

USING FRAUD EDUCATION TO DETER EMBEZZLEMENT IN SMALL  
CONSTRUCTION COMPANIES

by

Karen L. Smith

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Doctoral Study Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
Doctor of Business Administration

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Liberty University, School of Business

May 2020

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## Abstract

Fraud education is important in helping small business owners to formulate a strategy for the detection and deterrence of employee embezzlement. This research study was developed to examine cases of employee embezzlement within small construction contractors in efforts to determine the importance of fraud education and to identify factors leading to being victims. Participants were interviewed concerning their experiences with employee embezzlement schemes. The findings support the need for fraud education as none of the participants had any such education. Even those that had some formal business education expressed a lack of understanding of the principles of fraud. In addition to the lack of education, the findings also identified misappropriation of trust, a lack of oversight, and the weakness of internal controls as the common factors that played a part in the embezzlers' ability to commit fraudulent activity. The analysis of the cases included in this study provide other small construction contractors with suggestions for areas that need attention in the quest to reduce the risk of being victims of employee embezzlement.

*Keywords:* fraud education, employee embezzlement, small construction contractors, internal controls, trust, oversight

## Dedication

This study is dedication to my family who stood by me through this process and encouraged me to continue even when I was weary. They truly were the wind beneath my wings as I travelled this journey.

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There are numerous individuals that I must thank for assisting me as I completed the dissertation process. First, I want to thank my chair, Dr. Adam Sullivan. He guided me and encouraged me to keep running the race toward the prize. Along with Dr. Sullivan are the many other faculty in the Liberty University DBA program that were helpful in keeping me on track. I have adopted the Scripture shared by Dr. Gene Sullivan who was the director of the Liberty DBA program when I started. That verse is I Thessalonians 5:24 which states “Faithful is he that calleth you, who also will do it.” In the most difficult moments of this journey, I clung to this verse and was able to plod on.

Next, I would like to thank my family for their unwavering support. My husband, Rick, made many sacrifices enabling me to succeed. My children continually lifted me up through their encouraging words. My family along with my church family interceded for me for strength and perseverance. When I think of my family’s role in my completion of the program, I am reminded of the way that Aaron and Hur held up the arms of Moses. That is when the Israelites were victorious in the battle. I share this victory with my husband and children as they were my “Aaron” and “Hur.”

Finally, and most importantly, I want to thank my Lord and Savior, Jesus Christ. Without Him, I can do nothing. There were many times of prayer in which I needed to draw on the strength of the Lord. He promises to be with us as we go through this world and He was very present all through my doctoral journey. To God be the glory!

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## Section 1: Foundation of the Study

This research study examined multiple examples in the quest for understanding the impact of fraud education in the deterrence and detection of embezzlement in small construction contractors. First, the background for the problem researched was presented. This is followed by the declaration of the problem and purpose statements. The nature of the study was discussed depicting the methodology and the design of the study. Next, research questions identifying the focus of the study are presented. The conceptual framework describes the concepts developed as a result of the literature review and how these concepts are related to the purpose of the study. Key terms used in the study are defined as are the assumptions, limitations, and delimitations associated with the research conducted. The significance of the study indicates how the study is beneficial by identifying how the study fills gaps in existing research, is integrated with a Biblical framework, and how the study relates to the field of accounting. Finally, an extensive literature review is presented of the key concepts related to the study.

### **Background of the Problem**

Small businesses are integral to the economy as they employ a significant amount of the workforce (Bressler, Bressler, & Bressler, 2013). The owners of small businesses typically operate at a higher comfort level of trust of their employees (Kramer, 2015). In addition, small business owners are less likely to possess the resources to invest in anti-fraud initiatives which leaves them vulnerable (Kramer, 2015). Kramer (2015) noted that there is limited research relative to small business fraud. The Association of Certified Fraud Examiners (ACFE) stated in their 2018 report that small businesses experienced nearly twice the amount of loss per fraudulent scheme and the largest average cost per occurrence at \$200,000. This can be detrimental to small business owners whose resources are limited. Ruggieri (2012) indicated that



private companies in comparison with public companies are more susceptible to fraud as they are not required to institute internal controls which are audited.

The ACFE (2018) explained that the deterrence of fraud begins with understanding what types of individuals commit fraud and why. Cressey (1950) developed the fraud triangle which indicates that there are three components that must exist simultaneously for fraud to occur: motivation, perceived opportunity, and rationalization. Small business owners can take measures to deter fraud such as performing pre-employment background checks, instituting internal controls, and appropriately overseeing the accounting functions (Glodstein, 2015). Developing such safeguards begins with understanding the concept of fraud. Educating small business owners on the required elements of the fraud triangle will provide this needed understanding. Abd-Hamid, Azizan, and Sorooshian (2015) suggested that there is little research examining the issues impacting the overall success of construction companies. While there is literature discussing fraud relative to small companies and case studies specific to contractors (e.g., Mader, 2008; Mahamid, 2012; Bressler, 2011; McCollum, 2017; Gagliardi, 2014), there is a gap in the research applicable to the value of educating owners of construction companies on factors that increase the likelihood of fraud specifically as it relates to employee embezzlement. Elevated levels of trust and the lack of internal controls increase the perceived opportunity by potential fraudsters that they can misappropriate assets, mainly cash, for personal use without detection. The focus of this study was to gain insight into how understanding the components of the fraud triangle, which are motivation, opportunity and rationalization, can assist small construction contractors in establishing measures for the detection and deterrence of employee embezzlement of the firm's operating cash.

## **Problem Statement**

The general problem to be addressed is the devastation to small businesses subsequent to becoming victims of employee embezzlement. McCollum (2017) indicated that 25% of all embezzlement cases in the United States cost businesses over \$1 million with 50% of all embezzlement cases occurring in small businesses. N'Guilla Sow, Basiruddin, Mohammad, and Abdul Rasid (2018) warned that all businesses can be victimized by fraud regardless of the size or type of the business. However, Bressler (2011) suggested that small businesses are 35% more likely to experience fraud. Statistics indicate that employee theft occurs two to three times more than any other type of fraud (Bressler & Bressler, 2017). The ACFE (2018) reported that small businesses lose twice as much per incident of fraud with an average loss per fraudulent scheme of \$200,000. This is significant in that 30% of small business failures are as a result of dishonest employees. The specific problem to be addressed is the vulnerability of small construction companies to employee embezzlement. This vulnerability is due to a lack of education concerning the elements necessary for fraud to occur as well as the limitations due to financial constraints, manpower and lack of established procedures. The ACFE (2018) reported that, in the construction industry, one of the largest number of frauds reported was in the accounts payable function, second only to corruption. The focus of this study was to explore the value gained from educating the owners of small construction companies about the fraud triangle. This involves understanding that motivation, opportunity and rationalization are the necessary elements for fraud to occur (Cressey, 1950).

## **Purpose Statement**

The purpose of this qualitative multiple case study was to gain an understanding of the impact of fraud education in assisting owners of small construction companies in developing

better internal controls aimed at deterring embezzlement. Understanding the elements required for fraud to occur, as identified by the fraud triangle theory, allows business owners to identify areas needing improvement to lessen the likelihood of fraud (Azam, 2018). Moore (2018) identified the lack of resources available for implementing internal controls as the main reason that small businesses are vulnerable to fraud.

This study explored types of internal controls, such as segregation of duties, pre-employment screening, and confirmation of vendor accounts that were necessary to reduce occurrences of employee embezzlement. This research study collected data from small construction contractors to illustrate how internal controls and accounting policies and procedures have changed as a result of being victims of an embezzlement scheme. The study focused on a comparison of business processes before and after the fraud to determine if the experience associated with the embezzlement increased the owners' knowledge and awareness of the principles that contribute to increased motivation, opportunity, and rationalization. Such experiential knowledge will be beneficial in equipping the small construction contractors to determine how to detect and prevent embezzlement from happening in the future. As such, the research findings may allow other small construction companies to identify weaknesses in business processes that should be improved to reduce the likelihood that employees will be able to embezzle relative without being detected.

### **Nature of the Study**

The nature of this study was the qualitative multiple case study research design. First, consideration was given as to the method to be used. Creswell (2014) described the three methods as quantitative, qualitative, and mixed methods. The quantitative method is described by Ngulube (2015) as being deductive in nature and useful in statistical analysis aimed at testing

or enriching theories. Qualitative research is inductive and focuses on examining and understanding the meaning that people attach to the issue being studied (Creswell, 2014). Ngulube indicated that mixed methods research involves combining aspects from both the quantitative and qualitative methods. The following is a discussion of the various methods and their relationship to this study as well as a discussion concerning the research design chosen.

**Discussion of method.** The qualitative method was chosen as it is an interpretive approach that involves examining human behavior to ascribe meaning to a real-life event or situation (Harper & McCunn, 2017). Stake (2010) stated that qualitative research methods center on understanding gained through experience. Creswell (2014) suggested the use of the qualitative research method when the research focuses on gaining insight or an in-depth understanding or to examine the complexity of issues. Creswell (2016) described qualitative research as the process of identifying the problem to be solved and developing open-ended questions that assist in speaking to the problem. As this study involves gaining a better understanding of the importance of fraud education for small construction companies in preventing embezzlement through the study of the participants' experiences, the qualitative research approach was determined to be fitting.

The quantitative research method was not selected as it is used to objectively test the topic of research and to examine the cause-and-effect relationships (Park & Park, 2016). Qualitative research involves variables that are identified and analyzed in efforts to test the given hypothesis (Creswell, 2016). Park and Park (2016) stated that the quantitative method uses numeric data to describe attitudes, trends or opinions. Closed-ended questions are used with numerical values being assigned allowing for statistical analysis (Creswell, 2014). Mixed-method research studies involve combining elements of qualitative and quantitative research

(Ivankova & Wingo, 2018). As this study does not include testing of relationships between variables, the quantitative and mixed methods are not applicable.

**Discussion of design.** This research study will use the case study design of qualitative research. The case study design is useful when providing an understanding of a phenomena through examining actual cases (Riddler, 2017). Creswell and Poth (2018) stated this design should be used when the research involves an in-depth examination of a specific case or event. This involves evaluating the cases being studied over a period of time (Creswell & Poth, 2018). Yin (2014) further described the case study design as appropriate when focusing on a current event of which the research has no control. Dellaportas and Hassall (2013) stressed the importance of experiential learning in impacting one's knowledge relative to a specific context; much can be gained from the study of the experiences of individuals. As this study involved examining specific instances or cases of embezzlement to ascertain the importance of fraud education in fraud prevention, the case study design was appropriate.

Other types of qualitative study design include narrative, grounded theory, ethnography, and phenomenological. The following is a brief synopsis of these designs and indicates why these designs were not chosen for this study. Creswell and Poth (2018) indicated that the narrative research design is one that tells the stories of what individuals have experienced but should only be used when examining the experiences of one or just a few individuals. Butina (2015) suggested that the narrative design is not appropriate for studies involving a large sample. As this study involves the development of a theory based on the experiences of a larger sample population, the narrative design was not selected.

The grounded theory design is one in which a theory is developed which will provide an explanation for what will occur, how it will occur, and how individuals will respond (Creswell,

2016). The development of the theory is grounded in the data gathered during the research process (Creswell & Poth, 2018). Achora and Matua (2016) suggested the grounded theory design when examining new perspectives while seeking a more in-depth understanding of the interactions of individuals and business processes. As this study was not designed to explain a theory or process, the ground theory was not used as an appropriate design.

Creswell (2016) indicated that ethnography studies are used to examine the way a specific cultural group will behave given certain circumstances. Creswell and Poth (2018) stated that this type of study requires the researcher to spend ample time in the field observing the focus group. This observation involves identifying patterns relative to the cultural group being studied (Creswell & Poth, 2018). This allows for developing a theory respective of the actions, words, and behaviors associated with a certain group (Creswell & Poth, 2018). This study design was not selected as it did not involve studying a cultural segment.

The final research study design discussed is the phenomenological study. Creswell (2016) stated that this type of study focuses on both the subjective experiences as lived by individuals as well as the objective shared experiences with others. Sloan and Bowe (2014) explained that this type of study identifies how individuals view their environments. Creswell and Poth (2018) indicated that the phenomenological study is appropriate when attempting to attribute meaning to the experiences of the participants in attempts to gain a better understanding of a phenomena. While this study gathered data relative to the experiences of the participants, the focus was not to ascribe meaning to a phenomenon, rather to develop a theory for decreasing the likelihood of fraud.

**Summary of the nature of the study.** Since this research study was focused on examining how understanding the elements of the fraud triangle can assist small construction

contractors in establishing better internal controls that reduce the likelihood of becoming victims of employee embezzlement by studying a specific instance of fraud, the researcher identified the case study as an appropriate design method. The research study involved the collection of data concerning the experiences and level of fraud knowledge possessed by one or more owners of small construction companies who have experienced embezzlement by an employee. The research study focused on developing internal controls aimed at preventing or deterring the embezzlement of funds. The fraud triangle was beneficial in identifying internal control procedures that could be implemented to reduce the likelihood of being victimized by employees and was noted in the research findings.

### **Research Questions**

The research questions for this multiple case study were designed to examine how small construction companies change the organization's internal controls and accounting policies and procedures due to increased knowledge of why and how fraud occurs. The answers to the research questions will help owners/managers of small constructions understand the importance of internal controls and accounting policies to the deterrence and prevention of fraud. The findings may reveal corrective actions already taken or provide insight into additional changes that may be needed. The problem identified in this study deals with the lack of fraud education of small construction contractors relative to employee embezzlement with the intent to assist in developing better internal controls. As such, the research questions were stated to develop the study around using the gathered data in examination of the selected cases to provide a better understanding of the importance of fraud education in establishing internal controls and accounting policies and procedures to prevent and deter future instances of fraud for small construction contractors. Therefore, the proposed research questions were as follows:

RQ1: How were owners/managers educated on fraud prior to being victims of the embezzlement scheme?

RQ2: What strategies did the owners use to minimize fraud?

RQ2a: How have these strategies changed because of the fraud?

RQ3: What are the owners' perceptions of using internal controls to minimize fraud?

RQ4: How have accounting policies and procedures changed since the fraud?

### **Conceptual Framework**

This qualitative multiple case study examined how understanding the required elements of fraud, which are motivation, opportunity and rationalization, can impact the procedures established by small construction companies for detecting and deterring employee embezzlement of the entity's funds. This study was conducted from a social constructivist perspective.

Creswell and Poth (2018) described social constructivism as an interpretive framework that focuses on the viewpoints held by the participants relative to the concept being studied. The researcher then ascribes meaning to the real-life context being studied based on the participants' experiences (Creswell & Poth, 2018). The researcher understands that personal experiences shape one's interpretations and will explicitly identify possible potential biases (Creswell & Poth, 2018).

**Fraud theories.** There is a plethora of literature explaining the fraud triangle along with other fraud theories and their importance to deterring fraud (e.g., Cressey, 1953; Free, 2015; Raval, 2018; Abdullahi & Mansor, 2018). The preeminent theory was developed by Cressey (1953) in which the three required elements of fraud are identified as motivation, opportunity, and rationalization. Cressey (1953) maintained that all three of these elements must exist in order for fraud to occur. Howe and Romney (1984) adapted the fraud triangle in the



development of the fraud scale which also identified motivation and opportunity as essential for fraud to occur. However, rationalization is replaced with one's level of personal integrity (Howe & Romney, 1984). The likelihood of fraud is heightened when the level of motivation and opportunity is high while the level of personal integrity is low (Howe & Romney, 1984). Wolfe and Hermanson (2004) developed the fraud diamond to add a fourth element to the three identified by Cressey. The fraud diamond theory adds capability as a required element for fraud to occur indicating that the fraudster must have capabilities that allow the perpetration of the fraudulent act (Wolfe & Hermanson, 2004).

This study provided a “before” and “after” view of participant companies which were victimized by embezzlers. Application of fraud theories were used to identify factors contributing the perpetrator's ability to commit fraud. The study provided information relative to how well the business owners understood these concepts prior to the fraud and what steps were taken to minimize the risk of fraud. The study identified common oversights relative to the components of fraud in the cases studied. This information helped to answer Research Questions 1 and 2 and will be helpful to business owners in developing procedures for training and educating employees in efforts to minimize fraud risk.

**Small business education.** Most small businesses are started by those with technical knowledge; however they lack the education and skills necessary to successfully operate the business (Hanks & Bonaparte, 2015). The Small Business Administration (SBA) has been instrumental in providing educational resources for these business owners (Hanks & Bonaparte, 2015). Education is vital in that it increases awareness as to the consequences of not acting, heightens the ability to identify challenges and potential solutions, and promoting innovation (Lansberg & Gersick, 2015). Lansberg and Gersick (2015) pointed to the importance of

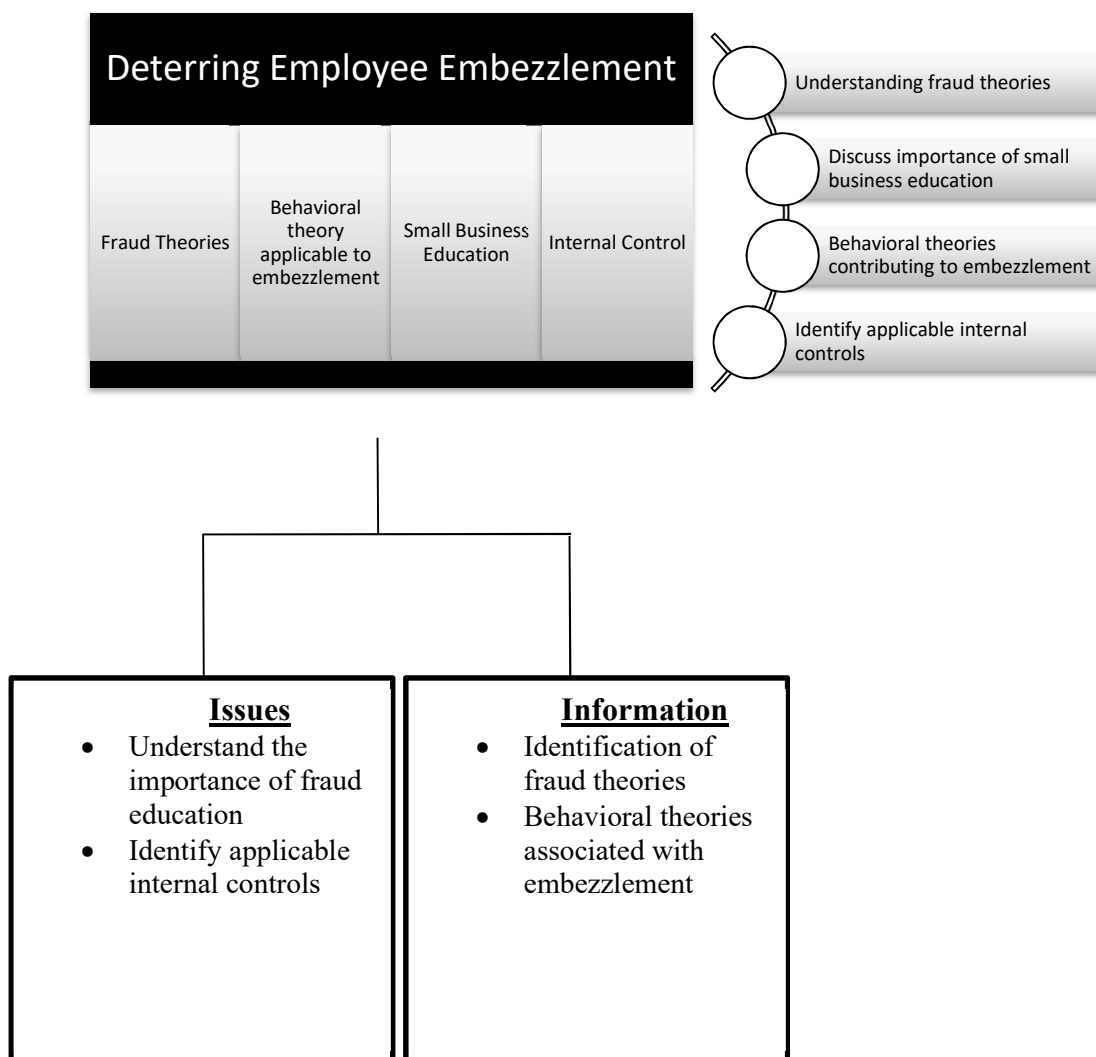
combining deductive education which involves formal training with inductive education which involves experiential learning. This study will help small construction contractors to integrate principles learned through being victims of embezzlement with the principles of fraud education. Understanding the concepts relative to fraud theories will provide valuable education for small construction contractors in deterring and detecting fraud through internal controls and education of employees.

**Behavioral theory applicable to embezzlement.** Mader (2008) warned owners of construction companies against assuming that they are immune to the possibility of embezzlement. Small businesses typically place greater trust in those performing the accounting duties thus becoming likely victims (Mader, 2008). Gottschalk (2019) presented the convenience theory as a major contributor to embezzlement. This theory identified three characteristics common to embezzlers: a financial motive, opportunity within the organization to commit the fraudulent act, and the willingness to commit the fraud (Gottschalk, 2019). Craig (2017) advised that the theory of social concern purports that those concerned for and empathetic for others are less likely to commit deviant behavior. As such, employee training and education should include elements aimed at increased awareness for the well-being of others. Craig (2017) also cited the general theory of crime which states that low self-control is a common to fraudsters.

Embezzlement is the most common type of fraud perpetrated against small businesses (Mader, 2008). Therefore, small business owners can learn by examining the experience of others. The participants in the cases studied were small construction companies who were victims of employee theft. This study identified characteristics of small construction companies that can create an environment conducive to fraudulent behavior.

**Internal controls.** Existing literature identified suggested internal controls that should be implemented. The increased number of instances of fraud in recent years has heightened the focus on the need for effective and efficient internal controls (Murphy & Tibbs, 2010). Keiper, Williams, and Fried (2017) encouraged constructing internal controls aimed at identifying and preventing fraudulent activity. Murphy and Tibbs (2010) indicated that ineffective internal controls are costly as this leaves organizations open to the likelihood of being victimized by fraudsters. Therefore, this study identified and examined the change in internal control protocol in the participants' business due to the experienced embezzlement.

**Discussion of relationships between concepts.** The understanding developed as a result of the research were derived from themes in the participants' experiences which were identified in the collected data. The study provided insight into the how the combination of fraud education, small business education, the understanding of the contributors to fraudulent behavior, and the implementation of internal controls are intertwined in the successful deterrence and detection of embezzlement. Using the experiences of small construction contractors that were victims of embezzlement, the study presented common themes relative to the lack of effective internal controls and a lack of knowledge of fraud, business, and deviant behavior. These themes will allow small construction contractors to narrow their focus to make applicable changes in policies, procedures, and employee training aimed at reducing the likelihood of embezzlement. As such, the process improvement will target weak areas and increase the likelihood of success at the aimed objectives of fraud deterrence.



*Figure 1.* Deterring employee embezzlement.

**Summary of the conceptual framework.** This conceptual framework defines the central elements associated with the research study. The four main elements include fraud theory, small business education, behavioral theory applicable to embezzlement, and internal control. Through an in-depth study of these concepts, the basis for the study is developed. The deterrence and detection of employee embezzlement is dependent upon understanding the importance of fraud education, overall business education, the embezzlement schemes associated with small construction contractors, and the potential impact of the internal control structure. The relationship of these concepts as discussed will provide insight beneficial in understanding the

importance of fraud education in the ability to develop effective internal controls and to implement successful employee training and education relative to employee embezzlement within small construction companies.

### **Definition of Terms**

*Association of Certified Fraud Examiners (ACFE):* The ACFE is the largest organization devoted to anti-fraud (ACFE, 2018). The ACFE (2018) describes the organization as the leading provider of fraud education and fraud training. The organization has over 85,000 members and provides certification for those seeking the certified fraud examiner designation (ACFE, 2018).

*Construction contractor:* Law Insider (2018) defines a construction contractor as an individual who undertakes or offers to undertake projects associated with building, improving, repairing or altering buildings or property. The person may perform the work himself or hire others to complete the project (Law Insider, 2018). This includes those acting as general contractors, prime contractors or specialty contractors or those responsible for the general supervision for the completion of a construction project or some part thereof (Law Insider, 2018).

*Embezzlement:* Embezzlement is defined as the taking the property of another through the violation of trust (O'Shea, 2014). Embezzlement differs from larceny in that the embezzler was entrusted with care of the property by the owner (O'Shea, 2014).

*Fraud:* The legal definition of fraud contains three required elements (Lord, 2010). The three elements are: a misrepresentation or false statement made with intent to be deceptive, the reasonable assumption that another would rely on the misrepresentation, and that the other person suffered damage as a result (Lord, 2010).

*Fraud diamond theory:* The fraud diamond theory defines the elements necessary for fraud to occur (Imang, 2018). This theory, developed by Wolfe and Hermanson, describes the four required elements for fraud as being the three elements identified in the fraud triangle theory (motivation, opportunity, and rationalization) plus capability (Imang, 2018). Imang (2018) stated that capability refers to the ability of the fraudster to carry out the fraudulent activity.

*Fraud triangle theory:* The fraud triangle theory, developed by Donald Cressey, attempts to explain why perpetrators commit fraud (Ghafoor, Zainudin, & Mahdzan, 2018). For a person to commit fraud, there must be motivation, perceived opportunity and rationalization (Ghafoor et al., 2018). Ghafoor et al. (2018) stated that this theory stipulates that all three of these elements must exist for fraud to occur.

*Internal controls:* Internal controls are procedures designed and implemented to improve the effectiveness of business processes in an attempt to achieve desired performance (Suárez, 2017). Suárez (2017) indicated that internal controls are detailed processes used to effectively manage the use of an organization's resources while minimizing risk while pursuing business strategies.

*Motivation for fraud:* Motivation, one of the required elements of fraud, involves the fraudster's perceived incentive or pressure that is felt to be non-shareable (Murphy & Dacin, 2011). This incentive or pressure may be financial, social, or performance based (Murphy & Dacin, 2011).

*Opportunity for fraud:* Opportunity, one of the required elements of fraud, refers to the perceived ability of the perpetrator to commit the fraudulent act without detection (Schnatterly, Gangloff, & Tuschke, 2018).

*Organizational culture:* Armenakis and Lang (2014) defined organizational culture as the personality of the organization that determines how employees are to perform their duties. Organizational culture is expressed in the codes and policies, the beliefs and values, and underlying assumptions of the organization (Armenakis & Lang, 2014).

*Rationalization for fraud:* Rationalization, the third requirement of fraud, refers to the attitude of the perpetrator that allows for the justification of the unethical act (Widianingsih, 2013). Such an attitude accepts the fraudulent act as consistent with the fraudster's personal code of ethics (Widianingsih, 2013).

*Segregation of duties:* Engdahl (2014) defined segregation of duties as the separation of individual work tasks for which two or more people are responsible for completion. No single individual is responsible for the various tasks associated with a specific process (Engdahl, 2014).

*Small business:* Anastasia (2015) indicated that businesses are defined as small based on a variety of factors such as gross receipts, number of employees, how the entity is organized, or some combination of these factors. For the purpose of this study, small business were defined as those with 100 employees or less (ACFE, 2017).

*Tip hotline:* A tip hotline is an ethics reporting tool that can be used by employees as well as those outside of an organization who have knowledge of wrongdoing committed within the organization (Nieweler, 2017).

*Whistleblowing:* Whistleblowing is the term that refers to the act of reporting information about an organization that is outside the normal functioning of the organization (MacDougall, 2016).

## **Assumptions, Limitations, Delimitations**

Understanding the assumptions, limitations and delimitations of the study was vital to understanding the overall scope of the research study. The assumptions define the beliefs held as truths governing the study. The limitations identify the parameters that restrict the scope of the study. The delimitations present conditions that were not included in the research study. These parameters were important in defining the specific focus of this study.

**Assumptions.** Assumptions are the beliefs of the researcher that shape what is deemed to be true with regard to the research study (da Costa, Hall, & Spear, 2016). Assumptions are made relative to the data collected from participants. The first assumption in this multiple case study was that the participants answered all questions during the interviews truthfully. The participants were informed that their answers would be included in the study without naming the person from who the information was collected. Understanding this allowed participants to be honest and open without fear of what others may think of their responses. The second assumption was that the interview questions were constructed to be clear and easily understood by the participants. Another assumption was that the results obtained through this multiple case study of the sample group of small construction contractors in Ohio were a fair representation of the processes and potential weaknesses in accounting procedures of the total population of small construction contractors.

**Limitations.** Limitations are the weaknesses associated with restrictions in the scope of the research study (Avgousti, 2013). The first limitation of this study was the results were derived from the before and after perspectives of the participants. It was possible that hindsight may have skewed the participants' perspective relative to the organization's processes prior to detection of the embezzlement scheme. Another limitation was the generalized scope of the



study which focused on small construction contractors who were victimized by embezzlement. Other types of fraud such as bribery and misrepresentation of material costs were not considered in this study. This study limited the focus to factors impacting small construction contractors. Larger construction contractors may not benefit as they would have more resources available for use in the minimization of the deficiencies found to increase the likelihood of fraud. The study was also limited in that the position of each individual participant, whether owner, manager, CEO or accounting personnel, may present a bias perspective.

**Delimitations.** Delimitations assist in defining the scope of the study as they identify factors that were not included in the study that may impact the research findings (Ellis & Levy, 2009). The first delimitation associated with this study was that the sample of cases used were from the experiences of small construction contractors located in Ohio. As such, the results were reflective of a small sample of small construction contractors in the United States. This study was limited to small construction contractors; those with 100 employees or less. This study did not examine the differences in policies and procedures and the experiences of being victims of employee embezzlement of mid to large construction contractors.

### **Significance of the Study**

This multiple case study will be significant for the owners of small construction companies as it will provide information beneficial to understanding why and how employees are able to successfully embezzle funds from the company through fraudulent activity. The interviews provide information relative to the level of fraud education possessed by small construction company owners as well as the control procedures employed before and after being victimized by fraudsters. Questions were also asked relative to the embezzlement scheme perpetrated against the participant companies. The results of this study will aid in educating

small construction company owners relative to an employee's motivation, opportunity and rationalization for committing such fraudulent acts and will assist them in identifying internal control procedures that could prove to be key in deterring employees from attempting to embezzle from the company. This study presented information aimed at reducing the gaps in existing literature. The significance of this study was further substantiated through understanding the impact relative to the field of accounting as well as the implications on a Biblical worldview.

**Reduction of gaps.** Gunduz and Önder (2013) suggested that the construction industry is perhaps the most corrupt industry as it entails complex business operations involving multiple parties. The estimated loss from fraud per year is approximately 10% (Gunduz & Önder, 2013). Gunduz and Önder identified the primary types of fraud within the construction industry as being conflict of interest, inventory theft, theft of information, bribery, and contract fraud. In addition, Crawford and Weirich (2011) discussed financial statement fraud in construction companies through overestimating the percentage of project completion or underestimating the project expenses. However, there seems to be a lack of research into employee embezzlement of company funds within the construction industry.

Cressey (1953) identified the three elements of fraud as being motivation, opportunity, and rationalization. Embezzlement can be defined as a type of fraud that involves violating the trust of one's employer (Lenz & Graycar, 2016). Lenz and Graycar (2016) stated that embezzlement has been studied from the perspective of applying the fraud theory. While there is literature discussing the existence of motivation, opportunity, and rationalization relative to embezzlement, there are few studies that address this specifically in the construction industry. There is a gap in the research concerning the impact of fraud theory education on deterring

employee embezzlement in small construction companies where resources for fraud prevention initiatives may be limited.

**Implications for Biblical integration.** Lenz and Graycar (2016) defined fraud as intentional acts using deception and the violation of the trust of others. Combating fraud requires a commitment to business integrity which Monga (2016) described as the consistency between one's words and behavior with moral and ethical values. Scripture clearly mandates that the Christian should be a person of integrity and not given to immoral or unethical behavior. Matthew 5:16 (KJV) challenges the Christian to let the light of Christ shine before all men. Keller and Alsdorf (2012) stressed that behaving with integrity is essential in living a life that glorifies God. In I Peter 1:16 (KJV), God states "Be ye holy; for I am holy." This is not an option for the Christian; it is a requirement. The Christian should continually strive to be more like God as he is created in His image.

Gill (2013) suggested that through behaving with integrity, one can be an example to others in the business world of a better way. As Christians conduct their work in an ethical manner, others will take note. Paul admonished the Christian to be imitators of Christ (Eph. 5:1, KJV). Christians should be mindful of the reflection of Christ that they are emanating to those they encounter. Such a commitment to behaving ethically may assist in promoting ethical behaviors in others, especially if the Christian is in a leadership role. People with integrity are less likely to have the motivation or be able to rationalize fraudulent behavior which are two of the three required elements for fraud to occur.

**Relationship to field of study.** Singh, Best, and Mula (2013) stated that fraud has become a multi-billion-dollar industry that is continually growing. Smith and Crumbley (2009) indicated that the study of fraud has become part of accounting and auditing education programs.

The many accounting scandals in recent years have increased the focus on forensic accounting and have promoted changes in accounting practices aimed at detecting fraud (Smith & Crumbley, 2009). Mangala and Kumari (2015) discussed the changes made to auditing standards creating greater responsibility for auditors to identify instances of fraud. The two primary types of fraud identified by Mangala and Kumari, are financial statement fraud and asset misappropriation, both of which involve accounting practices. Thus, the study of fraud and accounting are deeply intertwined.

Understanding and studying fraud is critical for those in the accounting profession as these individuals are held accountable for identifying fraudulent activities. Gates, Prachyl, and Sullivan (2016) admonished educators to include the study of the schemes used to commit fraud as well as detection procedures and tools for prevention in accounting curriculum. More educational institutions are offering degrees in forensic accounting or at the very least including courses in fraud in the accounting program requirements (Gates et al., 2016). The public's confidence in accountants has been shaken as a result of the numerous cases of financial fraud in recent years (Daniels, Ellis, & Gupta, 2013). Daniels et al. (2013) suggested that the increased inclusion of the study of fraud in accounting curriculum may help to increase the public's confidence in those in accounting.

**Summary of the significance of the study.** In summary, examination of the multiple cases presented in this qualitative study will provide an in-depth understanding of the importance of fraud education in the development of effective internal control procedures and accounting policies. Collecting and presenting information relative to before and after the embezzlement schemes that occurred in the participants' businesses will identify areas of weakness common to small construction contractors. Fighting against the likelihood of fraud requires a commitment to

business integrity which is greatly impacted by Biblical worldviews. Thus, considering the Biblical integration with the concepts of this study may be significant. As forensic accounting is a growing field of study, it is also beneficial to understand the relationship of this study to the accounting discipline.

### **A Review of the Professional and Academic Literature**

This study examined the extent to which fraud education enables small construction contractors to develop and implement internal controls aimed at detecting and deterring instances of employee embezzlement of company funds. N'Guilla Sow et al. (2018) suggested that fraud prevention is more cost-effective than the detection of fraud. The following section contained descriptions of the fraud triangle theory, including the three components required for fraud to exist - motivation, opportunity, and rationalization. Also presented was a discussion of the challenges that small businesses incur in fraud prevention. Literature relative to the embezzlement of company funds in small businesses was presented. Finally, there was a discussion of the literature relative to possible internal controls that could be implemented to assist in detecting or deterring this type of fraud.

**Fraud defined.** Fraud had been identified as problematic for business of all types and sizes (N'Guilla et al., 2018). Kummer, Singh, and Best (2015) indicated that fraud has become a growing concern for businesses worldwide. Lee, Churyk, and Clinton (2013) advised that even during times when the economy is performing well, instances of fraud continue to increase. Fraud is a result of social behavior that adversely impacts businesses (Ai, Brockett, Golden, & Guillén, 2013). Mohd-Sanusi, Rameli, Firdaus, Omar, and Ozawa (2015) suggested that fraud not only causes financial loss, it also causes loss to the businesses' reputation. Therefore, the managers and business owners should seek to understand exactly what fraud is.

The term “fraud” is derived from the Latin term *fraus*, which refers to the idea of danger, deception, or violation (Kartini, 2018). Fraud involves the intentional misrepresentation or misuse of information or resources for the purpose of deceiving another (Hawlova, 2013). Deception is integral to the definition of fraud (Singh et al., 2013). As fraud involves the intentional act of deception, one cannot commit fraud accidentally (Patterson, Goodwin, & McGarry, 2018). Kummer et al. (2015) indicated that the perpetrator uses this misrepresentation to gain an advantage. The three types of accounting fraud are identified as financial statement misrepresentation, misappropriation of assets, and corruption (Puspasari & Suwardi, 2016).

Specific to business is occupational fraud which is defined as using one’s occupation to intentionally misuse the resources of the organization for one’s own gain (Kumar, Bhattacharya, & Hicks, 2018). Cepeda, Gerardo, Perez, and Rivera (2015) cited the ACFE which ascribe losses from occupational fraud as being five percent of revenues which can be detrimental especially to small businesses. Not only do organizations suffer the initial loss from the fraud, there are additional costs associated with the fraud such as costs resulting from the investigation and prosecution of the crime, costs to fire and retrain employees, and costs association with late payments or default of loans relative to lack of funds (Button, Blackburn, Lewis, & Shepherd, 2015). A person will only commit fraud when the expected gain is exceedingly greater than the likely punishment should the fraud be detected (Kummer et al., 2015).

**Fraud theory.** Dennis, Hornik, Jones, Riley, and Trompeter (2013) indicated that it is imperative that the owners and management of organizations understand fraud and its association risks. Such knowledge allows for the design and implementation of initiatives aimed at controlling and minimizing the risk of fraud (Dennis et al., 2013). Katrini (2018) stated that preventing fraud requires the lessening or elimination of the cause which requires an

understanding of the elements required for fraud to exist. Understanding factors contributing to motivation, opportunity, and rationalization provides organizational leaders with the information necessary to develop effective internal controls, establish and communicate an anti-fraud organizational culture, and adopt a human capital perspective of employees in an effort to lessen the likelihood of rationalization as a result of perceived mistreatment.

*The fraud triangle theory.* Kumar et al. (2018) described the fraud triangle theory as the main theory for explaining the causes of fraud. Free (2015) stated that the fraud triangle theory is the most common framework for studying and understanding fraud internationally and domestically. The fraud triangle theory was developed by Donald Cressey who set out to identify the conditions required that would cause individuals to violate the trust of others (Mustafa Bakri, Mohamed, & Said, 2017). The fraud triangle theory was developed through the lens of the perpetrator to provide an understanding of why the person committed the fraudulent activity (Huber, Mui, & Mailley, 2015). Andon, Free, and Scard (2015) explained that Cressey interviewed prisoners convicted of embezzlement to understand why they committed such a criminal act. Dorminey, Fleming, Kranacher, and Riley (2012) indicated that the fraud triangle theory was developed in an attempt to understand the process that leads to embezzlement which is identified as white-collar crime. Understanding why some individuals commit white collar crimes provides a foundation for minimizing the conditions that increase the likelihood of such acts. The fraud triangle theory was developed for this purpose.

Perpetrators of white-collar crimes violate the trust of others for personal gain (Dorminey et al., 2012). Free (2015) indicated that occurrences of fraud are directly related to personal attributes and tendencies as evidence by Cressey's research. Etheridge (2015) stressed that anyone is capable of perpetrating fraud within an organization. Based on his research findings,

Cressey (1953) identified three conditions that must occur for the fraud to be perpetrated. All three of these elements must be present for fraud to occur (Dorminey, Fleming, Kranacher, & Riley, 2010). The more prevalent that these factors are, the more likely that fraud will occur (Howe & Malgwi, 2006). The three conditions are identified as motivation, opportunity, and rationalization (Free, 2015).

*Motivation.* An individual's perceived motivation for committing fraud forms the base of the fraud triangle (Howe & Malgwi, 2006). Boyle, DeZoort, and Hermanson (2015) described motivation as both the financial and non-financial reasons that the person is considering the fraudulent activity. The concept of motivation is enlarged to include perceived pressures and incentives (Trompeter, Carpenter, Desai, Jones, & Riley, 2013). Lokanan (2015) identified the following as examples of non-financial motivators: pressure from work, pressure resulting from some type of addiction, and the pressure associated with the desire and need to live a luxurious lifestyle. Morales, Gendron, and Guénin-Paracini (2014) identified the pressure to perform at a specific level as a non-financial motivator. For fraud to occur, the motivator must be relative to the lens the potential fraudster uses to understand his situation and the need for action (Suh, Sweeney, Linke, & Wall, 2018). Understanding one's motivation to commit fraud requires consideration of his emotions and perceptions (Suh et al., 2018).

Understanding motivators requires more than just the existence of the problem. Those considering committing fraud view these problems as not shareable and are searching out a way to meet the need (Boyle et al., 2015). An individual may believe that the problem is non-shareable because of the potential judgement from others because of having the identified struggle (Dorminey et al., 2012). Mulig (2018) indicated that the potential fraudster may be too proud to ask for help thus creating the sense of inability to share the need. Mulig discussed an



alternate view that suggests that the problem does not need to be non-shareable as indicated by Cressey, rather it just needs to represent what the potential fraudster feels to be immediate pressure within his surroundings. Dorminey et al. (2010) indicated that these identified problems represent perceived pressure on the individual to commit the fraud in hopes of resolving the problem. The potential fraudster views fraud as providing a positive economic gain (Kumar et al., 2018).

*Opportunity.* For a person to commit fraud, he must believe that there is opportunity to perpetrate the fraud with a minimal risk for being caught (Huber et al., 2015). Morales et al. (2014) stated that this means that the potential fraudster views the victim as susceptible. Trompeter et al. (2013) stressed the importance of understanding that a potential fraudster *perceives* the opportunity to successfully commit fraud. Adopting a perspective of seeing the opportunity to successfully commit the fraud can turn a normally honest employee into one that steals from his employer (Patterson et al., 2018). Employees that have a complete knowledge of the accounting processes and the control environment are in a better position to embezzle funds without being detected as they know how to manipulate the system (Howe & Malgwi, 2006).

Opportunity is the only required component of fraud that the organization can control (McClure & Margolis, 2010). Huber et al. (2015) indicated that poor work conditions as well as weak internal controls are responsible for creating an environment of perceived opportunity. Entrusting an employee with multiple duties relative to cash receipts and disbursements with little to no oversight creates perceived opportunity (Traynor, 2016). Dorminey et al. (2010) included poor supervision, lack of training, reluctance of management to prosecute previous criminal activity perpetrated by others, and a weak ethical organizational culture as factors that

help to establish a perceived opportunity. The fraudster uses any perceived organizational weaknesses in committing the fraud (Boyle et al., 2015).

*Rationalization.* Rationalization of fraud is defined as the lack of concern exhibited by perpetrators to justify guilt of their misdeeds (Lokanan, 2015). Lokanan (2015) explained that rationalization involves an attempt by the perpetrators to reconcile their actions with the normally accepted concepts of decency. Andon et al. (2015) indicated that the process of rationalizing fraudulent behavior is related to characteristics of one's personality such as arrogance, recklessness, and pursuance of power. Rationalization involves convincing one's self that the fraudulent behavior is not a criminal act (Andon et al., 2015). Often, fraudsters rationalize their crime by asserting that they are not injuring other people (Brody, Melendy, & Perri, 2012).

Brucker and Rebele (2014) stated that fraudsters often rationalize the theft by feelings that the organization owes them or has been unfair to them. Ulmer and Noe (2013) asserted that fraudsters attempt to rationalize their actions by maintaining that they simply borrowed the funds with the intent to repay the loan. Mustafa Bakri et al. (2017) suggested that personal integrity also impacts a person's ability to rationalize behaving unethically. Rationalization may include the focus on loyalties perceived to be of higher importance, past experiences, or denial (Dellaportas, 2013). Denial allows the potential fraudster to shift the blame for the wrongdoing to someone or something else, so he will not appear to be immoral or unethical (Dellaportas, 2013).

*The fraud scale theory.* In efforts to improve the fraud triangle, Mackevicius and Giriunas (2013) discussed the use of the fraud scale to measure the likelihood that fraud will occur. The fraud scale was developed by Albrecht as a tool used to educate others about fraud.

The ACFE (n.d.) indicated that the fraud scale evaluates situational pressures, opportunity, and personal integrity in identifying criteria necessary for fraud to be perpetrated. Nwanyanwu (2018) stated that two elements of the fraud scale theory are the same as that of the fraud triangle theory. Situational pressures are the same as motivation and both theories point to the importance of opportunity (Nwanyanwu, 2018). However, Abdullahi and Mansor (2018) stated that Albrecht stressed the importance of adding the concept of perception to motivation and opportunity. The motivation (or pressure) and opportunity are perceived by the potential fraudster (Abdullahi & Mansor, 2018). Puspasari and Suwardi (2016) indicated that Albrecht replaced the rationalization element required for fraud as proposed by Cressey with the concept of personal integrity. Personal integrity is exhibited in relation to an individual's code of ethics (Puspasari & Suwardi, 2016). There is a higher probability of occupational fraud occurring when the levels of situational pressures and opportunity are high while the level of personal integrity is low (ACFE, n.d.). The reverse is also true in that fraud is unlikely when the levels of situational pressures and opportunity are low while the level of personal integrity is high (ACFE, n.d.).

***The fraud diamond theory.*** Another theory relative to understanding fraud is that of the fraud diamond theory (Raval, 2018). Raval (2018) indicated that Wolfe and Hermanson developed the fraud diamond theory in efforts to better explain detection and prevention of financial fraud. The fraud diamond theory involves the addition of a fourth element of capabilities to the three elements of the fraud triangle (Nwanyanwu, 2018). Azrina Mohd Yusof and Ling Lai (2014) purported that the potential fraudster must have the capabilities to commit the fraud in order for the crime to occur. Capabilities to commit fraud include being in a position or function enabling the act, the intelligence to plan and carry out the fraud, the confidence and

ego that the fraud will be undetected, the ability to coerce other to participate or conceal the fraud, and the ability to deal well with stress (Azrina Mohd Yusof & Ling Lai, 2014). These employees tend to exhibit an eagerness in learning everything there is to learn relative to policies and procedures so that they have the knowledge to manipulate the system (Wells, 2017). Such personality traits are crucial to the likelihood that an individual will commit fraud (Baz, Samsudin, Che-Ahmed, & Popoola, 2016).

**Fraud in construction companies.** As with many types of industry, the construction industry needs greater transparency due to the growing number of occurrences of fraud (Nijhof, Graafland, & de Kuijer, 2009). “Counting the cost fraud” (2013) reported that fraud costs the construction industry approximately \$860 billion annually. The construction industry is targeted for fraud due to characteristics such as the complexity and diversity of projects, the secrecy of the bidding process, and the multiple contractual parties (Bowen, Edwards, & Cattell, 2012). Mahamid (2012) stated that the construction industry is second only to the restaurant industry in the number of business failures. This is of great concern as construction plays a vital role in a healthy, growing economy (Mahamid, 2012). Mahamid cited manipulation in the accounting function of construction contractors as a leading cause for business failure.

The large amount of public monies used for construction projects presents enticement for corruption (Hudon & Garzón, 2016). Nijhof et al. (2009) indicated that the primary types of fraud within the construction industry are bribery used in procuring contracts, corruption and asset misappropriation. Construction contractors should be alert to the possibility of the theft of the organization’s assets (Hall, 2008). Hall (2008) indicated that employees may steal assets to sell or to use at their own homes. Yu, Martek, Reza Hosseini, and Chen (2018) added kickbacks and embezzlement as common types of fraud. A considerable number of frauds in the

construction industry involve the collusion of multiple parties in corrupting the bidding process (Brinker, 2014). Bowen et al. (2012) encouraged construction contractors to evaluate procedures for deficiencies, establish forensic detection measures, and discourage and punish unethical behavior.

**Embezzlement.** Asset misappropriation, which is the misuse of the organization's resources by employees, is the most common type of fraud (Mohd-Sanusi et al., 2015). Johnson, Zurlo, and Hickman (2015) stated that this type of fraud may occur as the negligent misuse of resources or as a result of theft or embezzlement. Omar, Nawawi, and Puleh Salin (2016) indicated that embezzlement is the most common type of asset misappropriation. Makowsky and Wang (2018) suggested that the term "embezzlement" is not a new concept as the term became common to the English language in 1473 even though the concept dates to Aristotle's writings. Embezzlement creates a loss of working capital as it involves the failure of an entity's capital to reach the intended use and instead be stolen by an employee (Makowsky & Wang, 2018).

Due to the potential cost of embezzlement to victim companies, owners/managers need to understand the magnitude of this problem. Embezzlement costs businesses in the United States \$50,000,000 annually (Peters & Maniam, 2016). Astonishingly, Galletta (2015) cited the estimate that 75% of employees have stolen from their employer at least once. Almost two-thirds of fraudsters embezzling more than \$100,000 are women (Powell, 2014). Employee theft may include the theft of money, property, or time (Galletta, 2015).

Embezzlement is not only a type of fraud, it is a criminal act that can be prosecuted if the following legal requirements can be established: the perpetrator made a false material statement, the perpetrator knew the statement was false, the intent was to deceive another, there was a reasonable assumption that the victim relied on the false statement, and the victim suffered loss

as a result of the false statement (Ulmer & Noe, 2013). Button et al. (2015) stated that employee theft may be perpetrated against the employer, other employees, or the customers of the organization. Lindquist and Goldberg (2009) indicated that the perpetrator must have been entitled to possession of the asset(s) at the time of the theft for the act to be categorized as embezzlement. Possession does not mean that the individual had ownership, rather it means that the individual had the responsibility for caring for the asset (Lindquist & Goldberg, 2009).

***Employee embezzlement in small companies.*** In discussing embezzlement and pursuing an understanding of what prevents and fails to prevent fraud in a small business environment, one must define the term “small business.” Gale and Brown (2013) stated that there is not one definition of what constitutes a small business. However, the SBA (2017) indicated that business size is typically classified according to the number of employees or the gross annual receipts. The SBA provided a table which depicts the largest size that a business can be to remain classified as small. The SBA cautioned that the limits for the small business classification vary by industry which is determined by the NAICS code. Table 1 shows the size standards for businesses in the construction industry. An alternate method for identifying is to use information from the organization’s tax return such as the form that income is reported on or the amount of adjusted gross income (Gale & Brown, 2013). Williams and Kollar (2013) described small businesses, in agreement with the ACFE, as being those organizations with fewer than 100 employees.

Patterson et al. (2018) cautioned that one of every seven businesses victimized by fraud fails to fully recover from the loss. Gray and Ehoff (2015) pointed to the importance of the Sarbanes-Oxley Act of 2002 and the Dodd Frank Act in providing anti-fraud legislation for public corporations. The Association for Certified Public Accountants established accounting

and auditing standards designed to combat the likelihood of corporate fraud (Dong, Liao, & Zhang, 2018). However, this does not extend to small, private companies. The U.S. Census Bureau data of 2012 indicated that 99.7% of all U.S. businesses employ less than 500 people (The Small Business & Entrepreneurship Council, 2016). Furthermore, 89.6% of all U.S. businesses employ less than 20 people (The Small Business & Entrepreneurship Council, 2016). Aris, Arif, Othman, and Zain (2015) stressed that small business owners need to be concerned as statistics indicate that companies with less than 100 employees are more victimized by fraud than larger companies.

Estimates indicated that nearly 25% of all embezzlement cases cost the businesses more than \$1 million (McCollum, 2017). Approximately 68% of embezzlement cases are perpetrated against small and mid-sized companies (Wells, 2017). Bressler (2011) cited statistics from the U.S. Department of Commerce that indicated that 30% of small business failures are caused by dishonest employees and that small businesses are 35% more likely to be victimized by fraud than are large companies. McCollum (2017) stated that nearly half of all embezzlement cases in the United States are perpetrated against small businesses. Despite these statistics, Gagliardi (2014) indicated that small business owners tend to be complacent relative to fraud risk. Regarding construction contractors specifically, owners tend to view the development of strong internal controls as unnecessary as the entity's employees are trustworthy and fraud will not happen ("Internal Control Breaches," 2005). Small business owners invest much time, money and energy into building their business, however they neglect to take the risk of fraud seriously (Gagliardi, 2014).

Small business owners tend to be reluctant to prosecute fraud committed by employees (Bressler, 2011). Traynor (2016) indicated that while 40% of small businesses are victims of

embezzlement, only two percent (2%) of those will report the crime. Furthermore, Bressler and Bressler (2017) cautioned that employee theft is two to three times costlier than the combination of all other types of crime. Gabriel (2014) indicated that the loss from employee fraud is significantly higher when perpetrated by employees who have been with the organization for 10 years or more than for those in their first year of employment. Thus, it is necessary for small business owners and managers to educate themselves relative to the risk of fraud (Verschoor, 2014).

One factor contributing to the likelihood of fraud committed by employees in small companies is that of trust. Yenkey (2018) defined trust in an organizational setting as an environment in which the trustor willingly accepts the vulnerability in transactions due to expecting employees to behave in a positive manner. Such trust is dependent on the level of competency and integrity held by the employee (Yenkey, 2018). Fraud occurs as a result of a diminished level of integrity (Yenkey, 2018). The amount of the fraud is directly related to the level of authority held by the perpetrator (Tschaker, Needles, & Holtblatt, 2016). McClure and Margolis (2010) suggested that owners/managers remember the 10-10-80 rule when it comes to trusting employees. This rule indicates that 10% of employees will always steal, another 10% will never steal, and the other 80% will steal from the organization if the circumstances are right (McClure & Margolis, 2010). Verschoor (2014) encouraged small business owners to adopt the mindset conveyed by Ronald Reagan in the sentiment he often repeated stating “trust but verify.”

The most typical types of embezzlement include revenue skimming, check tampering and disbursements that are fraudulent using fake invoices (Moore, 2018). Smith, Hrcir, and Metts (2012) added corruption and expense reimbursement fraud as among the most common fraud schemes for small companies. The ACFE (2016) reported that small companies are twice as



likely to be victims of these types of fraud than large companies. While embezzlement can be well hidden for many years, Klein (2015) indicated that there are warning signs that can alert small business owners of potential occurrences of embezzlement. Harris (2013) maintained that four out of five of those who embezzle exhibit behavioral indicators that something could be amiss. These include a sudden change in lifestyle, living beyond one's means, reluctance to share work duties, refusal to take time off, exhibiting signs of substance abuse, and animosity toward co-workers or owners (Klein, 2015).

*Embezzlement in accounts payable.* One area that employees target when committing the fraud of embezzlement is the accounts payable function of the business. Daigle, Morris, and Hayes (2009) indicated 77% of embezzlement cases are attributable to employees in upper management, accounting, and purchasing with the highest number of cases originating in accounting. Billing schemes are among the most used accounts payable frauds (Singh et al., 2013). Anand, Dacin, and Murphy (2015) stated that billing schemes are most easily perpetrated by employees within the billing department that also have access to other accounting functions. Daigle et al. (2009) reported that one-half of all billing schemes are perpetrated by accounting personnel responsible for processing payments. Dennis et al. (2013) indicated that billing schemes are aimed at procuring payment from the organization for goods or services at an inflated rate or for items for personal use of the fraudster. Another form of embezzlement comes in the form of altering or forging checks for personal gain (Dennis et al., 2013). Guinn and Sevin (2013) stated that billing schemes include the use of fake invoices for shell companies, fictitious invoices for current vendors (complicit or non-complicit) and employee personal purchases.

*Credit card schemes.* One type of fraud committed relative to the accounts payable function is that involving credit cards (Cepeda et al., 2015). Chandar and Sanchez (2013) cited a case where an employee successfully embezzled funds through using the company credit card for personal purchases then paying the credit card bill through the company as well as using cashier's checks drawn by the company for paying personal debts. Some of the cashier's checks were made out using initials such as NMI to pay for purchases made by the fraudster at Neiman Marcus (Chandar & Sanchez, 2013). Other employees embezzle by opening credit cards for personal use while having payment made by the employer (Stewart, 2016).

*Fictitious invoices.* Varma and Khan (2017) discussed fraud perpetrated using fake vendors in which the employee submits invoices from these vendors for payment. This may involve the fraudster setting up shell companies used to obtain payments for fictitious invoices (Singh & Best, 2016). Singh and Best (2016) indicated that typically the employee alters the vendor master file to add these fake vendors. Becker and Barichello (2013) shared a case in which the fictitious invoice was missing information such as the vendor's logo and the name and telephone number for the sales contact person. Fraudsters may also use fake invoices or inflated invoices for existing vendors and divert and steal the payment (Guinn & Sevin, 2013). Other indicators of possible fictitious invoices are differences in the font types used and misspellings (Becker & Barichello, 2013). Hall (2018) advised that inventory shortages may indicate that fictitious invoices were used as the items purchased were never received making the computer balance higher than inventory on-hand. There is always the potential for the dishonest employee to collude with a vendor to inflate invoices allowing the two parties to split the overage (Varma & Khan, 2017).

Kreuter, Sawhney, and Sacks (2013) discussed a fraud case in which an employee embezzled funds by submitting invoices in their own name for consulting fees. This same employee was responsible for processing invoices and payments for which there was no oversight and the fraud went undetected (Kreuter et al., 2013). Lindquist and Goldberg (2009) pointed to an embezzlement scheme in which an employee used a company credit card for numerous unauthorized entertainment expenses. In another instance, Daugherty and Neely (2011) identified an embezzlement scheme in which the fraudster used company funds to pay personal credit card bills. These are typical embezzlement schemes that construction contractors should consider, and they should develop internal controls to deter such activity.

***Behavioral theory applicable to embezzlement.*** In efforts to create an environment that reduces the risk of being victimized by embezzlement, it is important to examine the theories and behaviors applicable to this type of fraud. Binde (2016) suggested that the perceived notion of a problem that the employee feels cannot be shared with others is common to all embezzlers. Verstein (2014) indicated that embezzlement can include behavior that might otherwise be considered to be lawful. This contributes to the embezzlers' ability to rationalize the deviant behavior (Verstein, 2014).

The convenience theory suggests that embezzlement occurs when an employee sees an opportunity to steal from the organization with a low likelihood of being detected (Gottschalk, 2019). Binde (2016) described this concept of perceived opportunity as the fraudster's idea of the practical possibility of using the organization's resources. The convenience theory refers to the decision-making process in which the fraudulent behavior is simply one option (Gottschalk, 2018). The embezzler could choose to behave in a legal manner; however, he chooses to commit fraud to solve the perceived pressure (Gottschalk, 2018). As small business owners understand

this theory, they are better equipped to assess this idea of opportunity. Keiper et al. (2017) indicated that minimizing opportunity should impact the internal controls that are established and implemented.

Gottfredson and Hirschi (1990) developed the general theory of crime which identifies characteristics common to criminals of all types. Examining the general theory of crime provides insight into behaviors common to embezzlers. Lianos and McGrath (2018) described this theory as describing antisocial characteristics that can lead to deviant behavior. One such characteristic is that of low self-control (Lianos & McGrath, 2018). Such individuals will pursue self-interests, thus making it easy to rationalize the fraud (Lianos & McGrath, 2018). Siegfried and Woessner (2016) stated that these individuals will focus on immediate gratification of personal pursuits. Understanding this concept could provide small construction contractors with an awareness of the types of employees that might be involved in embezzlement schemes.

Another behavioral theory applicable to the discussion of embezzlement is the social cognitive theory known as Bandura's theory of self-efficacy. Ring and Kavussanu (2018) suggested that individuals develop moral standards which, in turn, guide behavior. People will seek to behave in ways that align with their adopted moral standards (Ring & Kavussanu, 2018). An individual's behavior will be guided by the need for either self-approval or societal approval whichever is stronger (Beu & Buckley, 2004). Carson, Wiley, and Esbensen (2017) indicated that a person's behavior can be altered by social influences as these influences impact the person's ability to regulate himself. Yuan, Dong, and Melde (2017) stated that individuals' behavior will be shaped by their belief that they can control the outcome. This concept may contribute to the embezzler's ability to rationalize the deviant behavior.

Also beneficial to the discussion of behavioral theory applicable to fraudulent behavior is that of constructive/development personality theory. Blonigen (2010) stated that personality encompasses the typical manner in which a person thinks, feels and behaves in situations over time. This theory purports that people move from a place of focusing on themselves to a place of interpersonal relationships and consideration for others (Livesay, 2015). Livesay (2015) indicated that one ascribes subjective meaning based on his environment which impacts his development. Beu and Buckley (2004) described this theory as useful in understanding how leaders approach the task of leadership. This theory suggests that a leader's personal goals and objectives will shape the manner in which he leads others (Beu & Buckley, 2004).

Harrison, Summers, and Mennecke (2018) named the dark triad as a behavioral theory that helps in understanding why fraudsters commit deviant acts. The dark triad consists of three behavioral traits that have been linked to fraudulent behavior: narcissism, psychopathy, and Machiavellianism (Harrison et al., 2018). Epstein and Ramamoorti (2016) explained that narcissistic behavior involves traits such as egotism, pride, and a lack of empathy, while Machiavellianism is defined as a personality trait in which a person is manipulative of others. Ramamoorti and Epstein warned that a person with the dark triad will typically have no conscience and will likely be disagreeable and show indifference relative to the harm caused by his actions. Those exhibiting these personality traits have been found to be more likely to commit fraud (Epstein & Ramamoorti, 2016). The dark triad, especially when evident in leadership, reduces the fraud triangle to just one component: opportunity (Epstein & Ramamoorti, 2016). Rationalization will be immaterial as this individual has no conscience relevant to deviant behavior (Ramamoorti & Epstein, 2016).

As leadership can greatly impact employees' perception of acceptable behavior, it is important to consider the leadership behavioral theory. Rajbhandari, Rajbhandari, and Look (2016) discussed that the leadership behavioral theory identifies two dimensions of leadership that can greatly affect the effectiveness of an organization: people-oriented and task-oriented. The type of leadership will shape the manner in which leaders act and react in managing the organization (Rajbhandari et al., 2016). Extremes in either type of leadership can impact the employees' sense of value to the organization which may contribute to the employees' ability to rationalize fraudulent behavior. As these dimensions are not mutually exclusive, the best leaders function highly in both dimensions, thus encourage others to perform at their best (Ronald, 2014). Understanding this theory can promote the development of leaders that will contribute to the deterrence of fraud within the organization.

**Fraud detection and prevention.** While fraud detection may appear to be a daunting task, Drogalas, Pazarskis, Anagnostopoulou, and Papachristou (2017) indicated that it is not impossible. Detecting fraud sooner rather than later results in less financial damage to the organization (Lee et al., 2013). Walker (2014) stressed that owners need to be proactive relative to fraud prevention instead, as detecting fraud means that the theft has already taken place. Simser (2014) stated that frauds are perpetrated for an average of 3.4 years prior to being detected. Powell (2014) suggested that this average is more likely to be 4.5 years. Gee (2015) indicated that prevention is more effective at controlling fraud than punishment. Prevention is less costly than rectifying matters once the fraud has occurred (Gee, 2015). However, Weisman and Brodsky (2011) cautioned that it is impossible to totally prevent fraud and to eliminate all fraud risk. This should not negate a preventative mindset that pursues the implementation of anti-fraud initiatives (Weisman & Brodsky, 2011).

Business owners should be aware of the red flags that often point to fraud (Simser, 2014). Tschakert et al. (2016) cautioned that red flags do not mean that fraud is occurring, however red flags should be viewed as warning signs worth further consideration. Gabriel (2014) indicated that often owners/managers discount the red flags due to a high level of trust in the employee(s).

The following is a list of potential red flags as identified by Simser (2014):

- An employee who refuses the opportunity for advancement,
- An employee who refuses to take time off from work,
- An employee who conceals records or documentation,
- An employee who is unreliable and tends to blame others when mistakes are made,
- An employee is repeatedly the subject of rumors for having addictions or living above his means, and
- An employee who is arrogant, bullies others, or is overly agitated.

Peters and Maniam (2016) included unusually close relationships with vendors, constant complaining, and an attitude of scheming as potential red flags. Understanding possible warning signs is the first step in detection and prevention.

In conjunction with knowing what attributes may be warning signs of fraud, Gannaway (2013) encouraged business owners to assess their level of risk relative to fraud. Gannaway provided the following steps for this risk assessment:

- Examine the current internal controls and identify areas where the organization is vulnerable to fraud,
- Purposely design procedures that minimize the opportunity for fraud to go undetected,
- Identify fraud sooner rather than later,

- Take corrective action to strengthen internal controls determined to be lacking.

Being intentional relative to this type of assessment is crucial and allows owners to adhere to a stricter due diligence, reducing the likelihood of victimization (Gannaway, 2013). Bressler and Bressler (2017) identified internal controls, organizational culture, and leadership as the primary methods for discouraging fraudulent activity.

***Internal controls.*** Internal controls should be implemented that are aimed at discovering and discouraging fraud. Etheridge (2015) stated that the most powerful deterrence of fraud involves a focus on fraud detection. Failures in internal controls are the primary reason that fraud is able to be carried out (“Internal Control Breaches,” 2005). Commitment to internal control review and improvement is beneficial in efforts to prevent fraud (Zamzami, Nusa, & Timur, 2016). Peltier-Rivest (2018) suggested that companies can reduce the perceived opportunity relative to committing fraud through the development and installation of internal controls. Hermanson, Smith, and Stephens (2012) identified key areas of internal control that should receive upmost attention: the assessment of the organizational culture, breaches from policies and procedures, and management override of established controls.

Ruggieri (2012) explained that internal controls involve the control environment, risk assessment, control activities, information and communication, and monitoring activities. The control environment encompasses the ethical tone of the organization while control activities involve the policies and procedures designed to convey management’s objectives (Abiola & Oyewole, 2013). Risk assessment speaks to the identification, analysis, and handling of uncertainties faced during the course of business which includes the risk of fraud (Abiola & Oyewole, 2013). Monitoring is a process of analyzing the control environment to determine



areas of weakness (Abiola & Oyewole, 2013). Fraud prevention and detection requires an intentional consideration of how each of these areas are approached.

Bressler (2011) stated that small business owners can implement internal controls that are relatively inexpensive compared to the potential loss associated with employee embezzlement. Many such controls involve a common-sense approach to management oversight of accounting processes (Hrncir & Metts, 2012). This means that these owners should focus on operational processes and their oversight (Aris et al., 2015). Gabriel (2014) suggested gathering information from employees relative to possible areas of weakness as those performing the accounting tasks may be the best ones to identify areas of opportunity.

Internal controls should be designed to safeguard the entity's assets as well as to increase the reliability and the accuracy of the accounting records (Haskin, 2016). Kreuter et al. (2013) cautioned owners that internal controls are not static and should be reviewed and adapted frequently. The tighter the internal control system, the greater the likelihood that fraudulent behavior will be detected (Locati, 2017). A study of these controls in conjunction with understanding the required elements of fraud could significantly reduce the chance that the perpetrator will be able to conceal the fraudulent activity. Aris et al. (2015) indicated that internal controls should be developed to improve assurance relative to the effectiveness and efficiency of operations as well as the reliability of the financial reporting.

*Segregation of duties.* The leading procedure that should be considered is the segregation of duties which ensures that there are checks and balances in the handling of the accounting functions (Peltier-Rivest, 2018). Singh and Best (2016) defined segregation of duties as the separation of the key activities of the business for the purpose of minimizing the likelihood for the existence of fraud. Ney and Smith (2018) stressed the importance of assigning the

performance and review of accounting tasks to more than one person to minimize the likelihood of fraudulent activity. Segregation of duties ensures that no one employee is responsible for a transaction from beginning to end preventing the ability to steal funds without being detected (Wilkins & Haun, 2014). Trusting one employee with all financial dealings subjects the business to increased odds of being victimized (Traynor, 2016). Glodstein (2015) stressed the need for small business owners to actively participate in the oversight of the entity's accounting records to detect oddities that can be evident of embezzlement.

In conjunction with segregation of duties, Hrcir and Metts (2012) stated that different individuals should perform the various processes relative to payment of invoices. Each of the following responsibilities should be assigned to different individuals: approving invoices, drafting checks, signing checks and mailing checks (Hrcir & Metts, 2012). In a small business environment, Forman (2017) admonished owners to be the only person permitted to sign checks. Forman maintained that invoices should be attached to all checks submitted for signature. This forces owners to be involved in the business (Forman, 2017). Mathis and Lewis (2009) suggested that all checks be stamped with "for deposit only" upon receipt and that signature stamps are not used. Elder and Yebba (2017) shared details relative to the Rosalyn School District fraud. One factor that contributed to the embezzlement was the fact that one employee was responsible for issuing checks with no supervision (Elder & Yebba, 2017). Kapp and Heslop (2015) asserted that procedures should be adopted for monitoring check numbers in order to expediently identify any missing checks. Blank checks should be locked and those with keys should be required to sign in and out when accessing the checks (Powell, 2014). In a business environment, purchases are typically made from companies and not individuals. Thus, business owners should instruct their bank to not honor checks written to individuals (Carniello, 2011).

Another practical suggestion is that the person responsible for reconciliations of bank statements be different than the person responsible for handling the cash transactions (Maguire, 2014). Similarly, the person responsible for reconciling the credit card statement should be different from the authorized users of the credit card (Walker, 2014). Furthermore, Ulmer and Noe (2013) advocated that the treasurer should mail the checks to the payees instead of allowing the person who issued the check to mail it. This offers another layer of oversight in the accounts payable segment of the business. Marquet (2011) indicated that company policy should prohibit those in the accounting department from taking work home.

It is worthy of note that technology, especially the use of electronic transfers and electronic check writing have contributed to the ability of fraudsters to carry out their embezzlement plans (Dennis, 2000). Segal (2016) indicated that using technology and computer software to commit fraud is becoming increasingly more common. Employees with access to the computer system used for disbursing electronic payments can enter their bank account number in lieu of the vendor's bank account number – whether a real vendor or a fictitious vendor (Segal, 2016). This can be further exaggerated if a vendor and employee collude together to steal funds (Segal, 2016). Embezzlement as a result of using electronic transfers can be detected if the person reconciling bank statements is different from the individual responsible for initiating such payments (Dennis, 2000). Owners should set up notifications from the bank when accounts are accessed outside of the organization's business hours. Walker (2014) indicated that owners should give equal diligence to limiting access and authority to make electronic transfers as is given to limiting access to blank checks.

Segregation of duties creates an environment in which employees would need to collude with one another to carry out the fraudulent acts (Kapp & Heslop, 2015). Anand et al. (2015)

indicated that the majority of existing literature relative to fraud focus on acts committed by individual perpetrators rather than groups of people colluding together. Owners should be aware that collusion of employees in fraudulent activities requires increased attention to the construction of the segregation (Peltier-Rivest, 2018). This is important because as fraud awareness has increased so has the number of frauds involving collusion of employees (Galletta, 2015). Elder and Yebba (2017) indicated that the Rosalyn School District fraud resulted in over \$6 million being stolen by employees who colluded in participation of the fraud. Coworker influence to engage in misconduct opens the door to participation of joint embezzlement activities (Dimmock, Gerken, & Graham, 2018).

*Background checks.* As embezzlement is a crime involving the violation of trust, owners should consider this when hiring employees. McCollum (2017) stated that business owners must change from a mindset of blind trust to one of intelligent trust. Employees that have stolen from one employer will likely continue this activity with the next employer (Christopher, 2003). Johnson et al. (2015) questioned the importance of background checks as they maintain that most embezzlers are first-time offenders. However, Brody et al. (2012) maintained that many white-collar criminals are repeat offenders. Even if the prospective employee has not committed fraud previously, background checks are integral as they may show other issues such as addictions or credit problems.

Wilkins and Haun (2014) stressed the importance of conducting background checks on prospective employees. Bressler and Bressler (2007) asserted that background reference checks may be the most important preventative measure that organizations can undertake. Phairas (2016) suggested verifying the references provided by the applicant as well as performing a credit check and criminal background check. Such investigation will alert the owners to any

criminal record in the prospect's past (Wilkins & Haun, 2014). For this reason, Marquet (2011) stated that owners should prosecute perpetrators of fraud as this may alert future employers of the individuals' propensity for theft. Haskin (2016) encouraged routine credit checks of employees in efforts to discover potential red flags. These credit checks may alert management to employees who have filed bankruptcy, thus providing motivation for fraudulent activity (Haskin, 2016). Bressler and Bressler stressed that background checks and reference checks are beneficial in alerting owners to those who may have motivation or be able to rationalize the embezzlement.

*Tip hotlines.* The most common tool in detecting fraud is the use of tip hotlines allowing whistleblowers to advise of fraudulent behavior (ACFE, 2016). Lee and Fargher (2013) stated that using tip hotlines reduces the median loss due to fraud by the largest percentage. Whistleblowing occurs when employees knowledgeable of wrongdoing seek remedy (Somers & Casal, 2011). Gagliardi (2014) indicated that 47% of all workplace fraud is discovered through whistleblowing and that 50% of these reports are made by fellow employees. The ACFE (2016) indicated that 20.6% of the cases where whistleblowers have reported fraud have been to their supervisors, while 18% has been reported to executives of the organization. However, Bressler and Bressler (2007) reported that less than 10% of small businesses use a system for anonymous reporting of wrongdoing and that organizations that failed to use such reporting systems suffered losses that are twice as high as those with a reporting system. Companies should establish some type of system allowing other employees to share the knowledge of possible fraud. Locati (2017) indicated that whistleblowing systems need to be formal structured systems for handling the reporting and investigating of misconduct. Locati stated that some vendors offer hotline systems for a flat monthly or annual fee. Effective hotlines will assist business owners in

maintaining an ethical culture while providing the employees with an option for reporting unethical or deceitful behavior (Andrews & LeBlanc, 2013). Ahmed (2014) indicated that the use of tip lines or whistleblower hotlines will also help in detecting collusion of employees to commit fraud.

Owners need to take care to communicate to the employees, vendors and customers that the hotline system exists (Gest, 2014). One key to effective hotlines is that there is expectation that tips will be acted upon without retaliation against the one who came forward with the information (Somers & Casal, 2011). Near and Miceli (2016) indicated that it is vital that management investigate each report of wrongdoing. In the research study conducted by Somers and Casal (2011), 67% of the study participants did not report the embezzlement as they felt that nothing would be done. To be effective, whistleblowing systems should provide an avenue for employees to anonymously report wrongdoing (Lee & Fargher, 2013). Near and Miceli also stressed the importance of maintaining an environment in which employees that report wrongdoing are protected from retaliation. Lee and Fargher (2013) also suggested that tip lines be available to employees 24 hours a day allowing employees to report acts of misconduct at their convenience. An environment that promotes whistleblowing creates an opportunity for organizational leaders to be advised of wrongdoing thus reducing costs associated with lengthy frauds and damage to the organization's reputation (Near & Miceli, 2016).

*Mandatory time off.* Another important internal control would be to require all employees to take vacation time each year thus creating an environment where someone else is performing their duties (Klein, 2015). This may allow others to notice discrepancies that may shine a light on fraudulent activities. Often, employees attempting to conceal fraudulent behavior will refuse to take time off work (Shorr, 2015). Frezza (2006) advised that employees should be required to

take a minimum of one week per year. Allowing employees to only take an occasional day or two off at a time may provide continued opportunity for concealing fraudulent activity (Frezza, 2006). Employees should be cross-trained, so that during one's vacation, another employee can fill in and possibly discover areas of concern (Shorr, 2015). Kapp and Heslop (2015) suggested routinely rotating the duties of staff members in efforts to reduce the likelihood that fraud could be kept concealed. Employees should be rotated out of their regular position for a minimum of two weeks per year (Cascardo, 2018).

*Other suggested internal controls.* Many additional controls exist that can be implemented easily and can have a significant impact on reducing the likelihood of fraud. Changes to the monitoring activities can assist with the detection of fraud in these areas. Mathis and Lewis (2009) stated that time-keeping documentation should be cross-referenced with payroll reports to ensure that ghost employees are not being paid. Traynor (2016) also suggested the use of pre-numbered checks and invoices as this will enable other employees to more readily recognize missing documents. Brucker and Rebele (2014) encouraged reconciliation of control accounts with subsidiary ledgers especially for accounts payable and payroll. Ney and Smith (2018) indicated that a vendor master file should be kept and that several employees should be required to be involved to make changes to this file thus reducing the ability to add fictitious vendors. The employees who are tasked with making payments should never be able to make changes to the vendor master file (Ney & Smith, 2018). Ives (2014) also suggested that periodic inventory counts be performed to verify that computer counts are close to the physical counts. In addition, Guinn and Sevin (2013) stated the employees responsible for purchasing activities should have maximum purchase limits.

Glodstein (2015) also suggested the use of surveillance and monitoring equipment to record employee actions in efforts to create an environment of deterrence which diminishes the perception of opportunity. The lack of security measures can allow the fraud to go undetected longer than it should (Gray & Ehoff, 2015). Ives (2014) indicated that software that monitors computer usage is inexpensive and provides another outlet for monitoring employees' activities. When employees know that their activities are being monitored, an environment of accountability is created ("Embezzlement: A crime of opportunity," 2006). The most effective monitoring activities are those that are conducted randomly. This reduces the likelihood that the employee will be able to manufacture documentation to conceal the fraud during the scheduled monitoring event ("Embezzlement: A crime of opportunity," 2006).

As rationalization is a required component for fraud to occur, owners need to consider how they treat their employees. Satisfied employees will have a harder time justifying stealing from their employer. One way to accomplish this is through creating a work environment that is encouraging and supportive (Peters & Maniam, 2016). Baum (2017) encouraged business owners to study the pay standards and benefits offered by like businesses in their area. Using this information to establish employees' pay and the benefits offered will create an environment in which employees feel valued (Baum, 2017). Baum indicated that employees treated in this way will be less likely to feel that they deserve more and justify the reasons for taking (embezzling) what they feel is due them.

Zamzami et al. (2016) also stressed the importance of auditing in fraud detection. This includes both internal audits such as auditing cash as well as external audits (Zamzami et al., 2016). Cascardo (2018) indicated that audit trails need to be incorporated into the accounting system including in the computer system/software. Daigle et al. (2009) admonished small



business owners to have a thorough understanding of the accounting software used so that they are able to make full advantage of its capabilities in providing exception reports. Data analytic tools are available that will assist in the deterrence and detection of fraud (“Counting the cost fraud,” 2013). However, construction contractors often fall behind in the use of information technology relative to fraud prevention (“Counting the cost fraud,” 2013). All transactions should be tracked which includes identifying who entered the transaction (Cascardo, 2018). Shorr (2015) suggested that clauses be added to the entity’s insurance policy to cover losses because of employee embezzlement. Employee dishonesty policies provide insurance specifically for indemnification of an employer in the event of employee embezzlement (Cragle, 2016). Carniello (2011) indicated that this can also be accomplished by taking out a bond on the key employees that would allow the business to recover a portion of any potential losses.

***Organizational culture.*** The control environment involves the tone from the top relative to acceptable behavior (Maguire, 2014). Important to decreasing the likelihood of fraud is the commitment by the owners and management to an organizational culture that stresses integrity and communicates a position of no tolerance relative to unethical behavior (Yu et al., 2018). Mat, Nazri, Fahmi, Ismail, and Smith (2013) suggested that all employees within an organization are responsible for fraud prevention; this extends from top level management to the lowest level employee. Elmore (2013) suggested that this type of leadership is crucial in promoting an ethical organizational culture. Hrnair and Metts indicated that the best way to communicate such a commitment to honesty and integrity is to lead by example.

Encouraging employees to behave ethically begins with creating an environment that is based on ethical values and behavior (Elmore, 2013). Cant, Wiid, and Kallier (2013) asserted that developing an ethical code of conduct can be a key determinant in reducing the chances of

being victimized as a result of employee embezzlement. The procedures used in addressing ethical concerns will impact every segment of the business (Cant et al., 2013). Ahmed (2014) stated that the development and implementation of policies relative to fraud will communicate to employees that the leadership is serious in its position against fraud. Elmore (2013) pointed to ethics training as a valuable tool in communicating and defining the ethical code of conduct to the employees.

Weinstock (2010) asserted that owners should establish and implement policies and procedures that specifically state that theft will not be acceptable and identify specific repercussions for doing so. However, the focus should be on the effectiveness of these policies; not just the existence of the policies (“Internal Control Breaches,” 2005). Owners can also deter embezzlement by valuing their employees and communicating this to the staff (Phairas, 2016). This includes paying competitive wages as well as offering competitive benefits (Phairas, 2016). Ascribing to and communicating such a tone from the top will reduce the likelihood that employees will choose to violate the trust of their employers. Maguire (2014) indicated that such an environment will diminish the perceived opportunity for committing the fraudulent activity without detection.

**Leadership.** Ronald (2014) described leadership as a process that influences a group to pursue a specific goal. Such influences may be positive or negative. Destructive leadership promotes reckless behavior in the employees which may create an open door for fraud to occur (Johnson, Kidwell, Lowe, & Reckers, 2019). This also increases the likelihood that the fraud is a product of a collusion of employees which is more difficult to detect (Johnson et al., 2019). Leaders are crucial in communicating and supporting the organizational culture (Bryan, 2012). When the organizational culture is one of zero-tolerance of fraudulent activity or unethical

behavior, careful consideration must be given to the type of organizational leadership. Bryan (2012) suggested that leadership should encourage an environment that stresses personal responsibility.

Leadership that is effective in deterring fraud begins with an ethical leader (Bhal & Dadhich, 2011). Bhal and Dadhich (2011) indicated that ethical leadership combines elements of both transactional and transformational leadership styles. The ethical leader is a person of integrity who requires others to act ethically through words and action (Bhal & Dadhich, 2011). Patelli and Pedrini (2015) stated that attention to ethical behavior by employees and external partners is instilled by behavior of an ethical leader. To be effective, the leader's words must align with his actions as this will speak loudly to others (Patelli & Pedrini, 2015).

One style of leadership is known as transformational leadership. Transformational leaders seek to motivate others to be the best version of themselves (Kark, Van Dijk, & Vashdi, 2018). Graham, Ziegert, and Capitano (2015) maintained that transformational leadership influences subordinates' thoughts about their work and about others. Ma and Jiang (2018) stated that transformational leaders keep a perspective that is based on the future rather than the present. Transformational leaders tend to use non-financial rewards in the motivation of others (Ma & Jiang). Rather, Caillier, and Sa (2017) indicated that transformational leaders use individualized attention to motivate others on an intellectual basis. Such a leadership style can be beneficial in promoting an ethical organizational culture in which employees would be encouraged to report any potential wrongdoing committed by others, helping to reduce the perceived opportunity to commit fraud without detection (Caillieri & Sa, 2017).

Another style of leadership is known as transactional leadership. The transactional leadership style is one in which the leader focuses on the behaviors and roles required of

followers in achieving the desired results (Kark et al., 2018). Integral to transactional leadership is hierarchical authority (Washington, Sutton, & Sauser, 2014). Transactional leaders rely on the use of financial rewards to direct employee actions (Ma & Jiang, 2018). Caillier and Sa (2017) indicated that transactional leaders typically communicate specific expectations that are relate to performance goals

**Impact of fraud prevention training programs.** Drogalas et al. (2017) identified the effective training of employees in fraud risk management as a vital process needing continuous improvement. Han (2016) stated that skills training of employees will produce the highest measurable difference relative to anti-fraud initiatives. Anti-fraud initiatives include prevention, detection and insurance (Johnson et al., 2015). To be effective, fraud prevention training programs should include identifying red flags, symptoms, and indicators of fraudulent activity (Han, 2016). The establishment, implementation and continuous improvement of a fraud control system is crucial to fraud prevention (Mat et al., 2013). Such a control system requires specific training in the identifying and understanding of the elements of fraud (Mat et al., 2013). Those charged with the transaction approval process should be educated in what to look for and what questions to ask in efforts to prevent and detect fraud (Han, 2016). While small businesses do not usually have an internal auditor on staff as suggested by Drogalas et al., much benefit can be gained from educating owners and accounting personnel in the concepts of fraud.

**Small business education.** Gordon, Hamilton, and Jack (2012) stressed the importance of small and mid-size businesses to both regional and national economies. Therefore, the success of these businesses is vital to the overall economic health of the country (Gordon et al., 2012). Walker and Redmond (2014) credited education as a key contributor to the success of small business. This is due to the importance of education in increasing knowledge and

developing skills critical to business sustainability and growth (Sharafizad, 2018). Business education should include both experiential learning as well as formalized training (Walker & Redmond, 2014). Sharafizad (2018) categorized formal learning as involving the acquisition of knowledge while informal training involves learning from participation. Quigley and Rustagi (2018) advised that a correlation exists between small business owners' level of education and their level of innovation management. Innovative management that promotes growth is one result of small business education (Marom & Lussier, 2017).

Many times, small business owners depend on their technical knowledge to produce successful business operations (Hanks & Bonaparte, 2015). Garrido-Lopez, Hillon, Cagle, and Wright (2018) indicated that to be competitive and to maintain a competitive advantage, small business owners need to integrate technical knowledge with business knowledge. Glaub, Frese, Fischer, and Hoppe (2015) cautioned that business education is only beneficial when put into practice. Education relative to business principles should include teaching small business owners in identifying challenges they will face and how to go about finding solutions (Joshi, 2014). McDowell, Aaron, Lester, Gibson, and Harris (2014) explained that strategic knowledge may mean the difference between being successful and failing. Nearly 80% of all small business failures can be attributed to the lack of education relative to strategic business principles (McDowell et al., 2014). Walker and Redmond (2014) stated that small business education is responsible for bringing about behavioral change that results in better management which increases the likelihood of the survival of the business.

***Experiential learning.*** Kuk and Holst (2018) suggested that experience tops the list of concepts important for adult learning. As small business owners typically have limited resources relative to time and finances, Sharafizad (2018) indicated that experiential learning is a major

contributor to increased knowledge and capabilities. Experiential learning stems from the relationship between three main components: active experimentation, concrete experience and reflection of experience (Kuk & Holst, 2018). Small business owners gain knowledge from reflecting on what they have learned through their experiences (Gordon et al., 2012). This concept of reflection is integral to learning from one's experiences (Kuk & Holst, 2018). Marom and Lussier (2017) maintained that the experiential learning for small business owners should include simulations and interviews.

Sukavejworakit, Promsiri, and Virasa (2018) identified the experiential learning theory as one of the most prominent education theories. Central to this theory is the concept that learning occurs as a result of understanding and transforming experiences (Sukavejworakit et al., 2018). The experiential learning theory uses concrete experience, which is based on feelings, and abstract conceptualization, or thinking, as methods for grasping experience (Jenkins & Clarke, 2017). Reflective observation, which means watching, and active experimentation, which involves doing, are used in bringing transformation as a result of experiences (Jenkins & Clarke, 2017). Integral to the experiential learning theory is the use of activities that provide the learner the opportunity for experience such as fieldwork, workshops and hands-on activities (Sukavehworakit et al., 2018). Small business education is the most effective when making use of this learning theory to increase knowledge and understanding of key business and management principles.

**Potential themes and perceptions.** Based on the review of relative literature, the researcher developed potential themes and perceptions to be found in the multiple case study of small construction contractors that have been victims of employee embezzlement. It was anticipated that the research study would show that the small construction contractors had not

been educated relative to what fraud is and why it happens prior to their experience as victims. It was expected that the participants would reveal that they did not understand the importance of internal controls, organizational culture, or leadership on the risk of fraud. The researcher also expected to discover that the participants were able to identify weaknesses in policies and procedures that inflated the risk that employees could embezzle from the company without detection. The research study identified policy and procedural changes that occurred as a result of the lessons learned through the experience of being victimized. It was further expected that study participants would gain an understanding relative to ways to educate and train employees in efforts to reduce the risk of fraud. This study provided information from the experiences of these small construction contractors who had been victims of employee embezzlement that will be beneficial in educating others to potential pitfalls to avoid.

**Summary of the literature review.** This literature review provides a basis for understanding the definition of fraud as well as the major theories that contribute to understanding the components necessary for fraud to occur. Embezzlement, which is a specific type of fraud, is also defined. Information is also presented relative to deterring fraud through internal controls, organizational culture, background checks, segregation of duties, tip hotlines, and mandatory time off. The sample cases presented, embezzlement impacts companies in a wide range of industries. There is no industry that is exempt from the possibility of being victimized by employees. However, there are activities and procedures that can be put into place to prevent and deter fraud from occurring. Fraud education and training transforms small business owners from a place of passivity to that of being proactive (Tschakert et al., 2016).

## **Transition and Summary of Section 1**

The foundation of the research study involves examination of what the study entails and why it is beneficial. In this section, background information was presented to assist with understanding the need for the study. Next, the problem statement and the purpose statements were defined. Based on the study being conducted, the nature of the study was presented identifying the research method and design chosen for the study as well as describing why the other methods and designs were not chosen. The research questions were stated followed by the conceptual framework to be used in developing the study. The significance of this study as it relates to small construction contractors was presented along with the implications for Biblical integration and the relationship of the study to the field of accounting. Key terms were defined, and the assumptions, limitations and delimitations were identified as to define the specialized scope of the research being conducted. Finally, this section concluded with an in-depth review of existing literature as it relates to the focus of this study.

The next section will define the project through reflection on the purpose statement. The role of the researcher will be defined, and the participants will be identified. Section 2 will also revisit the discussion of the research method and design. This section will provide the details relative to the population and the sampling method, the data collection process, and analysis of the data. The section will conclude with a discussion concerning the reliability and validity of the research findings.



## Section 2: The Project

Instances of fraud are wide-spread and impact all types of businesses. Yekini, Ohalehi, Oguchi, and Abiola (2018) indicated that fraud has devastating effects on business which negatively impacts the economy. Hess and Cottrell (2016) stated that small businesses are integral to the U.S. economy as these businesses employ nearly 50% of the workforce and are responsible for most of the new job growth. Employee embezzlement, which is one type of fraud, causes higher average losses in small businesses than other businesses (Yekini et al., 2018). Educating small business owners in strengthening their business so that it is less vulnerable to fraud will result in strengthening the economy (Hess & Cottrell, 2016). Understanding existing fraud theories, the behavior theories common to embezzlers, and the types of internal controls necessary for deterrence will help to protect small construction contractors from becoming victims. This understanding can then be used to establish and implement effective employee training programs aimed at lessening the risk of fraud.

This project focused on examining cases of employee embezzlement of small construction contractors. The picture that was presented was that of a “before” and “after” view of company accounting policies and procedures in efforts to lessen the likelihood of embezzlement. This research study also provided information for small construction contractors in understanding motivation, opportunity, and rationalization as these were the required elements for fraud to occur. This section involved a discussion of the details relative to the research study conducted. Included were a discussion of the purpose statement, the role of the researcher, the participants, the research method and design, the population and sampling procedures, data collection, data analysis, and the reliability and validity of the study.

## **Purpose Statement**

The purpose of this qualitative multiple case study was to gain an understanding of the impact of fraud education in assisting owners of small construction companies in developing better internal controls aimed at deterring embezzlement. Understanding the elements required for fraud to occur, as identified by the fraud triangle theory, allows business owners to identify areas needing improvement to lessen the likelihood of fraud (Azam, 2018). Moore (2018) identified the lack of resources available for implementing internal controls as the main reason that small businesses are vulnerable to fraud.

This study explored types of internal controls, such as segregation of duties, pre-employment screening, and confirmation of vendor accounts that were necessary to reduce occurrences of employee embezzlement. This research study collected data from small construction contractors to illustrate how internal controls and accounting policies and procedures have changed as a result of being victims of an embezzlement scheme in accounts payable. The study focused on a comparison of business processes before and after the fraud to determine if the experience associated with the embezzlement increased the owners' knowledge and awareness of the principles that contribute to increased motivation, opportunity, and rationalization, thus equipping them to determine how to detect and prevent embezzlement from happening in the future. As such, the research findings may allow other small construction companies to identify weaknesses in business processes that should be improved to reduce the likelihood that employees will be able to embezzle without being detected.

## **Role of the Researcher**

The researcher performed multiple functions in conducting this study. First, the researcher was responsible for identifying and enlisting participants for the study. This involved

researching small construction contractors to identify those who had been victims of employee embezzlement. The researcher used the Internet to search news outlets for cases of embezzlement within small construction contractors. Once potential participants were identified, the researcher contacted them and presented the opportunity for participation. The researcher included participants for three to five cases of embezzlement in small construction contractors in this research study.

Next, the researcher gathered the data from the participants in this multiple case qualitative research study. The data were gathered by conducting interviews and from documentation provided by the participants relative to policies and procedures. The researcher developed the questions. The researcher was also responsible for keeping record of the participants' responses so that the data were analyzed. This involved transcribing the interviews into written documentation for analysis.

Finally, the researcher analyzed the data collected. Stake (2010) indicated that researchers in qualitative studies use their own experiences in interpreting the data. Accordingly, the researcher identified commonalities in the information provided by the participants. Analysis of the data allowed the researcher to present the findings as they related to the research questions posed in the study. During this process, the researcher analyzed the data for relevance to the study concepts and theories. The researcher was then responsible for presenting the findings of the study.

## **Participants**

According to Creswell (2014), the careful consideration given when selecting participants is integral to qualitative research studies. Researchers should select participants that can provide beneficial information for understanding the stated problem and developed research questions

(Creswell, 2014). The participants selected for this case study were small construction contractors who had been victims of employee embezzlement. The researcher performed Internet searches to identify possible participants meeting this criterion. Once candidates were identified, the researcher contacted these contractors to present the opportunity for inclusion via email. The researcher used email to provide potential participants with a description of the study and explained the terms associated with participation. The researcher confirmed the contractor's agreement to participate through an email synopsis of the interview process. The intent of this contact was to develop a working rapport with the participants. The researcher discussed the specifics of the study and answered any questions the participants had. The researcher encouraged continued communication with the participants.

Care must be taken to ensure the ethical protection of the research participants (Yin, 2014). To this end, Yin (2014) suggested the use of informed consent forms, avoiding deception in the study, protecting the privacy and confidentiality of the participants, and selecting the participants in a fair manner. The researcher used participant consent forms provided by Liberty University's IRB. These forms were used to inform the participants about the case study and provided the opportunity for participation. This will help to ensure that participants are not coerced into participation (Haines, 2017). The researcher also protected the participants' identities and ensuring privacy and confidentiality. The researcher obtained approval from the IRB prior to enlisting participants for this research study. In efforts to ensure the accuracy and validity of the audit findings, every participant was given the opportunity to review the transcription of the interview to verify the responses. The techniques described above were used to maintain the ethical protection of the case study participants.

## **Research Method and Design**

The researcher considered the research method and design that would most appropriately address the research questions. Fassinger and Morrow (2013) suggested that the research method selection process begins with developing an understanding of the various research methods noting the strengths and weaknesses associated with each. Park and Park (2016) stated that one must determine which method would adequately answer the research questions and provide an understanding of the phenomenon being studied. In selecting the appropriate method, the researcher needs to consider the type and focus of the research being conducted (Reiter, Stewart, & Bruce, 2011). Reiter et al. indicated that selection of the research method must be contingent upon the research questions and the existing literature. The researcher should consider the type of data to be collected and how it will be presented (Fassinger & Morrow, 2013). Once the research method was selected, the appropriate research design was determined. The research method and design chosen for this study was a multiple case qualitative research study. The following provides a detailed discussion relative to the chosen research method and design.

**Discussion of method.** The three main types of research methods are qualitative, quantitative and mixed methods (Schoonenboom & Johnson, 2017). Stake (2010) indicated that the research method is predicated on the types of research questions, the type of analysis being conducted and the types of interpretation. Quantitative research answers research questions that quantify what occurred using statistical data (Barnham, 2015). This contrasts with qualitative research, which delves into why or how something occurred (Barnham, 2015). The mixed-methods approach combines elements from both qualitative and quantitative research.

Park and Park (2016) suggested the use of the qualitative research method when the objective is to develop a theory relative to the similarities and differences of various concepts. Qualitative research is subjective in nature and requires the researcher to be personally involved with the participants (Park & Park, 2016). The researcher chose the qualitative method as the purpose of the research involves developing a theory versus testing an existing theory. This research study involved personal interaction with the subjects to provide insight relative the research questions. The data collected were analyzed and used in the subjective interpretation of the relationship of fraud education of small construction contractors to the changes in processes, procedures, and training in the pursuit of reducing the likelihood of embezzlement. In conjunction with the differences in qualitative and quantitative research as described above, the researcher chose the qualitative method as the best option for this study.

**Discussion of design.** Doody and Bailey (2016) stressed the importance of linking the research questions to the type of design. Creswell, Hanson, Clark Plano, and Morales (2007) described the case study design as being used when the objective is to gain understanding about a phenomenon through examining the experiences of individuals. Smith (2018) indicated that case studies should provide deep information from a variety of sources. Specifically, the researcher chose a multiple case study qualitative design as being the best fit for this study. Yin (2014) indicated that the case study design should be used when answering research questions addressing “how” or “why” specific issues exist. Baxter and Jack (2008) stated that multiple case studies are beneficial when exploring the differences between cases. Gaus (2017) named the multiple case study as important for strengthening the research and facilitating the generation of a theory. The objective of these types of studies is to replicate the findings when comparing cases looking for similarities and differences (Baxter & Jack, 2008). Multiple case studies

provide the opportunity for the researcher to analyze issues within and across the chosen cases (Baxter & Jack, 2008).

This study involved seeking understanding from the experiences of small construction contractors. Specifically, the study focused on small construction contractors who had been victims of employee embezzlement. The researcher interpreted the data collected from interviews and any documentation provided by the participants through the identification of common themes from the participants' experiences. The study highlighted the differences in management and policies and processes before and after the embezzlement occurred. Through evaluating the experiences of these companies, the study produced information beneficial in the development of policies and procedures, internal controls, and employee training programs designed to minimize fraud risk.

**Summary of research method and design.** Careful consideration was given to the purpose of the study and the research questions in determining the most appropriate research method and design. As this study did not involve the analysis of statistical data in quantifying what occurred, it was determined that the qualitative method was the best fit. The researcher next evaluated the qualitative research designs, which were narrative, grounded theory, phenomenological, participatory action, and case study. The case study design was chosen to be the most appropriate as this study involved gaining insight into the impact of fraud education in deterring fraud as experienced by small construction contractors who had been victims of an embezzlement scheme.

### **Population and Sampling**

Asiamah, Mensa, and Oteng-Abayie (2017) indicated that appropriate population and sampling selections help to give credibility to the research study. The population must be

defined as it guides the selection of the sample (Asiamah et al., 2017). This qualitative research study presented comparisons from multiple cases of embezzlement within small construction contractors. As such, this study provided an examination and analysis of the experiences of these contractors in efforts to understand the relationship between fraud theory, small business education, behavioral theory applicable to embezzlement, and internal controls.

**Discussion of population.** Asiamah et al. (2017) defined the population of a research study as being a group of people who share at least one characteristic of the phenomenon being studied. The population for this study was construction contractors that had been victims of employee embezzlement within the last 10 years. The true population number may have been somewhat skewed as there may have been construction contractors that were victims of embezzlement without detection or may have dealt with the employee privately without the embezzlement case being made public. Internet searches were done to identify construction contractors who had been victims with an initial focus on the Midwest region of the United States.

**Discussion of sampling.** A sample was then selected from the population. Gentles, Charles, Ploeg, and McKibbin (2015) defined sampling as the process of selecting a portion of the population that is representative of the characteristics of the entire population. As the premise of the case study design is to gain understanding by examining the experience of a subject, the sample size will be relatively small (Gentles et al., 2015). Yin (2014) suggested that in multiple case studies, one should adhere to replication logic rather than sampling logic. Replication logic means that each case is purposefully chosen so that it predicts either literal or theoretical replication (Yin, 2014). Literal replication predicts similar results whereas theoretical replication predicts contrasting results for reasons that can be expected (Yin, 2014).



Palinkas et al. (2015) identified the main sampling methods as being purposive, stratified, random, and convenience. Valerio et al. (2016) defined purposive sampling as the intentional selection of study participants based on the extent to which they have been impacted by the issue being studied. Stratified samples are conducted by statistically dividing the population into subsets known as strata and then using random selection to choose participants from each stratum (Setia, 2016). Setia described random sampling as a specific probability sampling method in which each participant has equal odds of being selected. The convenience method means selecting sample participants from the population based on the ease of availability as a result of their relationship to the researcher (Palinkas et al., 2015).

Of these identified sampling methods, the purposive method was most appropriate for this multiple case qualitative study. This sampling method involves selecting cases for inclusion in the study based on their richness as well as the relevance of the information they can provide in relation to the research questions (Gentles et al., 2015). Using purposive sampling requires that the cases selected be those individuals or groups that have experienced the phenomenon being researched (Palinkas et al., 2015). The purposive sampling method was used for this study in efforts to select cases for the study in which the participants had experiences and knowledge relevant to embezzlement within construction contractors.

Next, the sample size was determined. Marshall, Cardon, Poddar, and Fontenot (2013) indicated that choosing a sample size that ensures an adequate amount of data are crucial to establishing credibility for the study. Concrete rules for establishing a sample size for qualitative research does not exist (Marshall et al., 2013). Creswell (2016) advised that sample size is predicated by the qualitative design, the complexity of the issue being researched, the resources being used, and the robustness and extensiveness of the data. Saturation occurs when the data

begins to repeat with no new information being offered and signifies that the sample size is most likely adequate (Creswell, 2016). According to Vasileiou, Barnett, Thorpe, and Young (2018), qualitative research studies typically use small sample sizes in support of in-depth inquiry of participants which is fundamental to the study. While there are single-case studies, Yin (2014) suggested that having more than two cases produces more credibility. Marshall et al. suggested that research indicates that multiple-case study research should include between three to six cases and include 15 to 20 interviews.

According to the sample size guidelines presented, the sample size for this study was three to five cases. To be eligible, participants were small construction contractors who had been victims of employee embezzlement within the past 10 years. Foundational to case studies is that the participants have experienced the phenomenon being studied. As such, it was imperative to this study that the participants had experienced an embezzlement scheme being perpetrated against them. The purpose of the study involved analyzing the role of fraud education in instituting changes to policies and procedures through training and internal controls. The experiential learning involved with being victims of embezzlement provided the sample participants with an understanding and knowledge beneficial to the research questions asked.

**Summary of population and sampling.** The purpose of this study was to gain understanding from the experiences of small construction contractors who had been victims of employee embezzlement. Therefore, the population from which the sample was drawn was comprised of small construction contractors who had been victimized by embezzlers within the past 10 years. As consistent with the case study protocol, the sample size for this study was relatively small. The sample was approximately three to five cases for this multiple case study.

The selected cases was small construction contractors who had experienced the issue that was studied.

### **Data Collection**

The data collection process was integral to the research study as the findings were derived from the data collected. Rimando et al. (2015) defined the data collection process as the systematic collection of data for a specific purpose from various sources. Creswell (2016) stated that the data collection process, relative to qualitative research studies, involves more than merely collecting data. The nature of case study research requires the researcher to incorporate the experiences being studied with the data collection plan (Yin, 2014). The following provide detail as to the instruments, data collection techniques, and data organization techniques used for this study.

**Instruments.** Creswell and Poth (2018) recommended the use of multiple sources of data which include interviews, observations, documents and archival information. Yin (2014) cautioned that while the in-depth interviews may be integral to the case study, these should not be the only source in developing the research findings. The researcher was one instrument of data as she provided insight into the participants' interpersonal behavior through direct observations. In-depth semi-structured interviews were also used and provided the primary source for presenting information relative to the research questions. Additionally, this study used archival information collected from public records such as news articles and Internet information relative to the embezzlement cases as well as documentation collected from participants relative to policies and procedures.

***The researcher.*** The first instrument to be used in this study is the researcher. Hetherington (2013) explained that the researcher has an important role that requires interaction

with study participants. The researcher in qualitative research must create an environment in which the participants feel safe in sharing their stories (Pezalla, Pettigrew, & Miller-Day, 2012). The researcher should exhibit neutrality and self-disclosure in efforts to build trust with participants and to encourage free-flowing dialogue (Pezalla et al., 2012). Creswell (2016) indicated that qualitative research involves going to a research setting to collect data through subjective analysis of the information shared. As such, the researcher played a significant role as she needed to interpret the data collected. In this multiple case qualitative research study, the researcher actively participated in that she conducted interviews in which she observed the participants. Observing the participants as they provided responses to interview questions allowed for a more in-depth analysis and aided in interpretation of the information shared. The researcher was responsible for recording the interviews and then transcribed the information shared in the interviews.

***Interviews.*** Each small construction contractor who had been a victim of employee embezzlement that agreed to participate in this study represented a single case. Participation included interviews of key individuals from these companies concerning the individuals' understanding of fraud, internal controls, and policies and procedures, as well as any related education received both before and after the fraud occurred. The in-depth semi-structured interviews was made up of open-ended questions that were constructed to align with the research questions in order to gain insight into factors creating vulnerability to employee embezzlement in small construction companies. The questions probed the connection between this vulnerability and the lack of education concerning the elements necessary for fraud to occur as well as limitations due to financial constraints, manpower, and lack of established procedures. Those

interviewed were asked to describe what they experienced, observed, and believed as to why and how the embezzler was able to perpetrate the fraudulent activity.

The primary interview questions were related to the research questions. The interviews also included basic questions relative to the embezzlement scheme itself. The following represents questions developed to obtain general information as well as information for each of the four research questions. General information:

Q1: What was the embezzler's job title?

Q2: How long had the embezzler worked for the company?

Q3: What duties were assigned to the embezzler?

Q4: How was the embezzlement perpetrated?

Q5: Approximately how much was the employee able to embezzle?

Q6: How was the embezzlement discovered?

Q7: Why did the employee resort to embezzlement?

Q8: Did the embezzlement involve collusion between employees? What relationships existed between the employees?

Q9: Were other employees aware that the fraud was occurring? If so, why did they not reveal what they had knowledge of?

RQ1: How were owners/managers educated on fraud prior to being victims of the embezzlement scheme?

Q1: What education did the owners/managers have relative to small business management?

Q2: What education did the owners/managers have relative to fraud?

Q3: What red flags alerted to the fact that embezzlement was occurring?

RQ2: What strategies did the owners use to minimize fraud and how have these strategies changed as a result of the fraud?

Q1: What pre-employment screening procedures were used prior to the fraud?

Q2: Are employees required to take time off?

Q3: What are the procedures for issuing checks for accounts payable?

Q4: Who has access to the company credit cards? Are the statements reviewed by someone?

Q5: What procedures are in place for reconciling bank statements?

Q6: What procedures are in place for adding vendors?

RQ3: What are the owners' perceptions of using internal controls to minimize fraud?

Q1: Looking back, what safeguards could have been used to prevent the fraud?

Q2: What weaknesses existed in the internal controls that enabled the employee to commit fraud?

Q3: How was the embezzler able to commit the fraud without detection?

RQ4: How have accounting policies and procedures changed since the fraud?

Q1: How have the pre-employment screening procedures changed?

Q2: What has changed regarding the check issuance procedures?

Final questions:

Q1: What additional lessons were learned relative to fraud prevention/detection?

Q2: What other information concerning the embezzlement case would you like to share?

This represents the basic open-ended questions used in the interview process. The information gathered from these questions was used in identifying commonalities and differences in the experiences of the small construction contractors who had been victims of

embezzlement schemes. The researcher also sought to gain insight through observing the manner in which the participants responded to these questions. The following is a discussion of the techniques used in the data collection process.

**Data collection techniques.** Yin (2014) stated that case studies should involve the use of multiple sources such as interviews, observations, documents, and archival information. Using multiple sources allows for triangulation of the gathered data, which improves the accuracy and completeness of the study providing a greater degree of reliability (Morgan, Pullon, Macdonald, McKinlay, & Gray, 2017). This study utilized all four of these data procedures. The four primary data sources are discussed in further detail.

**Interviews.** The in-depth interviews, as discussed above, were used to gather information valuable in understanding the connection between fraud theory, small business education, behavioral theory applicable to embezzlement, and internal control. The researcher obtained permission from the participants to record the interviews. The recordings were then transcribed to create a written record of the responses given. The transcripts were used in the member-checking process which Creswell (2016) identified as a method of creating validity in the study. The participants had the opportunity to review the transcripts and acknowledge that the transcripts accurately reflected what was shared in the interview.

**Observations.** Direct observations can allow the researcher to gain insight that is not available by using the other data collection techniques (Morgan et al., 2017). These observations provide an opportunity to observe the participants within their natural environment (Morgan et al., 2017). During the interviews, the researcher took notes on personal observations made relative to the participants' behavior and mannerisms while responding to the questions. The researcher took care in observing the way that management related to the employees, the tone of

the work environment, and any security protocols that were used. The recorded details were included in the researcher's notes and analyzed relative to potential themes presented in the study findings.

***Documents.*** Creswell (2016) described documents as another type of data to be collected during case study research. This may include public documents such as meeting minutes or private documents such as journals and letters (Creswell, 2016). During the case study, the researcher collected documentation relative to policies and procedures that were relevant to the study. The researcher obtained permission from participants for all documentation collected. This may potentially provide information relative to hiring practices and internal control procedures. The researcher also looked for information relative to the small construction contractors' ethical climate and how this was communicated to the employees.

***Archival information.*** The researcher used Internet searches to collect archival data published in news articles relative to the embezzlement schemes. Reported details about the embezzlement were combined with the other forms of collected data and included in the triangulation of the data. The researcher also collected data from the participants' websites such as mission statements and core values. This assisted in understanding the organizational culture which may have impacted the risk of being victimized by an embezzlement scheme.

***Data organization techniques.*** Stake (2010) advised that coding systems be used for sorting gathered data by themes in order to classify the information in a useful manner. The researcher analyzed the transcripts from the interviews, the researcher's notes, the documentation, and the archival data to establish themes. In efforts to protect the privacy and the anonymity of the participants, the researcher used a unique identifier for each participant which was used in the data organization listings. The data were coded according to the applicable



theme(s). The coding system involved using identifiers for each theme. The reviewer created a table listing the data by number and recorded the identifiers used for the themes appearing in the data. The researcher used NVivo computer software for this coding process.

An external hard drive was used for storing all data, including the recordings from the interviews. All files were password protected to ensure the confidentiality and integrity of the information. The external hard drive, as well as any hard copies of documentation, will be kept in a locked fire safe box for a period of five years following the research study. These measures will be used to help assure the participants of the commitment to confidentiality.

**Summary of data collection.** Data collection was very important as the research findings were derived from the collected data. The data instruments included the researcher, in-depth interviews, observations, documents, and archival information. NVivo software was used in developing and implementing a coding system. An external USB hard drive was used for electronic storage of the research study data. The hard drive along with any hard copies will be maintained in a secure manner for five years following the conclusion of the study.

### **Data Analysis**

Data analysis is a multi-step process that involves recording the data gathered in an organized manner, identifying and coding themes, interpreting the data in a subjective manner, and presenting the data (Creswell & Poth, 2018). Thematic analysis was used, which Clark and Vealé (2018) defined as observing and recording identified patterns found in the collected data. The following provides insight into the data analysis process that was followed. Moser and Korstjens (2018) indicated that the data analysis process begins with the first item collected and requires the researcher to begin writing field notes which are used in the data management and organization process.

**Data management and organization.** To facilitate the ability to retrieve and review the information collected, the data needs to be organized into smaller segments (Moser & Korstjens, 2018). This part of the process should involve reading and re-reading the information collected in efforts to become familiar with the data (Castleberry & Nolen, 2018). Being familiar with the data was beneficial when it came to the coding and sorting processes. NVivo software was used to aid in the management and organization of the data. This software was used to organize the data into digital files and involved the use of a file naming system to aid in retrieval.

**Coding according to themes.** All forms of collected data were sorted and coded according to emergent themes. Coding is defined as identifying words, phrases or sentences that are reoccurring in the data (Clark & Vealé, 2018). The collected data were examined and scrutinized to identify codes that were used. The NVivo software facilitated annotation of the text within the data and the coding of emergent themes. Coding allows the researcher to tag the information to allow for separating the data by theme (Castleberry & Nolen, 2018). The researcher should use the following questions to assist with the coding process (Castleberry & Nolen, 2018):

- What is taking place in the document?
- Who are the individuals named in the document and what part do they play?
- What is happening chronologically?
- What is the setting for the event taking place?
- Why is the event happening?
- What is the process involved with the event?

The answers to these questions helped in identifying the themes that were coded. The researcher used a combination of NVivo software and traditional coding methods. When

reviewing the documentation, the researcher used colored pens to mark the themes found in each document. NVivo was used to create codes relative to emergent themes identified as the researcher studied the gathered data. Each document was numbered and information within the documents was coded based on the associated themes. The number assigned to each document was indicative of the type of document followed by an assigned number. The key for the types of documents was as follows: T – transcripts of interviews, O - observations as noted by the researcher, D – documents provided by participants, and A – archival information found via Internet searches. The software was used to create a table listing the data by number and noting the ascribed themes contained in the document. The rows in the table were labeled with the codes and names of the themes. A column was included for each document and the heading reflected as such. For example, T1 was used to denote Transcript #1. The table identified the page and line numbers within each document that included information relative to the theme. The following is an example of how the table was constructed:

Table 1

*Example of How Table was Constructed*

Theme #	Theme Name	T1	T2	O1	D1	D2	A1
01	Internal control weakness	P3L4	--	--	P10L8	P5L2	--
02	Perpetrator behavior	--	P1L15	P4L3	--	--	P2L9

P=page  
L=line

All themes and all data were included in the table. This provided a record for easy retrieval of information.

**Interpretation of the data.** The interpretation process involves developing analytical conclusions from the data as presented (Castleberry & Nolen, 2018). This includes reflecting on what the information states as well as what it does not state (Moser & Korstjens, 2018). Sutton

and Austin (2015) indicated that such reflection is required to establish context and understanding for readers of the study. The researcher will implicitly indicate any personal biases that may impact the interpretation of the data (Sutton & Austin, 2015). The interpretation process included cross-case analysis in attempts to discover possible patterns in the data collected.

**Presentation of the data.** As suggested by Castleberry and Nolen (2018), the presentation of the data included a thematic map which provided a visual representation of the themes, the codes, and the relationship between the two. Sutton and Austin (2015) stated that the research findings are presented in the form of a written report. The themes and coding system detailed above were used to establish sections included in the research findings report. The report provided comparisons and contrasts in the experiences shared by the participants. Explanations and conclusions were included in the report rather than simply presenting the details shared. Uprety (2009) cautioned that the data alone are not enough; the findings should be presented in a clear and illustrative manner. The findings were presented in both written and visual formats to increase the readers' ability to understand the research conducted.

**Summary of data analysis.** The data analysis process was a multi-step process that included organizing, coding, interpreting, and presenting the data collected during the study. Organization of the data involved using NVivo software to create a blueprint for easy access of the information. The coding process involved sorting the data and identifying themes across the various types of data. Interpreting the data involved the evaluation and analysis of the themes identified across the multiple cases employed in the study. Finally, the presentation of the findings included a report comparing and contrasting the information collected from the

participants. The presentation included both written and illustrative components, which allowed readers to understand the proposed findings.

### **Reliability and Validity**

Reliability and validity are the basis for establishing the accuracy of the research study (Jordan, 2018). Creswell (2014) stated that reliability and validity also speak to the consistency of the research findings. In the quest for achieving reliability and validity of the research, it is important to note that valid studies must be reliable, however reliable studies may not be valid (Lakshmi & Mohideen, 2013). Strategies for developing the reliability and validity of qualitative studies are methodical rather than statistical (Noble & Smith, 2015). These strategies are important in presenting the research findings as trustworthy and rigorous (Kelly, 2017). The following defines reliability and validity and identifies strategies advantageous to this study for achieving both.

**Reliability.** The reliability of the study is determined by the ability to reproduce the research findings using the data collected (Jordan, 2018). Reliability describes the dependability of the research findings in that the study could be duplicated by other researchers (Morse, 2015). This relates to the consistency of the result findings over time (Hayashi, Abib, & Hoppen, 2019). Noble and Smith (2015) indicated that reliability takes into consideration biases of both personal and research method perspectives. One strategy for establishing reliability involves maintaining detailed records that create an audit trail which clearly defines the decision process in arriving at the research findings (Noble & Smith, 2015). This study involved the use of semi-structured interviews. The interview guide included a list of the interview questions. The same questions were asked of all participants. This developed consistency and allowed the research to be duplicated as the same questions could be used by other researchers.

**Validity.** Jordan (2018) explained that validity evaluates the ability of the data collected in accurately addressing the issue being researched. This points to the credibility of the research and is judged by the readers of the study (Kelly, 2017). Studies deemed to exhibit validity are transferable, at least in part, to other research studies (Kelly, 2017). Pandey and Chawla (2016) defined construct validity as the degree to which the instruments used are relative and representative of population. Morse (2015) defined credibility as internal validity and transferability as external validity. Credibility relates to the ability to draw accurate conclusions while transferability relates to the generalizability of theory (Kihn & Ihantola, 2015).

**Validity strategies.** The researcher will use multiple strategies in building reliability and validity into this research study. These strategies help to provide readers with confidence in the accuracy of the findings (Creswell, 2016). Lakshmi and Mohideen (2013) indicated that reliability and validity may be partly achieved through a quality presentation of the research findings. The four primary validity strategies used in this study included triangulation of the data, data saturation, coding schemes, and member checking.

**Triangulation.** Hayashi et al. (2019) described triangulation as one of the most noted strategies for establishing reliability and validity. Triangulation of the data involves the examination and analysis of the interrelationships of the data collected from the various sources (Fusch & Ness, 2015). The data collected from various sources are used to identify themes which are accomplished through the coding system (Creswell, 2016). This research study included collecting data from interviews of multiple participants, information found via Internet searches, and from policy and procedural documents obtained from the participants. The coding scheme, as defined below, were used to establish themes across the types of data.

*Data saturation.* Hayashi et al. (2019) defined data saturation as another important strategy in the quest for reliability and validity in qualitative research. Data saturation is achieved through the depth of the data (Fusch & Ness, 2015). Interviews can be used to achieve data saturation (Fusch & Ness, 2015). Creswell (2016) stated that data saturation is achieved when the data begins to be repetitive with no new information being obtained. Fusch and Ness (2015) indicated that it is important to use the same interview questions for multiple participants. This study was a multiple case study and included interviews of enough participants to achieve saturation.

*Coding.* Coding can be important to the establishment of reliability and validity (Gheondea-Eladi, 2015). To be beneficial with this regard, the coding scheme used should be consistently applied and should adequately reflect the theories of the study so that these theories could be applied to other similar studies (Gheondea-Eladi, 2014). Regardless of the source of the data, all data were coded according to identified themes. The researcher maintained a database of the coding parameters. The themes were presented and defined in the research findings.

*Member checking.* Iivari (2018) defined member checking as a process in which the participants review, comment on and approve the researcher's interpretations. Thus, member checking validated the accuracy of the information collected during the interviews. This strategy establishes trustworthiness and credibility in the research findings (Iivari, 2018). In this research study, participants were asked to review the transcripts of the recorded interviews and to approve the contents as being accurate. This ensured that the information used and coded was what was shared from the participants relative to their experiences.

**Summary of reliability and validity.** Consideration must be given to establishing reliability and validity as these are signs of a quality research study. Studies that are reliable are consistent and can be duplicated in other studies. Validity is the extent to which the results accurately reflect the data. As all valid studies are reliable, focusing on employing validity strategies will also achieve reliability. This study used triangulation of data, data saturation, coding, and member checking as tools for achieving validity and reliability.

### **Transition and Summary of Section 2**

This section provides details as to how the research project was conducted. The role of the researcher was clearly defined and the process of securing the participants was stipulated. Discussion was provided relative to the types of research methods and designs that were available and justification was given for the choice to conduct this study as a multiple case qualitative study. Next, the population was defined, and the purposive sampling method was presented. Data collection and organization techniques were identified as well as the process used in analyzing the data. Finally, the concepts of reliability and validity were discussed and validity strategies used in this study were presented.

Now that the foundation of study was laid and the details of the project were stated, attention was given to the application to professional practice and the implications for change. Based on analysis of the data collected, the research findings were presented. This included both written and illustrative descriptions of the conclusions. Next, detailed discussion was included relative to the applicability of the research findings to improving business practices. Recommendations were given for actions beneficial to achieving these improvements as well as topics for future research. Finally, this section concluded with reflections from the researcher as



to the experience of performing the study and identified existing personal biases impacting the interpretation and presentation of the findings.

### Section 3: Application to Professional Practice and Implications for Change

Valdiserri and Wilson (2010) indicated that small businesses are responsible for generating more than half of the GDP for the United States as well as being the primary outlet for new jobs. Despite their importance to the economy, construction companies have the second highest failure rates (Mahamid, 2012). Fraud is one of the factors contributing to such business failures (Mahamid, 2012). Therefore, it is crucial to understand how fraud education can be effective in deterring and detecting instances of fraud within construction companies. One such type of fraud is employee embezzlement. This study focused on gaining an understanding of the impact of fraud education in assisting owners of small construction companies in developing better internal controls aimed at deterring embezzlement.

The research findings are presented in this section. These findings contribute to the current research relative to the impact of fraud education on the deterrence and detection of employee embezzlement within small construction companies. The following include a discussion on how the findings of this study can be applied to professional practice. In addition, there are recommendations for action and for further study.

#### **Overview of the Study**

Moore (2018) stated that an estimated 30-50% of all small business failures is due to the inability to recover after being victims of employee embezzlement. The current body of literature does not address the specific challenges and considerations relative to small construction contractors' vulnerability resulting from a lack of education in fraud theory as well as business principles. This research study purposed to provide insight through the analysis of the experiences shared by small construction contractors who have been victimized by this type of fraudulent activity. Researching the changes in policies, procedures, and internal controls

implemented as a result of the embezzlement scheme provided information that may assist other small construction contractors in the detection and deterrence of fraud.

The research questions established for this research study were developed to gain insight into the organizational internal controls and accounting policy and procedural changes due to experiential learning of small construction contractors that were victims of employee embezzlement. The research findings identified corrective actions that have been or will be implemented as a result of these experiences. The research questions explore the importance of fraud education in the analysis of the appropriateness of the small construction contractor's policies, procedures, and internal controls. The next section provides a detailed discussion of the research study findings.

### **Presentation of the Findings**

This research study was conducted as a multiple case qualitative study. Multiple cases of employee embezzlement within small construction contractors were examined and analyzed in order to understand the importance of fraud education. The general findings relate to the four research questions posed in this study as well as insights based on the participants' responses. Following the general findings, the qualitative data are analyzed. The researcher presents the themes identified from the information shared by the participants along with a detailed discussion of each theme. The relationships specified in the conceptual framework are examined and areas of concern are noted.

**Case study companies.** This study included interviews with the owners of seven small construction companies. The types of construction companies represented by the participants included fire protection, general construction, home building and repair, and water purification. The seven participants shared their experiences as it related to embezzlement schemes

perpetrated at their companies. All the embezzlement schemes were committed by employees. An in-depth look at these schemes provide the basis for the analysis of the information shared by the participants concerning their experiences.

*Participant 1.* Participant 1 was a co-owner of a small construction company that provided water purification services. This owner had no education in fraud or small business management. The participant identified the fraud scheme perpetrated against the company as being the misrepresentation of hours worked. This fraud scheme was perpetrated by the office manager. The participant stated that the owners had trusted this employee to perform the job duties. Both owners were pre-occupied with duties for other companies that they owned and exhibited little oversight of the employee's performance. The employee handled the accounts receivables and knew the amount of income accrued for the week. This person would then inflate both hours worked for both the employee and spouse who also worked for the company. Thus, the income was going to cover payroll rather than paying the accounts payable. The fraud was uncovered when vendors began contacting the owners concerning non-payment. The owners had assumed that the bills were being paid. They noted that payroll had increased significantly. Further investigation enlightened the owners to the inflated hours attributed to the office manager and the office manager's spouse. The fraudster was motivated to this unethical behavior as a result of medical bills for the spouse. The interviewee pointed to the high level of trust and the lack of oversight as primary contributors to the employee's ability to perpetrate the embezzlement scheme. Participant 1 estimated the total loss to be approximately \$30,000. The owners did not prosecute as their attorney advised that it would cost more to pursue prosecution than the total of the loss. As a result of the embezzlement, the owners subsequently sold the company.

**Participant 2.** Participant 2 is the owner/operator of a small construction company specializing in fire protection. This owner had no education in fraud, however, Participant 2 had two years of college in business. The fraud committed against Participant 2 was also through payroll fraud. The guilty party was a foreman who would report and be paid for hours not worked. This was causing jobs to go over budget due to labor costs. Participant 2 shared that throughout the time that the fraud was being committed, telephone calls were received from other trades or contractors on the jobsite inquiring into the whereabouts of the field workers for the company. The foreman was working alone at the jobs in question. While this may seem insignificant, Participant 2 said that by the time the fraudulent activity was discovered, the scheme had cost the company approximately \$130,000. The scheme was uncovered when another employee advised the owner that attention should be directed at the foreman in question. The embezzler was motivated to commit fraud as a result of an addiction to alcohol. Participant 2 had considered installing a GPS system on work trucks providing the ability to check that the employees were where they were supposed to be. This participant decided against incurring the expense of the GPS system and the ongoing costs for monitoring.

**Participant 3.** Participant 3 is the owner of a small construction company specializing in home building and remodeling. This owner indicated had no education in fraud, but had taken a few courses in business. Participant 3 reported experiencing three different instances of employee embezzlement. The first fraud involved an employee that ran the gutter division. The employee kept cash collected for jobs completed rather than applying it to the customer's account. The embezzler also completed jobs for a personal side business, while charging the hours to Participant 3. This person also bought materials for jobs used in the separate side business on accounts held by Participant 3. The owner expressed that this went on for

approximately two years before it was discovered. Participant 3 discontinued the gutter division following this first fraud. The second fraud involved a field foreman that padded hours worked for the entire crew. The third fraud was like the first in that the employee responsible for the fraud was a manager of a division of the company. The employee stole time and material to complete personal side jobs. This caused the books for Participant 3 to show cost overruns for material and labor for the jobs. Participant 3 advised that it was noticed that material was missing and that material costs for jobs were way over budget. This participant also noticed that payroll costs were higher than budgeted. Participant 3 indicated that one of the managers that stole from the company was engaged to someone whose family was in the construction business. Participant 3 questioned in their mind why this manager was not working for the fiancée's family. Participant 3 was not able to provide an estimated amount of loss for the scheme involving the misrepresentation of hours. However, the owner estimated that the loss from the other two schemes were approximately \$40,000 and \$50,000-\$60,000, respectively.

***Participant 4.*** This participant is the owner of a small construction company specializing in fire protection. This owner had no business management or fraud education. Participant 4 shared the experiences relative to multiple instances of employee fraud. The first scenario shared was that of a superintendent that fraudulently reported inflated hours worked for the entire crew. This resulted in payment for hours not worked for three or four workers. The owner ultimately discovered the fraud by going to the jobsite multiple times and the crew was not there. Participant 4 also received telephone calls from the general contractor on the job asking where the workers were. Additionally, Participant 4 indicated that an employee was purchasing material on the owner's account for the employee's side business. This overran the cost of materials charged to the jobs. Finally, Participant 4 shared that an employee used the company

credit card for personal purchases. Before being detected, the employee was able to embezzle approximately \$5,000. The owner estimated the aggregate amount of loss from these schemes as around \$100,000.

**Participant 5.** This participant was the owner/general manager of a small construction company specializing in commercial general contracting. Like many of the previous participants, Participant 5 had no formal education in business management or fraud. This participant did have 27 years of experiential learning. This small construction contractor was the victim of a few embezzlement schemes at the hands of three members of one family. The embezzlers were also related to the spouse of one of the owner's children. All three of the family members involved were guilty of misrepresenting the hours worked. One of the fraudsters was a project manager. Participant 5 had an agreement that this individual would receive additional pay of two percent of the profit on the jobs. However, this employee turned in two percent of the gross. This embezzler also stole approximately \$5,000 in tools from Participant 5. The owner of this company estimated the total loss from these embezzlement schemes at approximately \$40,000 to \$50,000.

**Participant 6.** This participant is the president of a small construction specializing in the installation of automatic fire sprinkler systems. Participant 6 had no formal education in business management or fraud. The employee that embezzled from this company was part owner with the individual interviewed. The embezzler was also a family member. Participant 6 stated that the fraudster stole from the company by issuing checks to the fraudster personally. The embezzlement scheme was discovered when other office workers showed this participant the accounting records indicating that fraudulent checks were being written. At that point, the embezzler invoked a clause in the ownership agreement that allowed the embezzler to force the

partner out of the business. Subsequently, Participant 6 discovered that premiums for health insurance had not been paid. This owner went to cash the last few paychecks received and payment was declined due to insufficient funds. As a result, the company went into receivership. Participant 6 did prosecute the embezzler and was ultimately able to retain the business. However, the company is still struggling due to the loss, which was estimated to be around \$260,000.

***Participant 7.*** This participant was the president of a general contracting corporation. The interviewee was also a part-owner in the company. Participant 7 had no formal education in business management or fraud. The participant shared two instances of fraud that were committed against the company. The first scheme involved employees using company gas cards to fill the tanks of family members. Participant 7 was uncertain as to how long this had been going on before detected. The other embezzlement scheme involved employees that misrepresented their time and were paid for more hours than they actually worked. Participant 7 indicated that the procedures were changed relative to the use of gas cards and that the owners watched the time sheets more closely. The interviewee expressed the difficulty in that this owner had a separate business and the partner was running multiple jobs at one time. Therefore, it was difficult to watch over the field laborers. As a small company, they are unable to use some of the precautionary initiatives used by larger construction companies. Participant 7 was unable to assign a dollar amount to the total loss. They did have additional costs for legal fees in resolving the issues relative to the misrepresentation of time worked.

***Participant 8.*** This participant owns a construction company specializing in residential and light commercial renovations. Participant 8 had no formal education in business management or fraud. This embezzlement scheme involved the office manager, the relative of a



long-time friend that the participant had hired. The owner gave this employee the authority to do all the accounting functions including being signatory on company checks. There was no oversight as the owner trusted that this employee was performing the assigned duties. This interviewee was only concerned that the accounts receivable was greater than accounts payable. Participant 8 found out later that the information entered into the accounting software was manipulated, which resulted in fictitious reports that was using to make decision concerning the health of the company. This employee stole materials as well as had the company complete remodel jobs at the employee's residence for which payment was never remitted. The perpetrator also used company credit cards for personal purchases. The owner reported that the fraudster also stole a significant amount of cash from the safe. The embezzler stole funds that were withheld from employees' checks for retirement funds as well as payroll taxes. This made the embezzlement a federal offense as it involved monies withheld from employees' checks. Participant 8 estimated that the embezzler stole nearly \$250,000, which does not include \$97,000 in interest for loans that were secured to pay the payroll taxes and monies to the employees' retirement accounts. As this included federal offenses, the owner did not have to pay an attorney to prosecute for this portion of the embezzlement. However, to recoup the money lost as a result of cash stolen from the safe, materials stolen, or unauthorized purchases on the company credit cards, the owner would have to file a civil lawsuit.

**General findings.** This study was designed to provide insight that would assist small construction contractors in understanding the importance of fraud education. Multiple cases of fraud involving seven small construction contractors were examined in efforts to gain this insight. The goal was to arm small construction contractors with knowledge that will help them

in detecting and deterring employee embezzlement. To that end, the following research questions were developed:

RQ1: How were owners/managers educated on fraud prior to being victims of the embezzlement scheme?

RQ2: What strategies did the owners use to minimize fraud?

RQ2a: How have these strategies changed because of the fraud?

RQ3: What are the owners' perceptions of using internal controls to minimize fraud?

RQ4: How have accounting policies and procedures changed since the fraud?

This section provides detail of the findings as gathered by interviewing these contractors regarding their experiences. Seven small construction contractors were interviewed, providing details about many different cases of employee embezzlement. During the interviews, the participants were asked about their level of education as it relates to small business management and fraud, as well as the details of the fraud, the changes made in policies, and the lessons learned from the experiences. Following, each research question is addressed and information gathered from the interviews is shared.

**Research question 1.** The first research question dealt with the level of education possessed by the owner/manager of the small construction company prior to being victimized by fraud. Azam (2018) stressed the importance of being educated on the elements necessary for fraud to occur in developing policy and procedures that deter fraudulent behavior. Cressey (1950) developed the fraud triangle which identified motivation, opportunity, and the ability to rationalize the wrongdoing as elements that must be present for fraud to occur. All eight participants stated that they had no education relative to fraud. However, unknowingly, all participants referred to the required elements of fraud when sharing their experiences. In each

case, the participant recognized the motivation, opportunity and rationalization of the perpetrator. These owners of small construction companies have an understanding of these required elements as a result of being victims. The lack of fraud education made the small construction contractors vulnerable. This lack also increased the embezzlers' ability to commit the fraud for a longer period without detection. All owners acknowledged that being victims has opened their eyes to areas needing more attention.

The small construction contractors were asked about the level of small business management education they possessed. Small business education increases awareness associated with the consequences of not acting and heightens the ability to identify challenges and potential solutions (Lansberg & Gersick, 2015). The owners interviewed all had different levels of small business management education. Participant 2 had two years of business college. Participant 3 had taken a couple of courses, while the remaining participants had no formal small business education at all. All participants identified business principles used in uncovering the embezzlement activity. The ACFE (2016) identified the use of tip lines as the most common tool used in the detection of fraud. This played a part in the discovery of three of the embezzlement schemes studied as other employees alerted the owners to problematic situations. Current literature also recommends that time-keeping records be compared to the payroll reports to identify ghost employees (Mathis & Lewis, 2009). The detection of several of the embezzlement schemes involved a similar process in that discovery was made as a result of comparing the time-keeping records with the budget labor costs for the jobs. Ives (2014) suggested that companies perform periodic inventories to reconcile computer counts with physical counts. Participant 3 used a similar process in identifying material that was missing.

The third type of education that plays a part in educating small construction contractors on fraud is that of experience. Experiential learning is vital in increasing one's knowledge relative to a specific context (Dellaportas & Hassall, 2013). In this case, that context is fraud. All interviewees pointed to experience as the leading contributor to their education; both in business and in understanding fraud. However, experiential learning of fraud results in loss and could result in the failure of the business. This is especially critical for small construction contractors as Mahamid (2012) stated that the construction industry suffers the second highest number of business failures. Participant 1, an owner with no formal business education, who learned from over 35 years of small construction company management, experienced the least amount of aggregate loss due to the embezzlement scheme. This could suggest that business management education is not a major contributor to reducing the likelihood of being victimized by embezzlement scenarios.

**Research question 2.** The second research question had two parts. The first part was used to identify the strategies used by the small construction contractors to minimize the likelihood of fraud. The second part of the question was used to determine how those strategies changed as a result of being a victim of employee embezzlement. None of the participants in the study had implemented strategies specifically aimed at minimizing fraud. Suárez (2017) pointed to the use of internal controls which he defined as detailed processes used to effectively manage the use of an organization's resources while minimizing risk. None of the participants in the study showed a good understanding of the benefit of internal controls. While some of the participants identified areas of weakness, none of the participants understood the concept of internal controls in general, which is a significant weakness. Overall, the owners exhibited a lack of oversight. Even after being victims of employee embezzlement, the participants did not

target initiatives aimed at reducing the risk of fraud. While each small construction contractor made some changes to the accounting procedures, none of them established an organizational culture with a zero tolerance for fraud. None of the interviewees expressed plans to educate their employees on fraud nor did they plan to seek out additional education themselves.

**Research question 3.** The third question was used to determine the importance that the owners of the small construction companies placed on the implementation of internal controls. Glodstein (2015) cited internal controls as an effective method for small business owners to use to minimize fraud risk. A weak system of internal controls contributes to the potential fraudster's perceived opportunity of committing the scheme without detection (Huber et al., 2015). Even after experiencing fraud firsthand, the owners interviewed did not plan to heighten the level of internal controls. Each owner made some changes relative to accounting policies, however, none of them seriously considered how the lack of internal controls contributed to the employee embezzlement. In efforts to avoid being victimized again, Participant 1 never again trusted employees with the money. This might deter some types of fraud while doing little to prevent other types. For example, seven of the eight small construction contractors pointed to the padding of hours worked by their field employees as a major problem. The theory of the owner being the only one to handle the money will do little to deter or detect fraud committed through misrepresentation of hours worked. In all the companies, the owners would benefit from examining and analyzing the current weaknesses and developing tighter internal controls.

**Research question 4.** The fourth question asked the participants to identify the accounting policies and procedures that were changed subsequent to the employee embezzlement scheme. The expectation was that the experience of being the victim of fraud would illuminate policies and procedures that were ineffective. Participant 2, who had taken two years of business

college, revealed that no changes had been made and no changes were planned. It is expected that someone with this participant's level of business management education would be more vigilant about the need for change. The remaining participants were able to identify specific policies and procedures that had been changed. The changes in policy and procedures could assist these participants in developing a stronger system of internal controls, which would help to reduce the risk of fraud.

**Summary of general findings.** The research questions were designed to assist small construction contractors in understanding the importance of education in fraud and business management as well as to identify and implement changes to internal controls and accounting policies and procedures in efforts to deter fraud, especially with regards to employee embezzlement. All participants in this study stated that they had experience in operating a small construction company. Only one of the participants had formal education in business management. However, none of the participants had training or education in fraud theory. None of the participants could define the elements of fraud nor did they exhibit an in-depth knowledge of fraud theory. For the participants, business management education alone proved not to be sufficient concerning fraud awareness. The one owner that had two years of business college suffered the second highest loss per individual embezzlement scheme. The small construction contractors interviewed for this study showed little understanding of the need for strengthening internal controls in areas such as segregation of duties, background checks, and incentives for whistleblowing. The findings suggest a need for small construction contractors to be more educated and aware of fraud theory and deterrent strategies.

**Data analysis.** Data were collected through an interview process with eight owners of small construction companies. Transcriptions of the interviews were sent to the participants for

member checking to ensure the validity of the collected data. The interviews were uploaded into NVivo software. Four themes were found in the information gathered. Those themes were lack of education, misappropriation of trust, lack of oversight, and a weak system of internal controls. Data saturation was achieved relative to the gathered data as the responses were repetitive among all the participants across multiple sources of data.

***Relationship of findings to conceptual framework.*** The conceptual framework established four areas integral to the deterrence of employee embezzlement within small construction contractors. When energy is put into understanding the magnitude of the importance of these areas, owners create a safer organizational climate that is less likely to be victimized (Katrini, 2018, Bressler & Bressler, 2017). Figure 1 depicts the relationship of these core elements to the protection of the business. The themes identified through analysis of the data collected correspond to deficiencies in the stated core blocks of the conceptual framework.

The first theme discovered through analysis of the findings was that there was a lack of education amongst the owners of the small construction companies. This lack of education refers to the owners not being educated in fraud or business management principles. As small business education and fraud theory are two of the core elements of the conceptual framework, the lack of education in both creates a significant fraud risk. A lack of commitment to further education also inhibits the ability to understand behavioral theory related to fraud, as perceived opportunity, one of the required elements of fraud, is the basis for the convenience theory (Gottschalk, 2019). The convenience theory asserts that an employee will embezzle when there is a perceived opportunity to steal without detection (Gottschalk, 2019). The reluctance of small business contractors to pursue further education in spite of the experiential learning from being victimized may be attributable to status quo bias. This is a cognitive bias that suggests people

may resist change, even though needed for improvement, in preference of the comfort of the status quo (Nebel, 2015).

Another theme identified in the collected data, is that the owners often misappropriated trust. This also relates to the convenience behavioral theory, in that the owners placed too much trust without verification of the employees. Thus, the employees had an increased perception that the embezzlement would not be detected (Gottschalk, 2019). This lack of verification on the owners' parts is an internal control issue which is another core component of the conceptual framework. Binde (2016) asserted that it is this type of environment that propels the employee into using the organization's resources for personal gain.

The next theme identified in the findings directly corresponds to one of the core elements of the conceptual framework: the owners employed a weak system of internal controls. Weak internal controls create an environment in which employees have an increased perception of opportunity to commit fraud (Keiper et al., 2017). Again, education relative to fraud could have helped the small construction contractors to understand the risk associated with the weakness of the internal controls by understanding the necessary elements of fraud as defined by Cressey (1953).

The final theme identified in the study findings is that the owners demonstrated a lack of oversight. The lack of oversight represents a deficiency in the internal control system (Hrncir & Metts, 2012). Dorminey et al. (2010) named lack of oversight as a contributing factor to creating perceived opportunity. Lack of oversight may also impact the embezzler's ability to rationalize the wrongdoing. Hendi (2014) suggested that a common rationalization for embezzlement lies in the employee's perception that management does not care so why should they. A lack of oversight could be interpreted as a lack of concern on the part of management. Fraud education



could have helped the small construction contractors to identify these areas of concern prior to becoming victims. When one of the core blocks are deficient, the business is not as protected as it could be which increases the opportunity for fraud. The researcher found that the participants of the study created circumstances in which none of these core elements for deterring employee embezzlement were present, thus creating significant vulnerability.

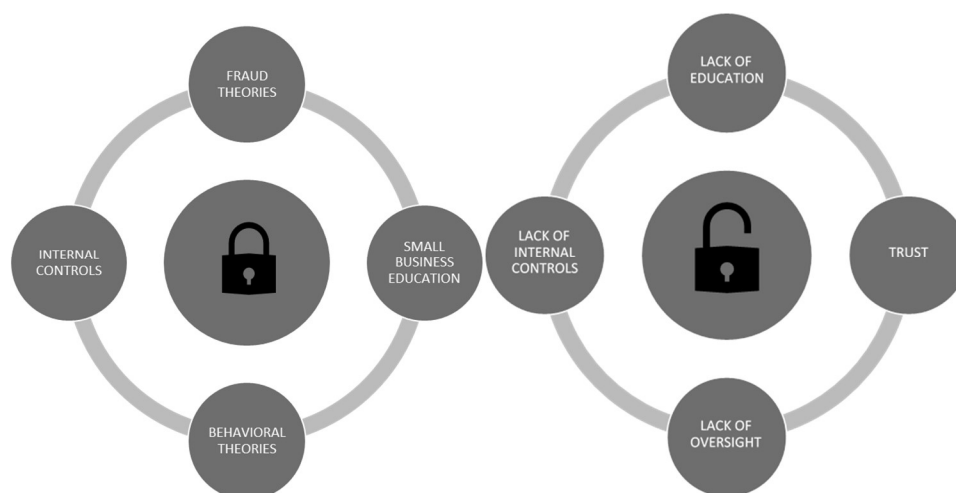


Figure 2. Relationship of conceptual framework with identified themes.

***Lack of education contributes to fraud opportunity.*** The findings revealed that the owners' lack of education contributed to the opportunity for the embezzlers to carry out their fraudulent schemes. This supports Trompeter et al.'s finding that a lack of education contributes to creating an environment of increased opportunity for fraud (2013). The use of Research Question 1 provided valuable data for identifying this theme among the study participants. Lansberg and Gersick (2015) identified education as key in increasing awareness of the consequences associated with business decisions as well as increasing the ability to identify challenges and the appropriate solutions. As such, it is important to consider the level of business education and fraud education of the participants in efforts to gain insight into how

these embezzlement schemes may have been prevented. Further, it is also important to consider the impact of the owners' experiential education, and their commitment to further education.

*Business education.* Analysis of the level of education possessed by the owners of the small construction companies that were interviewed revealed that there was a general lack of business education. Only two of the participants interviewed had any business education at all. Participant 2 had two years of education, while Participant 3 had just a couple of courses. The participant with the most business management education experienced one of the larger amounts of loss per embezzlement scheme. This could indicate that business management education alone is not enough to deter fraud, as while these two participants had some formal business management education, it was not enough to alert them to the red flags associated with the detection of fraud.

*Fraud education.* The most prominent fraud theory in existing literature is the fraud triangle developed by Cressey (1950). All participants indicated that they had no education relative to fraud. The researcher further found that while the participants of the study had no knowledge of the fraud triangle or understanding of how fraud occurs, all interviewees mentioned the motivation for why the fraud occurred. Participants 1, 7 and 8 reported that financial struggles motivated the employees to steal. Participant 5 identified a "lazy lifestyle" (personal communication, July 18, 2019) as the reason the fraud was perpetrated. The other four participants pointed to alcohol, drug, and gambling addictions as the motivations behind the embezzlements.

When it came to opportunity, all participants created environments in which there was little to no oversight of key employees. This allowed the employees to embezzle without immediate detection. Even though the participant did not understand the required elements of

fraud, Participant 3 identified the “combination of a bad person and a big opportunity” (personal communication, June 24, 2019) as reasons that the fraud occurred. All of the participants admitted to being consumed with other tasks. The misappropriation of trust and lack of oversight were key in creating an environment where the fraudsters were confident in their abilities to steal without detection.

Even without using the term “rationalization,” Participants 1, 2, 3, and 8 touched on the concept by describing the reasons the fraudsters gave for their wrongdoing. Participant 2 stated that the fraudster’s “excuses were beyond bizarre” (personal communication, June 22, 2019). Participant 3 discussed the fact that the embezzlers attempted to justify their behavior. Participant 6 stated that the embezzler gave multiple reasons for the fraud, including credit card debt and needing money to support their children. Participant 8 quoted the fraudster as saying “I didn’t take anything that wasn’t mine” (personal communication, August 2, 2019), expressing the embezzler’s belief that only what belonged to the employee was taken.

If the participants had been educated about fraud and had they understood the fraud triangle, they may have been able to identify the potential problems prior to the embezzlement losses. The ACFE (2018) maintains that it is crucial for small business owners to understand how and why fraud occurs. This is where fraud education becomes important. To fully understand fraud, one must also study human behavioral theories (Ramamoorti, 2008). The cost of such education would likely be less than the cost associated with the experience of being a victim, which for the participants of this study ranged from \$20,000 to over \$260,000. As stated by Participant 1, “schooling comes not too cheap” (personal communication, June 17, 2019) in reference to the cost of the experiential learning.

*Experiential education.* All participants agreed that experiential learning has been key in helping them understand how and why the embezzlement schemes occurred. This aligns with Dellaportas and Hassall's (2013) contention that experiential learning is key in impacting one's knowledge relative to a specific context. Existing literature identified experiential learning as one of the more prominent educational theories (Sukavejworakit et al., 2018). All but one of the participants identified changes implemented as a result from learning from their experience. Participant 2 was resistant to making changes while all the others were able to identify weaknesses that contributed to the embezzlement schemes. The problem with experiential learning is that it comes through experiencing the phenomena being discussed. The participants only learned about fraud by being victims of fraud. Had they had education in small business management principles and fraud theory, they may have been able to protect themselves to begin with.

*Commitment to future education.* None of the participants expressed plans to obtain fraud education or training. This is concerning as Tschakert et al. (2016) stated that fraud education and training transforms small business owners from a place of passivity to that of proactiveness. Considering that the participants had already been victims of employee embezzlement schemes, it would be expected that they would want to move from being passive to being proactive in deterring future incidences of fraud. The constructive/development personality theory focuses on the development of individual's personality which is shaped by his environment (Livesay, 2015). Beu and Buckley (2004) credited this theory as being instrumental in the way leaders approach their leadership role as the leaders' personal goals dictate the leadership style. Ramamoorti (2008) insisted that fraud education without education in understanding psychological factors that impact behavior is falling short of the needed knowledge. Therefore,

if the participants in this study were committed to gaining more education, this would encourage the employees to pursue knowledge as well. This could be used as a motivator for employee training initiatives designed to educate on fraud and ethical behavior.

Creswell (2014) identified data saturation as occurring when the data collection process ceases to produce new insight or information. In attempts to achieve saturation, the researcher coded the transcripts of the interviews and observations of the participants as well as review of archival information. All participants reported the same information relative to education: none of the participants were educated in fraud theory and only two of the eight participants had limited business management education. The researcher used triangulation in that multiple sources were used to obtain information, including observations, interviews, and archival information.

***Misappropriation of trust contributes to fraud opportunity.*** Analysis of the findings indicated that over-trusting employees was a major contributor in providing the employee the opportunity to commit fraud. All the participants reported that they had placed too much trust in the perpetrators who held key positions in the companies. Kramer (2015) advised that small business owners typically have a higher level of trust of employees which can create vulnerability. Embezzlement is defined as the act of stealing the property of someone through violating their trust. McCollum (2017) stated that business owners must be selective and smart about who they trust. Research Question 2 was developed to identify strategies aimed at minimizing the likelihood of fraud that were used by the participants, before their experiences, as well as to identify changes made as a result of the fraud. One such area that all but one participant identified was that of being more selective and cautious when it comes to trusting their employees.

Misappropriation of trust was overwhelmingly identified by all participants as a key factor in why they were victimized. Through observing the participants as they discussed the violation of their trust, the researcher found this to have created a great personal cost to those interviewed. Participant 3 cautioned that “trust is your friend and your enemy always” (personal communication, June 24, 2019). This aligns with the theory cited by Fleckenstein and Bowes (2000) that identified trust as being problematic in that individuals expect others to have similar sets of values. This leads to giving unmerited trust to others and being disappointed in their actions (Fleckenstein & Bowes, 2000). Participant 3 was one that was definitely more trusting prior to being a victim of employee embezzlement. Participant 1 suggested that, as an owner, one is almost doing the employees an injustice by giving them too much trust, thus creating temptation for them to behave unethically. Participant 3 stated that “it’s the ones you trust that you have to be careful with because they’re the ones that have the opportunity” (personal communication, June 24, 2019).

Participant 1 stated that the owners had fully trusted the employee in question to run the office which provided plenty of opportunity for the employee to cheat. Further, this participant expressed, “You might hire an honest person, but you can train them to be a thief if you’re not careful” (personal communication, June 17, 2019). Participant 4 expressed that a position of “total trust” (personal communication, July 18, 2019) was extended to the employees which ended up creating a position of vulnerability. This participant indicated that as a small construction contractor you trust your field personnel only to find that “they will take your trucks and they’ll take your tools. They’ll take anything they can get ahold of” (personal communication, July 18, 2019). Participant 2 always trusts until given a reason not to. This participant explained that an honor system is used. However, this owner said that “once you

break that honor system, chances are it's hard to trust" (personal communication, June 22, 2019). Participant 2 explained that when an employee violates that trust, this owner tries to help them. Participant 7 also pointed to trusting employees as a contributor to the perpetration of the fraud schemes. This participant was so trusting that after the employees had stolen from the company once, the employees were brought back to work at a later date only to steal again. The first time, the employees stole gas for personal use paid for with the company credit card. After they came back to work for this owner, the employees stole through the manipulation of time reportedly worked. Participant 7 stressed the importance of keeping a watchful eye rather than giving blind trust.

*Hiring friends and family.* Participant 1 cautioned against friendships as this can add to the likelihood of a violation of trust. This interviewee maintained that "friendships can't enter into the business part of them working for you because you can take a friend and make them an enemy if you give them too much trust" (personal communication, June 17, 2019). Participant 2, like Participant 1, expressed concern with being too friendly with employees. This participant encouraged business owners to "keep on a friendly basis with employees but also at the same time be their boss" (personal communication, June 22, 2019). For Participants 5 and 6, the embezzlers were family members, which increased the sense of violation. These participants exhibited more emotion when discussing the violation of their trust than when discussing the dollar amount of the loss. Both participants cautioned against hiring family members, as they trusted that family members would never steal from them only to find out that this blind trust made them vulnerable. Participant 6 never would have suspected that a family member would embezzle; however, this owner learned the hard way that this is not so. Not only did the participant's family member steal approximately \$260,000 from the business, the perpetrator

also forced this owner out of the own company. Participant 8 completely trusted the fraudulent employee as the person was recommended by a long-time friend and mentor. The embezzler was a family member of someone that the participant had total trust in. This interviewee said, “I didn’t have any reason not to trust the employee” (personal communication, August 2, 2019). Participant 8 advised that “I trusted someone so much, like they were family because they came from one of my great friends and neighbors” (personal communication, August 2, 2019).

*Personality traits impacting trust.* One factor that the participants identified as leading to the misappropriation of trust was the personality of the embezzlers. Miller, Buse, Glochowsky, Friedman, and Johnson (2001) used the rule of thirds as a descriptor of the likelihood of embezzlement: one third of the organization’s employees are stealing now, one third of the employees would steal if they perceive that they can do so without detection, and one third would never steal under any circumstances. Victims of embezzlement commonly identify the perpetrators as someone they trusted that they never would have suspected of wrongdoing (Miller et al., 2001). Participant 3 encouraged other small construction contractors to always keep an eye on the people they do not expect to cheat, as they are the most likely to do so. This owner warned that it is the ones that you think are really great that you need to keep watching.

Participant 1 described the perpetrator and the perpetrator’s spouse as being very nice individuals who were simply “really likeable people” (personal communication, June 17, 2019). Participant 3 advised that one of the perpetrators was very gifted and had a lot of ability. Another embezzler of Participant 3 was described as an excellent employee with a good attitude prior to the fraud. Participant 5 also described the perpetrator as very talented as well as very smart. In nearly all instances of fraud, the perpetrator considers himself to be smarter than everyone else (Ulmer & Noe, 2013). Kapp and Heslop (2015) identified personality traits and



abilities as major contributors to the ability to successfully commit fraud. These characteristics led the participants to trust the employees without question.

*Over-appropriation of trust leading to mistrust.* The researcher found that all of the participants had become somewhat jaded as a result of the violation of their trust. Participant 1 has never again entrusted an employee with money following the experience with fraud. While Participant 2 trusts until given a reason not to, this participant also indicated that “once you break that, chances are it’s hard to trust” (personal communication, June 22, 2019). Participant 3 was much more trusting of others prior to being a victim of employee embezzlement. This has caused this participant to adopt a philosophy of never assuming that the employees are honest. Participant 4 explained that even with the changes that made as a result of being a victim of employee embezzlement, this participant understands that “you can’t keep them honest” (personal communication, July 18, 2019). Participant 4 also warned that employees will steal anything that they can get their hands on. Participant 5 trusted everybody prior to being a victim of employee embezzlement. When referring to the embezzlers, Participant 5 stated that “they just stole all the time, everything they could” (personal communication, July 18, 2019). Participant 6 maintained that no matter how trustworthy the employees may seem, owners/managers need to keep their eyes on everything. Participant 7 admonished owners and managers to always be looking for dishonest behavior. Participant 8 no longer trusts anyone. Due to the distrust of others, this participant advised that “you have to do it yourself” (personal communication, August 2, 2019).

In observing the participants, the researcher noted that most participants seemed to have learned from their experiences. As such, almost all participants advised that they are more cautious when it comes to trusting employees as a result of their experiences. However,

Participant 2 expressed no intention to change anything. This participant even expressed confidence in the ability to trust current employees. This seems to undercut the value of experiential learning in this situation, as this position leaves the participant vulnerable to future incidents of fraud.

Data saturation and triangulation were achieved through the use of multiple sources to obtain the collected data. Observations, interviews, and archival information were used to identify the misappropriation of trust as a major contributor in the ability of the embezzlers to commit the fraudulent acts as experienced by the participants of this study. All of the participants named trust as being a problem area relative to fraud risk. As such, all participants except Participant 2 advised that they are more cautious when it comes to trusting employees as a result of their experiences.

***Lack of oversight contributes to fraud opportunity.*** The findings indicated that a lack of oversight of the employees' activities played a major role in the embezzlement schemes. All participants revealed that there was a lack of oversight which contributed to the opportunity for the employees to commit the embezzlement schemes. This is concerning as a lack of oversight can entice an otherwise good person to commit dishonest acts (Patterson et al., 2018). Dorminey et al. (2010) cited that a lack of appropriate oversight is a factor in developing perceived opportunity to embezzle without detection. McClure and Margolis (2010) named opportunity as the only element in the fraud triangle that business owners can impact. Small business owners should actively participate in the oversight of the accounting functions in efforts to detect fraudulent activity (Glodstein, 2015). By not keeping an eye on the business activities, the employees were provided the opportunity to embezzle from the owners for a longer period

without detection. The experiences shared by the participants of this study support the need to maintain oversight over one's employees as indicated in the current body of literature.

*Focusing on multiple operations.* Some participants failed to provide proper oversight because their management focus was split. Sutphen (2007) stated that no one person should have a substantial amount of unchecked authority, and in these cases, the owners' split focus resulted in an imbalance of authority. Participant 1 indicated that the owners entrusted the office manager to run the office, while they were busy with other companies. Participant 2 also identified lack of oversight as a problem, given that the employee that stole from the company was a field foreman who was entrusted with managing the job and seeing that it was completed. Participant 3 was distracted with the operation of other business segments and was not watching carefully enough. This participant learned that "whenever I've been taken advantage of, it's been when I've been really, really busy and distracted" (personal communication, June 24, 2019). Participant 6 trusted their partner, a family member, to handle the finances and did not look over the accounting records until alerted to the wrongdoing by other employees. Participant 7 shared that the partners had other duties that prevented them from keeping a close eye on the field employees. Participant 8 trusted the office manager to perform assigned job duties while the owner would perform job duties associated with field labor, expressing that "It's my company but it was the office manager's job to oversee and the individual was not putting in" (personal communication, August 2, 2019).

*Delegating oversight responsibilities.* Owners and managers must be cautious in the delegation of oversight responsibilities as an environment with strong supervision is crucial to deterring fraudulent behavior (Ulmer & Noe, 2013). Phairas (2016) asserted that it is the owner's responsibility to maintain proper oversight of accounting procedures as he will be the

one to suffer should embezzlement occur. Participant 1 explained that the embezzler knew that neither owner was keeping a close watch over the business activities as this was not their primary business. Participant 1 stated, “the more time that went by, the more freedom we gave the employee” (personal communication, June 17, 2019). The experience taught Participant 1 that “you can take good people and make them bad sometimes if you give them too much power” (personal communication, June 17, 2019). Participant 3 put people in positions of authority and trusted that they would do their jobs. However, this participant discovered that the lack of oversight contributed to their ability to commit the embezzlement schemes. This owner pointed to this lack of oversight as a reason that the fraud was carried out for as long it was. Participant 3 identified the nature of construction as making it difficult to adequately oversee the field labor. This participant purported that there should be someone that oversees the overseer (field foreman or manager) and in a small company that typically falls to the owner. When Participant 5 would leave the jobsite, the field laborers would quit working as they followed the example set by the foreman.

*Neglecting due diligence.* Participant 2, like many of the other participants, maintained that owners must keep a vigilant eye on the money, looking for discrepancies that may signify fraudulent behavior. Participant 4 did not pay close enough attention to the time worked by the employees compared to what they reported. This participant also allowed employees to purchase material without keeping a close eye on the invoices. This lack of oversight made the owner susceptible to fraudulent behavior. Participant 4 indicated that the experience taught the need to be more diligent in reviewing material purchases, the time turned in by field laborers, and the inventory of tools. Participant 5 shared that “I ran the company by the seat of my pants” (personal communication, July 18, 2019). This participant’s lack of oversight allowed the

fraudster to steal a higher percentage of bonus from jobs. Participant 8 did not keep a close eye on the accounting reports, thus allowing their employee to inflate the percentage of bonus received per job. Participant 6 had not been diligent in overseeing the finances of the company. This interviewee admonished other owners to be aware of the monies coming in and going out at all times. Participant 6 advised that this could identify red flags that should be investigated immediately. This participant summed it up by saying “You have to really know what’s going on” (personal communication, July 19, 2019). Participant 8 gave the office manager the authority to sign checks, make purchases with the company credit cards, and handle all other accounting duties. This led to the office manager being able to steal from the company for four or five years without detection. Participant 8 now understands that giving an employee too much control leads to an open door to dishonest behavior.

The data on lack of oversight was collected from multiple sources: interviews, observations, and archival information which speaks to triangulation. Data saturation was achieved as the participants repetitively identified lack of oversight as a reason that the embezzlers were able to commit the fraudulent activity. The participants acknowledged that they should have been more vigilant. In the absence of such oversight, opportunity was created for fraud to occur without detection.

*A weak system of internal controls contributes to fraud opportunity.* Through analysis of the information gathered during the interviews, the researcher found that the participants operated with weak systems of internal control. Existing literature stresses the importance of internal controls. Murphy and Tibbs (2010) maintained that effective internal controls are critical in reducing the likelihood of fraud. Weak or non-existent internal controls heighten the potential embezzler’s perception that the embezzlement can be conducted without detection

(Huber et al., 2015). The participants interviewed exhibited a lack of understanding of internal controls and the importance of implementing such controls. None of the participants established an organizational culture that stresses the importance of ethical behavior. This supports the existing literature that credited a strong ethical organizational culture as a major contributor to the deterrence of fraud (Fleming, Kranacher, & Riley, 2010; Bressler & Bressler, 2017; Yu et al., 2018).

*Segregation of duties.* It is imperative that duties involving money be divided by two or more individuals (Phairas, 2016). Many of the study participants created environments in which there was no segregation of duties. Participant 1 described the embezzler as being responsible for paying the bills, receiving payments, and processing employee's time. This participant said that the employee was in charge of all aspects of the office as being the only office employee. Participant 3 shared that two of the embezzlement schemes perpetrated against the company were by managers of divisions. These managers were given full control of their divisions. Participant 6 identified the embezzler as the co-owner who was in charge of the organization's finances. This provided the opportunity for the embezzler to issue company checks for personal use as the embezzler was the one who reconciled bank statements. Participant 8 shared that the embezzler, the office manager, was "in control of the whole company with the exception of owning it" (personal communication, August 2, 2019). This participant described the duties conducted by the embezzler as being all accounts payable and accounts receivable activities, opening the mail, and maintenance of bank accounts and credit cards.

*Screening of potential employees.* One important internal control that was identified as being lacking was that of performing pre-employment screening. Bressler and Bressler (2007) pointed to the importance of background reference checks in managing fraud risk. Phairas

(2016) encouraged business owners to check references, conduct credit references and perform criminal background checks prior to hiring applicants. Despite the plethora of literature encouraging pre-employment screening, the small construction company owners who participated in this study did very little in the way of screening potential employees. Participant 1 did check a few references but “nothing extensive” (personal communication, June 17, 2019). Participant 4 conducted minimal pre-employment screening. The remaining participants said that they did not conduct any type of screening. When asked about the implementation of pre-employment screening initiatives, Participant 5 stated “Absolutely not” (personal communication, July 18, 2019). Participant 8 stressed that although some pre-employment screening tasks were completed, this owner did not even consider checking into the background of the employee in question as the employee was recommended by a life-long friend. It is impossible to know what the participants may have discovered had references been checked or background checks been conducted. To reduce the risk of being victimized again, the small construction contractors should heed the advice of Verschoor (2014) who promoted the mindset conveyed by Ronald Reagan in his often-stated theory of “trust but verify.”

*Anonymous reporting of unethical activity.* The establishment of tip lines is another valuable internal control that assists with the deterrence and detection of fraud. The findings of the study support the importance of tip lines as three of the embezzlement schemes were discovered through reports from other employees. The ACFE (2016) identified whistleblowers as the primary method for discovering fraudulent activity. Approximately 47% of all workplace fraud is discovered through whistleblowing (Gagliardi, 2014). Participants 2, 3, 6, and 8 stated that the embezzlement was revealed via other employees. In the cases shared by Participants 2 and 3, the embezzlers were field laborers. The employees that reported the fraudulent activity

also worked in the field. Most construction companies have staff that work on the jobsites which makes it hard to supervise. All the participants shared their concerns over the difficulty of overseeing those that are in authority on the jobsites. Participant 3 further explained the difficulty with preventing and discovering fraud as it relates to reporting fictitious hours when the employees collude in the wrongdoing. The perpetrator identified by Participant 6 was the co-owner and CEO. The embezzlement was first discovered when other office workers suggested that the owner take a close look at checks that had been written. Participant 8 advised that one of the employees questioned the retirement statement as it did not reflect monies withheld from the employee's paycheck. This led the owner to finding that the embezzler had stolen the funds rather than paying into the employees' retirement accounts. The researcher found that maintaining an environment that promotes and supports employee reporting of wrongdoing may be key to detecting embezzlement by field laborers.

*Establishment of policies and procedures.* The participants were questioned regarding policies and procedures prior to the fraud. Most of the participants stated that there were no specific policies in place, and that the employees were trusted to perform their duties. In fact, Participant 1 admitted, "we did not have everything in place that we needed to as owners" (personal communication, June 17, 2019). When asked about policies that were in place, Participant 5 said "I had no policy, none" (personal communication, July 17, 2019). Participant 3 advised that there were some policies in place, but in many cases the policies were not being followed. Since there was a lack of oversight, the diversion from policy was not recognized. This left much opportunity for improvement in policies and procedures. Effective internal controls involve establishing, evaluating, and improving the accounting policies and procedures (Aris et al., 2015). The researcher found that the participants had not given adequate attention to



procedures designed to reduce the risk of fraud prior to being victimized. However, all participants acknowledged that changes had been made as a result of being victims of employee embezzlement. The researcher found that the lack of understanding of the importance of internal controls limited the changes that the participants made, as there were many other controls that could be beneficial in the deterrence of future embezzlement schemes.

Phairas (2016) cautioned against giving anyone other than the owners the authority to sign checks. Participant 1 took over any duties dealing with money following the embezzlement at the company. Participant 6 shared that changes in the accounting procedures were made by the agent who ran the company while in receivership, and this participant has maintained the changes that were instituted by this agent. Participant 6 now has an accountant that keeps a close eye on the financial activities and helps in reconciling bank statements and credit card statements. Participant 8 is now involved in every aspect of the accounts receivable and accounts payable process.

Participant 1 has established a policy that all purchases include a purchase order number and that hours and purchases are to be reviewed on a weekly basis. Participant 1 revised policies so that receipts were kept for every purchase as this participant said that “I always have to have proof” (personal communication, July 17, 2019). As two of the frauds perpetrated against Participant 3 involved the theft of materials, the owner established a policy requiring that material be inventoried on a weekly basis. These inventories are then checked against previous inventory, material received, and current job orders. Participant 3 has also changed from manual invoices to digital invoices and all invoicing is to come through the office. This is to limit the opportunity for employees to procure and steal cash paid by customers for jobs completed. Participant 3 also shared that most of the vendors with accounts for material purchase will email

this participant when material is purchased. These emails come to the owner's cellular telephone immediately upon purchase. This has allowed for better tracking of materials purchased.

Participants 1 and 2 shared that they have been more diligent to address questionable actions immediately to enable a timelier discovery of wrongdoing. In efforts to limit fraud by field employees, all participants except 6 and 8 stated that time tickets are tracked more thoroughly, and the time charged is routinely compared to the time budgeted for the jobs. Significant discrepancies in time charged to the jobs versus the time budgeted for the jobs are investigated much sooner than had been done previously. Since starting this, Participant 3 estimated that payroll costs have gone down by approximately 10%. Participant 2 asks more detailed questions relative to times that the crews worked and the amount of work completed. Participant 2 had considered adding tracking devices to the vehicles, however, this participant decided against the added expense. Participant 4 suggested the implementation of some type of time reporting system in which the employees had to indicate what time they arrived and what time they left the jobsite. This could be compared to records from tracking systems that this owner suggested for all company vehicles. Participant 4 is also at the jobsites more than in previous times. When errors are found in the reported time, Participant 7 now requires the employees to make changes so that there is record of the employees' change.

Participant 5 changed the methods used for procuring employees. This participant suggests that owners "go out and fleece every avenue for your employees instead of just trusting what comes down the road" (personal communication, July 18, 2019). After being the victim of employee embezzlement, Participant 5 made the decision to keep the crew small using only qualified individuals who were not family. Both Participants 2 and 5 advocated for smaller work crews making it easier to oversee the field workers.

Participant 7 no longer gives laborers credit cards to be used for gas, and has set up an account with a chain of gas stations that provides detailed purchase information. Employees can only put the purchase of gas on the company account when driving the company truck.

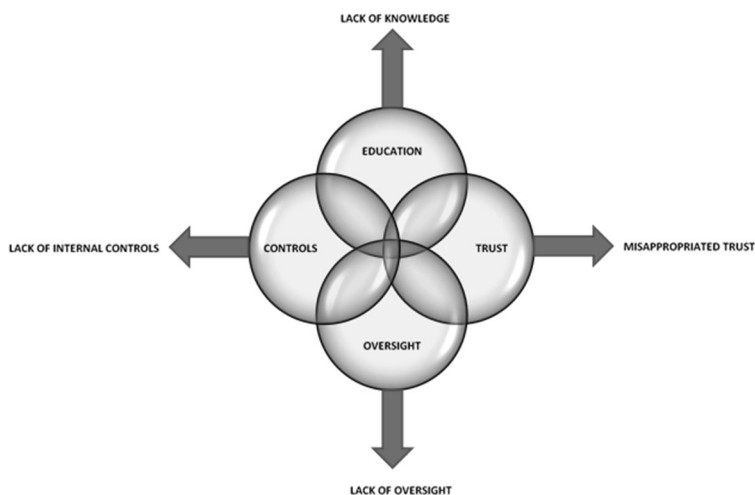
Participant 8 approves all expenditures, reconciles the bank statements and credit card statements, and reviews all the incoming mail. This participant matches every check to an invoice to validate the expenditure. Participant 8 no longer allows any employee to have signature authority on company checks. This interviewee also requires that employees copy the owner on all outgoing emails so that the owner can keep apprised of what is happening.

Participant 8 has recognized the importance of checks and balances.

The current body of research cites the lack of resources as a reason that small business owners fail to implement internal control initiatives (Moore, 2018). However, the policy changes shared by the participants are ones that can be easily implemented and have produced positive results for these owners. Some of the participants were creative in finding methods for implementing internal controls designed to minimize fraud risk. Considering the amount of loss experienced by the participants, the investment associated with implementing a stronger system of internal controls seems to be a necessary cost of doing business.

Analysis of the data collected regarding weak internal controls provided repetitive information from the participants of this study, indicating saturation. While prior to being victims of employee embezzlement, these participants had little understanding of the meaning or importance of internal controls, all the participants now understand that the lack of internal control creates vulnerability. Triangulation was again achieved through the use of multiple sources of data: interviews, observations, and archival information.

**Summary of data analysis.** As presented in the analysis of the data findings, the researcher identified four themes from the collected data that led to the ability of the embezzlers to perpetrate the fraud schemes. Those themes include the lack of education, misappropriation of trust, the lack of oversight, and a weak system of internal controls. As shown in Figure 2, when fraud and small business education, trust, oversight, and internal controls intersect, the risk of fraud decreases as the opportunity for committing fraud without detection is greatly reduced. However, deficiencies in these areas result in increased risk of fraud. The themes identified in this study create less intersection of these concepts. For example, the lack of education moves the education node in Figure 2 away from the other nodes. The greater degree of separation, the greater the opportunity for the fraudster to commit fraud without detection. When all four themes are present, as with the participants of this study, the company is left open and vulnerable. Each participant in this study had a varying degree of separation between the nodes however, all the participants showed significant vulnerability. Small construction contractors that purpose to reduce the degree of separation between these concepts will provide their company with a higher degree of protection from employee embezzlement schemes.



*Figure 3.* Identified themes.

Research question 1 was used to determine the level of formal fraud education possessed by study participants. The participants of the study purported that much was learned through the experience of being victims of employee embezzlement and such education may help them create an environment that deters this type of fraud in the future. The second research question was used to investigate policy and procedural changes because of the fraud. The researcher discovered that the participants gave little consideration to the importance of adequate controls. Insight gathered from the findings revealed that misappropriation of trust, lack of oversight, and a weak system of internal controls were common to the embezzlement cases studied. These themes from the findings answer Research Question 3 which explored the participants' perception of internal controls in the process of deterring fraud. The final research question was used to inquire about accounting policy and procedures that were changed as a result of the experiential learning received. The changes made by the participants as stated herein were developed to correct the misappropriation of trust, the lack of oversight, and the weakness of the internal controls. Even though the participants had a lack of formal education about fraud, the experiential learning led some of the owners to define processes needing change. However, some owners made the decision not to make changes. Experiential learning alone may not be enough to force change.

### **Applications to Professional Practice**

This research study provides information relative to business and accounting practices as well as a Biblical worldview. The concepts contained herein may assist business leaders in making decisions aimed at minimizing the risk of fraud. Learning from the experiences shared in this study will enable small business owners to adopt a proactive perspective on the deterrence and detection of fraud. The findings highlight accounting policies important in the quest to deter

fraudulent activity. The experiences shared by the participants illustrated various deficiencies in business practices that contributed the ability of the employee to embezzle without detection. Understanding these deficiencies will provide other small construction contractors with insight relative to the deterrence of fraud. The following provides details relative to the implications of the findings as applicable to these key areas: business, accounting, and Biblical perspective.

**Business practices relative to fraud education.** Fraud education is invaluable in business management to protect the entity from the unethical behavior of those seeking personal gain from the loss of company assets (Tschakert et al., 2016). Hess and Cottrell (2016) identified small businesses as being especially susceptible to fraud which can negatively impact an organization's finances, reputation, and the emotional well-being of the owners and employees. Of those businesses who become victims of fraud, one out of every seven will be unable to recover from the associated losses (Patterson et al., 2018). Therefore, in order to protect their businesses, owners/managers must seek to become knowledgeable concerning how and why fraud occurs as well as the best practices for deterrence and detection.

The small construction contractors who participated in this study indicated that they had no education relative to fraud. The participants exhibited a lack of knowledge concerning the three necessary elements of fraud as named by Cressey (1953) as being motivation, perceived opportunity, and rationalization. The study participants were able to list the motivations that caused the embezzlers to consider behaving unethically. A few of the participants shared the reasons or rationalizations held by the perpetrators. However, none of the participants understood the propensity associated with an environment of open and unlimited opportunity for committing fraud without detection. Had the small construction contractors understood this principle, they could have better protected their business from the embezzlement schemes.

The findings of this study provide an opportunity for other small construction contractors to be educated on fraud theories that describe how and why fraud occurs. By studying the findings presented herein, others can develop an understanding of how to safeguard their own businesses. As stated by McClure and Margolis (2010), opportunity is the only one of the three required elements of fraud that business owners can control. Therefore, it is imperative that small construction contractors pursue developing a good understanding of initiative for control of perceived opportunity. The findings as presented can be used as an educational tool to increase awareness and understanding for reducing perceived opportunity which reduces the likelihood of employee embezzlement.

In addition to being educated themselves, the owners should establish employee training initiatives aimed at educating employees on fraud. Kramer (2015) identified educating employees as key in the deterrence and detection of fraudulent activity. Tysiac (2012) purported that less than 20% of employees of small businesses receive fraud education as opposed to 60% of employees of larger businesses. Moore (2018) indicated that businesses that train all of their employees relative to fraud suffer fewer incidences of fraud, and fraud is detected sooner than in those businesses that provide no such training. None of the participants of this study provided fraud education for their employees. Participants 3, 4, 5, and 7 (or 50% of those interviewed) reported multiple embezzlement schemes involving multiple employees. It is possible that educating employees in fraud may have impacted the number or schemes/employees involved in the wrongdoing.

**Business practices relative to proper oversight.** Traynor (2016) maintained that the lack of proper oversight over the business accounting processes lead to greater opportunity for potential fraudsters. Business owners should establish an environment in which there is adequate

oversight for the accounting functions (Hrncir & Metts, 2012). The researcher found that the participants did not exhibit understanding of the importance associated with managerial oversight prior to being victims. However, experiential learning taught the participants this lesson in a costly way. Other small construction contractors have the opportunity to learn from the experiences shared in this study.

The findings described situations in which the owners trusted those placed in authority to manage the business or a segment thereof and did not actively oversee the operations. This promoted an environment of opportunity for the perpetrators. The embezzlers were able to steal for a longer period of time as they knew that the owners were distracted or not paying close attention. The lack of oversight combined with the blind trust contributed to the ability of the embezzlers to commit the fraud. The participants identified specific areas where the lack of oversight proved to be detrimental.

First, the findings indicated that in many cases there was a lack of oversight of the functions related to accounts payable. The employees were given too much control over the finances of the organization which led to corrupt practices. The perpetrators were able to easily hide the wrongdoing as they were confident that no one was watching. The small construction contractors interviewed for this study cited being distracted with other responsibilities and simply trusting their employees to perform their jobs professionally as reasons for the lack of oversight. The participants pointed to the struggle with being able to have the ability to hire people to oversee those put in positions of authority. It is recommended that other small construction contractors use the stories shared by these participants to develop sound practices of overseeing the accounting practices as performed by their employees.



Tysiac (2012) stressed the importance of external audits in the detection of fraud. Only 56% of small businesses as compared to 91% of larger businesses make use of external audits (Tysiac, 2012). None of the participants of this study used external audits to verify the accuracy of the financial statements. Participant 8 advised that even though outside accountants reviewed the financial reports on a monthly basis, they were unable to detect the fraud as the information entered into the accounting system was fictitious. The embezzler manipulated the information so that the financial picture of the company was much different than reality. However, some of the schemes perpetrated against the participants of this study may have been detected sooner through the use of external auditors. The embezzlement against Participant 6 involved an employee that stole by issuing company checks for personal use which should have been questioned had an external audit been performed. Schemes described by Participants 3, 4, 7, and 8 included the use of company credit cards or accounts for personal purchases. This may have been detected had the owners had external audits conducted. The external auditor(s) may have discovered the significant discrepancies between budgeted and actual costs associated with labor and materials as would have existed as a result of the schemes perpetrated against all participants with the exception of Participant 6. The use of external audits would have added another layer to the level of oversight of accounting reporting.

**Business practices relative to organizational culture.** Another area of concern revealed in the findings of this study is that of a lack of ethical organizational culture. The small construction contractors that participated portrayed a lack of understanding of the importance and value of establishing and communicating an ethical organizational culture. Bressler and Bressler (2017) identified organizational culture as one of the primary components in fraud deterrence. Yu et al. (2018) stressed the importance of the commitment by the owners and

management to an organizational culture that stresses integrity and communicates a position of no tolerance relative to unethical behavior. A strong ethical organizational culture will reduce the level of perceived opportunity and may somewhat reduce the ability of the perpetrator to rationalize the fraudulent behavior (Moore, 2018).

Elmore (2013) stated that it is critical for the organization's leadership to promote and ethical organizational culture that is communicated to the employees. Hrnair and Metts (2012) stressed that the best way to communicate such a commitment to ethical behavior is to lead by example. The findings of this study reinforce the need for attention given to this area. The participants of this study indicated that they had not established and implemented formal organizational culture policies. In discussing company policies and procedures, none of the participants exhibited an understanding of the importance of an ethical organizational culture. The experiences shared should point to the need for a more deliberate pursuit of commitment to honesty and integrity. Weinstock (2010) admonished business owners to establish and implement policies and procedures specifically stating a zero tolerance for theft and the consequences associated with such actions. These policies and procedures should then be communicated to the employees and used in employee training (Elmore, 2013).

**Business practices relative to internal controls.** Huber et al. (2015) pointed to weak internal controls as another obstacle in fraud deterrence as this magnifies the level of perceived opportunity to commit fraud without detection. "Internal Control Breaches" (2005) purported that internal control weaknesses are the primary reason that perpetrators are able to commit fraud schemes. These weaknesses in internal controls cause small businesses to be three times more likely to be victims of fraud than larger companies (Tysiac, 2012). Continual review of established internal controls and commitment to improvement is key in the quest to prevent fraud

(Zamzami et al., 2016). The findings indicated that the eight small construction contractors who participated showed a lack of understanding as to the definition and importance of internal controls. As such, these findings can be used in identifying key areas of potential weakness.

As these were small companies with a limited number of employees, emphasis was not given to the segregation of duties. Accordingly, the participants interviewed advised that one employee would be trusted with numerous job duties. For the cases in this study involving the misrepresentation of hours, the owners were not consistently on the jobsites and did not implement methods for tracking field employees. In the instances where the embezzlement scheme was carried out by office personnel, the owners spent more time in the field rather than in the office or in managing other divisions or businesses. The lack of oversight that occurred in the cases examined combined with the lack of segregation of duties only served to exacerbate the magnitude of the embezzlement.

The findings should encourage other small construction contractors to give careful consideration to the distribution of duties to their employees. In the small business environments as is consistent with those who participated in this study, it becomes necessary for the owner/manager to share in these duties which provides more appropriate oversight. Participant 6 and 8 cautioned against delegating signatory responsibilities for issuing checks. The owners interviewed also suggested consistent attention to the comparison of time and material charged to jobs to the amounts budgeted when the jobs were bid. Finally, the participants recommended that small construction contractors be diligent in reconciling bank and credit card statements looking for fraudulent activity.

The findings also show that the participants did very little in the way of pre-employment screening; no background checks were performed and only one participant checked a few

references. Glodstein (2015) cited pre-employment screening as key in the prevention and deterrence of fraud. Brody et al. (2012) stated that white-collar criminals are typically repeat offenders. Performing background checks would allow future employers to discover these past issues. The participants in this study had not performed consist background checks or other forms of pre-employment screening prior to hiring. It is unknown if any of the embezzlers associated with the cases in this study had committed unethical activities prior to their employment with study participants. However, several of the participants shared that the motivation for the fraud was related to addictions: drug, alcohol, and gambling. Pre-employment screening such as drug tests and credit checks may have alerted the study participants of possible problems prior to hiring these employees.

Another internal control that is beneficial in detecting fraud is that of developing and implementing tip lines in which whistleblowers are able to report suspected incidences of wrongdoing. The ACFE (2016) named tip lines as the most commonly used tool in the detection of fraud schemes. Tips from customers, vendors, and/or employees are the most common method for fraud detection in small companies (Daigle et al., 2009). Tootle (2008) indicated that educating employees on fraud is important to the successfulness of the tip hotlines. Small business owners should consider implementing systems for the anonymous reporting of unethical behavior as owners are not able to see all that happens (Tootle, 2008). All participants except 1 and 7 advised that the embezzlement scheme was detected in part due to information shared by employees, customers, and/or vendors. This supports the need for implementing fraud tip lines that allow stakeholders to report suspect activity.

Internal controls enable the owners to proactively defend the organization's assets and create obstacles for potential fraudsters. A weak or non-existent system of internal controls

makes businesses vulnerable to wrongdoing as can be seen in the cases examined in this study. Other small construction contractors can use the cases described in this study to identify internal controls to strategically implement in efforts to deter fraud. This would allow other construction contractors to focus on prevention rather than the consequences associated with being victims.

**Relationship to accounting.** In recent years, accounting and auditing curriculum has included increasing amounts of content related to fraud (Smith & Crumbley, 2009). Smith and Crumbley (2009) cited the number of accounting scandals in recent years as creating an increased awareness of forensic accounting principles. The detection, deterrence, and correction of embezzlement schemes require those in the field of accounting to be educated relative to fraud. Accountants are tasked with examining and analyzing the financial records of the organization. Thus, the findings of this study provide insight into the accounting functions that should be closely monitored.

In the pursuit of being educated relative to fraud, those in the accounting profession need to be alerted to the psychological aspects of fraud. The study of human behavior should be combined with the study of fraud to provide a more thorough understanding (Ramamoorti, 2008). Personality traits such as greed and a focus on revenge increase an individual's ability to rationalize unethical behavior (Ramamoorti, 2008). Forensic accountants would benefit from increasing their understanding of behavioral theory in understanding the concepts associated with fraud.

Most of the small construction contractors that participated in the study indicated that comparing the actual job costs with the budgeted job costs helped in discovering the embezzlement schemes. However, the owners indicated that this was not done on a routine basis. It was not until a problem was suspected that special attention was given to the variances

between actuals and budgets. Both material and labor job costs were inflated compared to the estimates used in pricing the jobs. The findings support the need for continually tracking job costing records. Those in the field of accounting should be diligent to actual versus budget reports looking for large variances as this may signify a problem needing further investigation.

The embezzlement cases of a few of the participants involved employees who did not pay vendors so that the money could be diverted to payroll to pay fictitious hours or to steal funds for personal use. This highlights the need for verifying statements with the accounts payable journal to identify discrepancies. Had this been done, this embezzlement schemes would have been detected much sooner. The examination of aging reports would have also shown that a problem existed. Accounting personnel should look for accounts that have been unpaid for a significant period of time and should investigate as to why the vendors had not been paid.

**Implications from a Biblical perspective.** The quest to deter fraud begins with a dedication to business integrity which is defined by Monga (2016) as speaking and acting in a manner consistent with ethical values. The Word of God teaches that Christians should be people of integrity as this glorifies the Father (Keller & Alsdorf, 2012). God instructs the Christian to “be ye holy as I am holy” (I Peter 1:16, KJV). This is a commandment; not a suggestion. Therefore, the Christian cannot rationalize fraud. The spiritual condition of the embezzlers in this study is unknown, however, at least two of the small construction contractors interviewed profess to be followers of God. As such, these owners have the opportunity to be an example to others in the way that they conduct their businesses.

The Bible teaches to be sober and vigilant over one’s spiritual condition. For the Christian, the way individuals behave in their vocation should reflect this commitment to right living. As such, one’s business dealings, whether an owner or an employee, should reflect

truthfulness. Christians should be in the 30% of employees that would not steal from their employers under any circumstances. There is no circumstance in which the Christian should be able to rationalize fraudulent activities. Christians should also feel an obligation to report wrongdoing in efforts to shine a light on dishonest behavior.

The concept of misplaced trust was paramount in understanding the experiences shared by the study participants. Misplaced trust opened the door of opportunity that led to loss for the small construction contractors. Why is it so easy to trust others? The natural tendency of human beings is to trust. People tend to blindly, blatantly trust without question. Anne Frank is quoted as saying “I keep my ideals, because in spite of everything I still believe that people are really good at heart.” However, the Bible declares that the heart of man is desperately wicked. God warned about misplaced trust. Jeremiah 7 (KJV) states “Behold, you trust in lying words that cannot profit.” In Kings 20, Hezekiah suffers from God’s displeasure in the misplaced trust exhibited by Hezekiah as he showed the entire kingdom to his enemy. The children of Israel, after being enslaved by the Egyptians, exhibited trust in their enemy over trust of Moses, their leader brought to them by God. Psalm 20:7 (KJV) declares that “Some trust in chariots, and some in horses: but we will remember the name of the Lord our God.” One may think that being a Christian means that one always trusts his fellow man. God cautioned against this type of thinking. It is wisdom to be cautious as the only truly trustworthy one is God Himself.

Being a Christian does not mean that these business owners should turn a blind eye to the misdeeds of others. The findings indicate that, in all instances, the embezzlement occurred as a result of blindly trusting the employees. While Christian owners should desire to be good to their employees and seek the employees’ growth and well-being, the owners must be aware that people can resort to unethical behavior. Scripture instructs the Christian to love and to serve

others. It is this desire to love that may blind the Christian owners from seeing the potential in others for wrongdoing. Looking through eyes of love and desiring to help those in need may make these owners vulnerable to the one who seeks to take advantage. The best advice is that given by Ronald Reagan when he stated, “trust but verify.”

In Matthew 25:14-30, Jesus taught the parable of the talents which illustrated the need to be good stewards of the resources to which one is entrusted. Christian business owners are obligated to this same teaching. This should be considered relative to all resources of the organization: finances, material, and staff. For this cause, Christian business owners should be vigilant over the business activities. Allowing one individual to have free reign with no oversight puts the entire organization at risk. Other employees are depending on the longevity of the organization. One participant shared that the experience of being a victim of employee embezzlement has taught the owner that giving too much trust or control to employees with little to no oversight is doing an injustice to the employee as well as others as it sets the scene for the potential for dishonest behavior.

As a good steward, Christian business owners should watch over the business and be aware of any discrepancies in the records. Holding the embezzlers accountable is not a sign of a lack of love for the perpetrators. On the contrary, it shows a concern for the perpetrator’s eternal well-being. Accountability benefits the organization, the other employees, and ultimately for the fraudster as it gives him or her the opportunity to make amends for the unethical behavior.

### **Recommendations for Action**

The findings presented for this study would be beneficial to any small construction contractor wishing to be proactive in deterring employee embezzlement. The study provided examples of employee embezzlement, identifying areas that owners of small construction



companies should pay special attention to. The findings are also advantageous for accounting professionals in alerting them to business practices where small construction contractors may be vulnerable. Distributing the findings to small construction contractors could make it possible for owners to reduce their risk of fraud. This could be accomplished through the publication of this study in academic and professional journals. Additionally, the findings could be shared via the internet, through social media outlets, and with associations for construction contractors. Based on the experiences shared by the small construction contractors interviewed for this study, specific recommendations for action have been identified.

**Recommendation 1: Small construction company owners should educate themselves on business management and fraud.** One such recommendation is that small construction contractors educate themselves relative to fraud. Fraud education will help the owners to understand the established fraud theories and the components required for fraud to occur which are motivation, opportunity, and rationalization. As the small construction contractors begin to understand these concepts, the owners will be better able to identify red flags and areas of weakness. This, in turn, will enable the owners to educate and train their staff accordingly.

This can be accomplished through attending seminars on fraud or taking a college course on fraud. Owners may also self-educate by reading journal articles discussing fraud. Hanks and Bonaparte (2015) encouraged small business owners to consider contacting the SBA as they are leaders in educating small business owners. The ACFE is dedicated to educating individuals in fraud theory thus arming them with information valuable in preventing or deterring fraud (ACFE, 2018). This would be another viable source for small construction contractors in fulfilling a commitment to increased knowledge and understanding of fraud theory as well as business management principles.

**Recommendation 2: Small construction company owners should establish and implement an ethical organizational culture.** Another recommendation is that small construction contractors establish and implement an ethical organization culture that purports a zero tolerance for unethical behavior. Campbell and Göritz (2014) described organizational culture as the guide that explains why employees behave the way they do. The organizational culture consists of both formal and informal systems (Campbell & Göritz, 2014). The formal system is defined by the code of conduct, the tone from the top, and the employee reward system while the informal system includes workforce influence and the ethical climate of the organization (Campbell & Göritz, 2014).

Communicating organizational expectations and training employees accordingly are important in such an organizational culture. This could involve formal training as well as leading by example. Such communication is required in order for employees to perceive the established code of conduct as accurately reflecting the ethical climate (Berry, 2004). Organizational policies should support the established culture. The owners should reinforce the culture by standing firm and taking action when wrongdoing is discovered as this will deter others. Yu et al. (2018) advised that an ethical organizational culture should stress a commitment to integrity. The owners should also lead by example by modeling behavior exemplifying integrity and honesty (Hrncir & Metts, 2012).

**Recommendation 3: Small construction company owners should exercise appropriate oversight.** Small construction contractors should actively participate in the oversight of business processes. Being distracted and unaware led to the employee embezzlement in the small construction contractors that participated in this study. One participant in this study advised other owners to be vigilant and watchful, especially of those

employees that would never be expected to embezzle. Kapp and Heslop (2015) named owner oversight as one of the best methods for reducing the opportunity for employees to commit fraud. Aris et al. (2015) urged owners to focus on the oversight of the operational processes as an effective method of deterring embezzlement. When employees know that the owners are keeping a close eye on the business, there will be a decreased level of perceived opportunity for committing the fraud without detection.

**Recommendation 4: Small construction company owners should implement a strong system of internal control.** The final recommendations relate to the establishment of sufficient internal controls. Small construction contractors should perform pre-employment screening. This should involve, at a minimum, background checks, reference checks, and drug testing. Credit checks could also be enlightening. Owners should also establish a policy that promotes whistleblowing and develop a way for employees to anonymously report wrongdoing. If the resources are not available for a tip hotline system, the owners should be creative in communicating openness and confidentiality available to those employees who come forward. Small construction contractors should strive for segregation of duties. By nature, small construction contractors may find this difficult due to the small number of employees. However, checks and balances should be implemented wherever possible. The same person should not perform all duties of the specific business processes. Small construction contractors should be diligent in examining credit card statements, matching vendor statements with the account payable ledger, and comparing actual job costs with the budgeted amounts. Attention given to these internal controls will help to deter and detect fraudulent activity.

## **Recommendations for Further Study**

This study focused on the importance of understanding fraud in efforts to detect and deter employee embezzlement in small construction companies. The process of conducting this study provided the opportunity to identify areas suggested for further study. The limitations of the study point to the potential for additional study using other criteria. Such suggestions for further study include the comparison of embezzlement schemes perpetrated against organizations of different sizes, the analysis of the importance of fraud education in deterring embezzlement in small construction contractors in other geographical areas, and the examination of embezzlement amongst companies specializing in different types of construction,

**Recommendation 1: Comparison of embezzlement to size of organization.** One area for suggested research would be to examine the differences in employee embezzlement of small construction contractors compared to those of medium and large construction contractors. This would allow analysis of the different types of fraud to see if there is a correlation between the type and size of the fraud with the size of the construction company. This could involve qualitative analysis of the embezzlement schemes on multiple criteria, such as percentage of loss from fraud as compared to gross income, comparison of the amounts of loss associated with various employee positions in the different size companies, or number of instances of fraud per size category. This could also include comparison of the most common factors impacting opportunity for committing embezzlement for the various sizes of organizations. One might assume that larger companies would have environments with greater opportunity for fraud and different challenges due to a larger diversity of employee characteristics. However, a comparison study may prove this assumption to be false. This type of study could be used to

analyze the difference in the percentage of loss per type of embezzlement scheme for the various sizes of organizations. There may be a variety of themes in the findings that differ based on size.

**Recommendation 2: Analysis of the importance of fraud education in deterring fraud in small construction contractors in other geographical locations.** As the participants in this study were all located in the mid-west section of the United States, another recommendation for further study would be to conduct a similar study in different regions of the United States. The experiences of small construction contractors in other locations may identify different types of fraud that appear to be common problems. Regional economies, cultural beliefs, and local legislation may impact companies in other areas differently than what was found in the research of companies in the mid-west. An additional thought would be to conduct a similar study in other countries to determine the impact of cultural differences.

**Recommendation 3: Examination of embezzlement amongst companies specializing in different types of construction.** Another recommendation would be to research embezzlement in specific types of construction contractors such as general contractors, plumbers, and HVAC contractors. Research could be conducted to compare the differences in the sizes of contracts and the number of employees of different types of contractors. This type of study could also provide insight into the difference in the types of fraud found in these different specializations of construction. Various types of construction companies may have factors unique to the type of company. Some specialties may perform more public contracts than others and this may impact the type of fraud experienced.

**Recommendation 4: Other types of fraud.** While this study dealt specifically with employee embezzlement, other studies could be conducted to focus on other types of fraud. Some possibilities would be the investigation into incidents of corruption, bribery, or asset

misappropriation. Research could involve the analysis of the importance of fraud education in deterring and detecting these types of fraud. This could potentially include a quantitative study to examine the percentages of each type of fraud that occurs within small construction companies, as they relate to independent factors such as level of business or fraud education and understanding of internal control.

### **Reflections**

Based on a background that includes a bachelor's degree in forensic accounting, the researcher anticipated that small construction contractors had no education in fraud and as such would have little understanding of the importance of such education. It is a little surprising that after being victims of employee embezzlement, the small construction contractors interviewed did not express a desire or a need to pursue further education relative to fraud. Interestingly, simply being a victim of employee embezzlement did not provide enough information as almost 50% of those interviewed were victims more than once.

**Researcher biases.** The researcher had preconceived ideas that blind trust was a significant contributor in providing an environment conducive to employee embezzlement and was not prepared for the lack of oversight on the part of the owners/managers. The researcher's experience in working for a small construction contractor was that the owner seemed to be in control and aware of what was going on within their company. It was surprising to the researcher that nearly half of the participants had more than one business and therefore was not fully aware of what was transpiring. These interviewees depended on and trusted others to take care of their interests.

**Changes needed.** The results of this study are beneficial in that they identify areas that small construction contractors may wish to focus on in the quest for fraud prevention. In

addition, the study provides insight that may be used by those in the field of accounting in deterring and detecting embezzlement schemes. One notable area of concern is the lack of understanding of internal controls and the importance that such controls play in the reduction of the risk of fraud. The development and implementation of internal controls could have a major impact for small construction contractors. Even with limited staffing, it is imperative that small construction contractors seek to improve business processes to include segregation of duties, a better system of oversight, pre-employment screening, and educating and training employees in accordance with an ethical organizational culture.

While attempting to secure participants for this study, the researcher identified another concern relative to embezzlement within small construction companies. Owners of small construction companies that have been victims of such fraud exhibit apathy for sharing their experiences to help others. Many of those contacted would not discuss the fraud even though these owners were identified through internet searches for small construction contractors that had been victims of employee embezzlement. Participant 8 credited this to the embarrassment of being a victim. This participant reported being treated differently by others, as they felt the participant should have not allowed the fraud to occur; somehow suggesting that the participant was at fault rather than the dishonest employee. Fleckenstein and Bowes (2000) identified this as part of the victimization associated with white-collar crimes. Others lose faith in the victim's ability to manage the organization (Fleckenstein & Bowes, 2000). Participant 8 indicated that some employees had quit because they felt that the owner could not be trusted to effectively run the business. Sharing their stories would allow these owners to turn bad experiences into learning tools for others in the industry.

One final area of concern that the researcher found in conducting this study was the reluctance of the participants to prosecute the employees for their wrongdoing. Ulmer and Noe (2013) maintained that failure to prosecute embezzlers is an injustice to the organization and its employees as well as to society. Dorminey et al. (2010) suggested that the unwillingness to prosecute fraudsters increases the opportunity for other potential perpetrators who assume that there will be little consequence for unethical behavior. Participant 1 had discussed this with an attorney who advised that it would cost more than would be recouped from it. Participant 6 did prosecute the employee for the theft. Participant 8 advised that the embezzler was being prosecuted as parts of the embezzlement were federal offences. Therefore, the participant did not have to hire an attorney to prosecute as the federal agents were taking over. Prosecution of embezzlers creates a record so that future employers who perform background checks would discover the fraudulent activity committed. The researcher found it interesting that the majority of the participants were willing to let the embezzlement go without prosecuting the perpetrators.

**Biblical principles.** As a Christian, integrity is very important to the researcher. As such, the researcher assumes a certain level of commitment to ethical values in others. This study allowed the researcher to see that there is a lack of attention to the creation of an environment that promotes ethical and moral behavior. This is not to say that integrity and ethics are not important to the businessmen who participated. However, none of the participants expressed a commitment to the establishment of an ethical organizational culture with a zero tolerance for unethical behavior. Scripture stresses the need for good stewardship. As such, the researcher believes that owners of small construction companies should seriously consider the responsibility that have to all stakeholders. This should provide encouragement for the owners to become more



educated so that they can protect their businesses. This benefits the owners, the employees, and society as it helps to keep the business from becoming a statistic of another failed small business.

### **Summary and Study Conclusions**

This study was conducted as a qualitative multiple case study that examined cases of employee embezzlement within small construction contractors/companies (you can choose) in efforts to understand the importance of fraud education. The research study was designed to address the vulnerability of small construction companies to employee embezzlement. The researcher found that this vulnerability is created by a lack of education, ineffective internal controls, and a lack of training employees concerning anti-fraud initiatives. Small construction contractors were interviewed concerning policies and procedures before being victims of employee embezzlement as compared to after being victims. These participants were asked to share their experiences and provide insight relative to lessons learned. The researcher identified contributing factors and areas of weakness that can help educate other small construction contractors concerning fraud deterrence and detection.

The research study consisted of in-depth interviews with seven small construction contractors about their experiences with employee embezzlement. The researcher identified four themes from analysis of the data gathered from the interviews with the participants. The first theme identified was the lack of education. None of the participants possessed fraud education and only two of the participants had any education in business management; one had two years and one had a few courses. Another theme that was derived from the findings was the misappropriation of trust. All the participants stated that the trust they placed in the employees played a part in the embezzlers' ability to carry out the fraudulent activity. The third theme discovered was the lack of oversight. The participants indicated that they had not been as

vigilant and attentive as they should have been. This lack of oversight, combined with the blind trust of employees, created opportunity for wrongdoing. The final theme identified was the weakness of internal controls. The participants of the study exhibited a lack of knowledge of internal controls; thus, internal controls were non-existent for the most part. The combination of these themes created an environment conducive to fraud. This increased the embezzlers' perceived opportunity for committing the fraud without detection.

While there is a plethora of existing literature addressing employee embezzlement, there is limited literature that deals specifically with the construction industry. There is an abundance of literature on fraud theory. However, most literature relative to fraud in construction contractors does not provide information on employee embezzlement. This is especially critical for small construction contractors. Therefore, this study was developed to investigate the importance of fraud education in the detection and deterrence of employee embezzlement within small construction contractors. The information contained herein could be beneficial in assisting small construction contractors to establish an environment that reduces the likelihood of being a victim of employee embezzlement.

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## Appendix A: IRB Approval Letter

**LIBERTY UNIVERSITY.**  
INSTITUTIONAL REVIEW BOARD

April 17, 2019

Karen Smith  
IRB Exemption 3753.041719: Using Fraud Education to Deter Embezzlement in Accounts Payable of Small Construction Companies

Dear Karen Smith,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under exemption category 46.101(b)(2), which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

(2) Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if . . . the following criteria is met:

(iii) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

Please note that this exemption only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued exemption status. You may report these changes by submitting a change in protocol form or a new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption or need assistance in determining whether possible changes to your protocol would change your exemption status, please email us at [irb@liberty.edu](mailto:irb@liberty.edu).

Sincerely,

**G. Michele Baker, MA, CIP**  
*Administrative Chair of Institutional Research*  
Research Ethics Office

**LIBERTY**  
UNIVERSITY.  
*Liberty University | Training Champions for Christ since 1971*

## Appendix B: Consent Form

The Liberty University Institutional  
Review Board has approved  
this document for use from  
4/17/2019 to --  
Protocol # 3753.041719

### CONSENT FORM

Using Fraud Education to Deter Embezzlement in Accounts Payable of  
Small Construction Companies  
Karen L. Smith  
Liberty University  
School of Business

You are invited to be in a research study on how understanding the elements of fraud can deter embezzlement in the accounts payable segment of small construction companies. You were selected as a possible participant because you are a small construction owner/manager that has been a victim of an embezzlement scheme. Please read this form and ask any questions you may have before agreeing to be in the study.

Karen L. Smith, a doctoral candidate in the School of Business at Liberty University, is conducting this study.

**Background Information:** The purpose of this study is to provide a better understanding of the importance of fraud education in establishing internal controls and accounting policies and procedures to prevent and deter future instances of fraud.

**Procedures:** If you agree to be in this study, I would ask you to do the following things:

1. Participate in an in-depth interview concerning the experience of being a victim of embezzlement. The interview should take approximately one hour. An audio recording will be created of the interview.
2. Review a transcript of the audio recording of the interview to verify accuracy. This will take approximately 15 minutes.
3. Provide policy and procedural documentation relative to hiring practices and organizational culture. This will take approximately 30 minutes.

**Risks:** The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

**Benefits:** Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include the provision of information beneficial to other small construction contractors in minimizing the fraud risk associated with employee embezzlement within the accounts payable function.

**Compensation:** Participants will not be compensated for participating in this study.

**Confidentiality:** The records of this study will be kept private. In any sort of report that I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records.

The Liberty University Institutional  
Review Board has approved  
this document for use from  
4/17/2019 to --  
Protocol # 3753.041719

- Participants will be assigned a pseudonym. I will conduct the interviews in a location where others will not easily overhear the conversation.
- Data will be stored on a password locked computer and may be used in future presentations. After three years, all electronic records will be deleted.
- Interviews will be recorded and transcribed. Recordings will be stored on a password locked computer for three years and then erased. Only the researcher will have access to these recordings.

**Voluntary Nature of the Study:** Participation in this study is voluntary. Your decision to participate or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

**How to Withdraw from the Study:** If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

**Contacts and Questions:** The researcher conducting this study is Karen Smith. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at (937) 408-3158 and/or [klsmith12@liberty.edu](mailto:klsmith12@liberty.edu). You may also contact the researcher's faculty chair, Dr. Adam Sullivan at [acsulliv@liberty.edu](mailto:acsulliv@liberty.edu).

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at [irb@liberty.edu](mailto:irb@liberty.edu).

*Please notify the researcher if you would like a copy of this information for your records.*

**Statement of Consent:** I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

The researcher has my permission to audio-record me as part of my participation in this study.

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Signature of Participant

Date

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Signature of Investigator

Date



## Appendix C: Interview Questions

1. What type of contracting does this company do?
2. What is your position?
3. How long have you been with the company?
4. What education do you have relative to small business management?
5. What education do you have relative to fraud?
6. What was the embezzler's job title?
7. How long had the embezzler worked for the company?
8. What was your relationship to the embezzler as far as job duties?
9. What duties were assigned to the embezzler?
10. How was the embezzlement perpetrated?
11. Approximately how much was the employee able to embezzle?
12. How was the embezzlement discovered?
13. Why did the employee resort to embezzlement?
14. Did the embezzlement involve collusion between employees? What relationships existed between the employees?
15. Were other employees aware that the fraud was occurring? If so, why did they not reveal what they had knowledge of?
16. What red flags alerted to the fact that embezzlement was occurring?
17. What is the organization's policies relative to fraud and unethical behavior?
18. How are these policies communicated to employees?
19. What pre-employment screening procedures were used prior to the fraud?
20. How have the pre-employment screening procedures changed?

21. Are employees required to take time off?
22. What are the procedures for issuing checks for accounts payable?
23. What has changed regarding the check issuance procedures?
24. Who has access to the company credit cards? Are the statements reviewed by someone?
25. What procedures are in place for reconciling bank statements?
26. What procedures are in place for adding vendors?
27. What duties do you perform relative to ensuring checks and balances are in place that deter fraud?
28. Were procedures relative to checks and balances and internal control followed?
29. Looking back, what safeguards could have been used to prevent the fraud?
30. What weaknesses existed in the internal controls that enabled the employee to commit fraud?
31. How were weaknesses in the internal control structure identified?
32. How was the embezzler able to commit the fraud without detection?
33. What changes have been made relative to training employees concerning fraud?
34. What difficulties have been experienced as a result of the embezzlement?
35. What additional lessons were learned relative to fraud prevention/detection?
36. What other information concerning the embezzlement case would you like to share?

Table 2

*Small Business Size Standards for Construction Industry*

NAICS Codes	NAICS Industry Description		Size Standards in millions of dollars
<b>Sector 23 – Construction</b>			
<b>Subsector 236 – Construction of Buildings</b>			
236115	New Single-family Housing Construction (Except For-Sale Builders)	\$	36.5
236116	New Multifamily Housing Construction (except For-Sale Builders)	\$	36.5
236117	New Housing For-Sale Builders	\$	36.5
236118	Residential Remodelers	\$	36.5
236210	Industrial Building Construction	\$	36.5
236220	Commercial and Institutional Building Construction	\$	36.5
<b>Subsector 237 – Heavy and Civil Engineering Construction</b>			
237110	Water and Sewer Line and Related Structures Construction	\$	36.5
237120	Oil and Gas Pipeline and Related Structures Construction	\$	36.5
237130	Power and Communication Line and Related Structures Construction	\$	36.5
237210	Land Subdivision	\$	27.5
237310	Highway, Street, and Bridge Construction	\$	36.5
237990	Other Heavy and Civil Engineering Construction	\$	36.5
237990_Except	Dredging and Surface Cleanup Activities <sup>2</sup>	\$	27.5
<b>Subsector 238 – Specialty Trade Contractors</b>			
238110	Poured Concrete Foundation and Structure Contractors	\$	15.0
238120	Structural Steel and Precast Concrete Contractors	\$	15.0
238130	Framing Contractors	\$	15.0
238140	Masonry Contractors	\$	15.0
238150	Glass and Glazing Contractors	\$	15.0
238160	Roofing Contractors	\$	15.0
238170	Siding Contractors	\$	15.0
238190	Other Foundation, Structure, and Building Exterior Contractors	\$	15.0
238210	Electrical Contractors and Other Wiring Installation Contractors	\$	15.0
238220	Plumbing, Heating, and Air-Conditioning Contractors	\$	15.0
238290	Other Building Equipment Contractors	\$	15.0
238310	Drywall and Insulation Contractors	\$	15.0
238320	Painting and Wall Covering Contractors	\$	15.0
238330	Flooring Contractors	\$	15.0
238340	Tile and Terrazzo Contractors	\$	15.0
238350	Finish Carpentry Contractors	\$	15.0
238390	Other Building Finishing Contractors	\$	15.0
238910	Site Preparation Contractors	\$	15.0
238990	All Other Specialty Trade Contractors <sup>13</sup>	\$	15.0

*Note.* Adapted from "Table of Size Standards," 2017, Small Business Administration.

<sup>a</sup>No size standards for the number of employees for construction industry.