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A VISION STATEMENT TAXONOMY: LINKING STRATEGIC MANAGEMENT, STRATEGIC COMMUNICATION, AND ORGANIZATIONAL CULTURE

Jerry Allison, University of Mount Olive

ABSTRACT

Organizational vision statements have typically been studied as part of strategic management. This paper shows they are also part of strategic communication and develops a hierarchical taxonomy. The methodology used includes using text mining and analytics to discover the taxonomy based on natural language rather than predetermined classifications that may contain researcher bias and error. This novel approach created the taxonomy based on characteristics of the statements and, consequently, led to the development of propositions that link vision statements to organizational culture. Thus, this paper extends theory in strategic management, strategic communication, and organizational culture while utilizing a research methodology that is relatively new and less subject to researcher bias.

INTRODUCTION

Vision statements are an important tool in strategic management. Textbooks teach that vision statements, along with mission statements and ethics statements, are an essential ingredient in the formation of strategy (e.g. Hill, Jones, & Schilling, 2015; Grant, 2002). Given this information, the study of vision statements as a component of strategic management is very relevant to academicians and practitioners alike because it articulates the desired future state of an organization.

Unfortunately, while vision is a commonly studied topic, vision statements themselves have not been researched nearly as much. The topic of vision permeates a micro and macro level of multiple management disciplines such as leadership (e.g. Northouse, 2016; Yukl, 2013), organizational behavior (e.g. McShane & Von Glinow, 2015), strategy (e.g. Hill, Jones, & Schilling, 2015; Grant, 2002), and organizational development (e.g. Palmer, Dunford, & Akin, 2009; Anderson, 2017) to name a few. As a result of the diverse disciplines, the topic has been widely studied (e.g. O'Connell, Hickerson, & Pillutla, 2011; Shamsi et al., 2015). The same cannot be said about the vision statement. The vision statement as a written document has been isolated to the topic of strategic management. This paper, while not ignoring strategic management, extends the influence of the vision statement upon the newer field of strategic communication and upon organizational culture.

Part of the reason for the lack of study may be due to vision statements being text statements rather than numerical measurements, making them much more difficult to analyze. One older method for analyzing documents is content analysis where researchers design a coding

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system to categorize textual phrases (Neuendorf, 2017). Neuendorf (2017) also states that there is still the potential for error in the coding process. However, with relatively recent developments in computer speed and processing capabilities, text mining and analysis have the capability of analyzing text documents, finding patterns that were not previously recognizable (Chakraborty, Pagolu, & Garla, 2013). This paper employs this newer, more accurate method to analyze a large sample of vision statements to find a taxonomy based upon the patterns found in the vision statements themselves.

Thus, this paper extends theory in several directions. First, this paper develops the study of vision statements by showing how these are not just a strategic management topic, but rather they extend into other areas such as strategic communication and organizational culture. This accomplishment helps explain some of the linkages between the various management disciplines. Second, this paper uses a relatively recent technique of text mining to date not often used in research to study a rather large sample of vision statements. This accomplishment presents a new methodology to researchers for understanding text without resorting to tenuous coding and potential error. Third, this paper develops a hierarchical taxonomy for vision statements. This accomplishment allows vision statements to be seen as having relationships with one another. More importantly, it allows researchers to reduce vision statements to a type that can be coded for quantitative research.

LITERATURE REVIEW

This section conducts a literature review. The first part takes a look at vision in the literature, but, more importantly, examines how vision statements have been studied. The second part examines some of the literature of strategic communication and develops a succinct definition. The final part combines the two topics to show that vision statements are strategic communication.

Vision Literature

Organizational vision has been a much researched topic with the added liability of a lack of agreement by researchers (Carver, 2011; MacLeod, 2016). This lack of agreement extends to the very definition of vision. Some define vision broadly to include purpose, mission, strategic intent, ideas, goals, and a picture of the future (e.g. Baum, 1994; Kantabutra & Avery, 2010). Others define it simply as a future image of what the organization is to become (Brown, 1998). Arguably, the most direct definition of vision is that of a future state to which stakeholders can aspire (Carver, 2011).

While vision is certainly important, it may not become relevant for an organization until it is communicated; this communication is a necessary but not sufficient condition (Baum, 1994; Kantabutra & Avery, 2010; O'Connell, Hickerson, & Pillutla, 2011). For positive organizational effects, the method in which the vision is communicated to the organization is extremely important (O'Connell et al., 2011) as is the acceptance of the vision by stakeholders (Slack, Orife, & Anderson, 2010). It is in this light that this paper focuses upon the codified vision known as a vision statement.

Vision as a codified statement has not been studied much. One area of focus in the literature has been upon the design of vision statements. About twenty years ago Brown (1998) lamented that 75% of visions statements are of poor quality because they were written poorly or did not proffer clear guidance. Similarly, MacLeod (2016) notes the lack of seriousness behind many vision statements because often the creation of a statement is just an item on a checklist or because someone stated it was important. Arguably, this poor attention to quality was quite noticeable, prompting some researchers to focus on the proper design of the statements. For example, Brown (1998) suggested that statements be future-focused for three to ten years and have characteristics such as brevity, verifiability, focus, understandability, and inspirational. The same year Lucas (1998) found that vision statements should be a living document, providing a motivating and challenging future goal while being detailed enough to provide accountability. The same sentiment was echoed by MacLeod (2016) and Meade and Rogers (2001).

A second area of focus in research has been the implementation of vision statements. Lucas (1998) observed that stakeholders are often not aware of the organizational vision and, therefore, the vision does not play much of a part in guiding the actions of those inside the organization. As a result, Kantabutra and Avery (2010) discovered factors that enable the vision in a vision statement to be realized. These factors include communicating the vision, changing organizational systems to align with the vision, empowering stakeholders to achieve the vision statement was further augmented by Payne, Blackbourn, Hamilton, and Cox (1994) when they posit a vision statement can be implemented, but specific points can be made regarding the vision in order to provide extra clarity.

The final research area of vision statements is that of the organizational effects that statements can have. Kantabutra and Avery (2010) found that vision statements containing solid organizational and motivational goals can bring about higher employee performance by way of employee and customer satisfaction. Lucas (1998) tempers that previous notion by stating when a statement is not taken seriously by those in the organization, company morale and long-term effectiveness can be reduced significantly. Finally, Price (2012) found that wording in a vision statement is very important in creating a desired organizational image.

Strategic Communication

Strategic communication is a relatively new field that is being developed through the intersection of communication theory and management theory (Thomas & Stephens, 2015). As such the definition of strategic communication has not had time to blur and become confusing as in other topics such as leadership. Aggerholm and Thomsen (2012) define strategic communication as the transmission of strategic organizational goals. Hallahan, Holtshausen, van Ruler, Vercic, and Sriramesh (2007) similarly proffer the definition of intentional organizational communication for mission attainment. They further develop criteria stating the communication must be purposeful, created for a specific goal, and delivered to a specifically identified target. Dulek and Campbell (2015), agreeing with the definitions of both, add the focus of this one-way communication shifts from the receiver to the goal of the communication. As a result, this paper adopts a definition that incorporates all of this relevant information: "strategic communication is

unidirectional communication of an intentional message for a strategic purpose" (Allison, 2017, p. 2).

This definition of strategic communication brings together several forms of communication under one general topic. For example, social media communiques by governments for the purpose of transparency, collaboration, and public participation have been studied as strategic communication (Agerdal-Hjermind & Valentini, 2015; Avery & Graham, 2013). Social media has also been suggested as a strategic communication for faculty for integrated communication (Meredith, 2012) as well as for journalists and public relations practitioners (Avery, Lariscy, & Sweetser, 2010). Moving past social media, messages of political figures have also been studied as strategic communication (Hoffmann, Steiner, & Jarred, 2008; Almondari & Isotalus, 2012).

Other uses for strategic communication include responding to customer complaints (Bach & Kim, 2012), broadcasting corporate social responsibility (Coombs & Holladay, 2009; Cho & De Moya, 2016; Bachman & Ingenhoff, 2017), and shareholder letters (Allison, 2017). One interesting facet to strategic communication has been to segregate management of a firm into a "quasi-organization" and employees of the firm to be in a second "quasi-organization". For example, Garner (2009) examines employee dissent directed at management to be strategic communication. Heide and Simonsson (2011) take a directionally opposite tactic of viewing employees as the recipients of organization and be directed to another part of the same organization. Other intraorganizational examples include ethics statements (Allison, 2015a) and values statements (Allison, 2015b) although these also can be communications to those outside the organization.

Vision Statements and Strategic Communication

Garner (2009) and Heide and Simonsson (2011) have examined management and employees as two separate quasi-organizations that can utilize strategic communication. Thus, management can not only produce strategic communication in the form of annual meetings, shareholder letters, news releases and webcasts as stated by Chandler (2014), but for internal stakeholders management may create strategic communication the form of mission statements, vision statements (Allison, 2015a), and ethics statements (Allison, 2015b). In particular by definition vision statements contain strategic intent (MacLeod, 2060; Kantabura & Avery, 2010; Baum, 1994). Thus, vision statements are a strategic communication device through which management conveys future ideals to employees.

METHOD

This section describes the analytical methodology used to create the taxonomy and the results from using that methodology. The first part describes data collection as well as the methodology used on the sample. The second part details the results from the analytical method used and provides details regarding the classification.

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Analytical Methodology

According to Duarte and Sarkar (2011), taxonomic development is a well-defined process. The first step is where a researcher creates a classification system based on existing research. The second step is to use analytical methods, generally cluster analysis, to determine if the elements group in the manner expected. Finally, the researcher creates guidelines for the classification of the elements. However, Duarte and Sarkar (2011) warn that the taxonomy may be useless because of its creation before data collection instead of being created as a result of the data. Additionally, taxonomies created in this way may be subject to researcher prejudice or possibly error. As a result, the taxonomy may be unrealistic and out of line with existing theory (Kuo-Chung & Li-Fang, 2004).

McGee and Howard (1986) suggest a more natural way to create a classification scheme is to utilize the characteristics of the elements to be classified. Autry et al (2008) further state that classification is performed better by using patterns found in the data. Consequently, it would be extremely valuable if there were classification methods that reduced or eliminated researcher error and bias while at the same time basing the classification on data characteristics. Text mining is one such methodology that uses computerized analysis of the data and "helps analysts extract meanings, patterns, and structure hidden in unstructured textual data" (Chakraborty, Pagolu, & Garla, 2013, p. 1).

Text mining and analytics have been used in other research. Xiang, Schwartz, Gerdes, and Uysal (2015) use text analytics to determine customer satisfaction from written comments. Decision-making regarding product development was studied by Markham, Kowolenko, and Michaelis (2015) by analyzing text documents from the decision-making process. Other examples of text analytics in research include analysis of decision-making about drug patents (Yang, Klose, Lippy, Barcelon-Yang, & Zhang, 2014), determining nursing workplace concerns (Bell, Campbell, & Goldberg, 2015), uncovering managerial mental orientations (Helmersson & Mattsson, 2013), and classifying student course drops (Michalski, 2014).

With reference to strategic communication, text analytics has been used to create a taxonomy of mission and vision statements jointly with respect to industry (Alshameri et al. 2012). More recently, Allison (2017) used text mining to discover a taxonomy for shareholder letters. Other classifications in strategic communication include ethics statements (Allison, 2015a) and values statements (Allison, 2015b). The Alshameri et al. (2012) used a predetermined variable to create the classification while the others mentioned do not use any predetermined variables, letting the natural language speak for itself.

The sample for this study was gathered in 2016 by eight text analytics students who gathered the 798 vision statements from organizations, most of whom are based in the U.S. Fewer than 50 organizations were located outside the U.S.; however, their vision statements were available in English. The English language was a requirement since the analytics software available could only analyze statements in that language.

Analysis on the vision statements began after the students submitted the data and the data was combined into one file. The analysis was a two-stage process specifically designed to find the best "fitting" taxonomy. The first stage had the software take the data and create an

unsupervised classification – a classification without any predetermined rules – and create rules for classification. The second stage, a supervised classification, took the data rules previously formulated and then reclassified the original data to see how well the reclassification and the original classification agree. This resulted in a metric called the misclassification rate that is a percentage of the data where the unsupervised classification and the supervised classification do not agree. Once the procedure was established, then each parameter of the software was changed to find the classification with the lowest misclassification rate.

When the above mentioned procedure was applied to the entire data set, several classes formed. However, on inspection it was revealed that one of those classes was created due to the word "vision" in the data. In other words several of the vision statements in the data set had phrases such as "Our vision is…" or "The vision is…" Use of the word "vision" in this context is redundant since everything in the data set was a vision statement and this word was creating a new class for those statements using the word vision. To correct the analysis the word "vision" was omitted from the analysis. Upon reapplying the entire procedure mentioned above, the vision statements formed two classes.

Viewing these two classes as parent classes, the set of vision statements was broken into two sets based upon the assignment of the data to these parent classes. The statements in each of the parent classes were then analyzed using the same procedure as above. For both parent classes, multiple child classes were formed.

RESULTS

Employment of the methodology above resulted in two parent classes and seventeen subclasses for vision statements. As mentioned, the criteria for choosing this classification was whichever variation in the program parameters produced the lowest misclassification rate. For example term weightings in the program can be logarithmic, binary, and no weighting. The data was run under each option to find the lowest misclassification rate. This process occurred for every parameter in the computer program.

The first parent class consisted of approximately 39% of the sample. The top key words for this classification in order are "world", "company", "global", "people", "energy", and "customers". The statements in this first-level class concentrate on either providing a regional influence, whether that region is local, nationwide, or global. One example of a vision statement in this category is from the beverage manufacturer Ambev: "To be the best beer company, bringing people together for a better world." This type of statement will be called a Spatially Oriented vision statement.

The second parent class consisted of approximately 61% of the sample. The top key words for this classification are "growth", "partner", "excellence", "trusted", and "committed". The statements in this other first-level class concentrate on achieving some goal, not necessarily with a regional emphasis, but doing so by being the best. An example of a vision statement in this category is from Brown Forman Corp.: "To be the best brand builder in the industry". This type of statement will be called an Achievementcentric vision statement.

Each of the parent classes then breaks up into several subclasses. The Spatially Oriented statements contain eight subclasses. The Achievementcentric statements break up into nine

subclasses. The rules for classifying statements into these parent classes are found in Appendix A. Each subclass is explained below.

Spatially Oriented Statements

As mentioned, the Spatially Oriented statement class consisted of about 39% of the original data set which is 310 vision statements. The statements in this parent classification were segregated from the statements in the other parent classification and treated as an individual data set. The same unsupervised-supervised analysis was run on this data set as was run on the original data set. This allowed the finding of subclasses within this parent class. After changing the all the parameters to find the classification with the lowest misclassification rate, eight subclasses emerged. Each class was also examined to see if the original key words clustered again in the child classes. If this had happened, it would have implied the documents in that child class where being overly influenced by the collection of key words that placed them in the parent class in the first place. This influence would have masked subtypes and distorted the creation of classes on the child level. The key words for the parent class were distributed throughout the child classes indicating a better class creation. The rules for classifying these statements are found in Appendix B. Each of these subclasses is explained below.

The first subclass of the Spatially Oriented statements contained about 7% of the data that created the parent class. Some of the key words defining this class are "health", "care", "patients", "serve", "community", and "excellence". The obvious organizations in this class are health care firms which the majority of firms in this class are. One example of a vision statement in this class from the associate degree nursing school at Eastern Kentucky University: "The Department of Associate Degree Nursing will be an innovative leader in preparing nurses who will promote health and well-being, advancing Kentucky and impacting the world." There are a few non-health care statements in this class that discuss well-being. For example, the vision statement for Hilton states, "To fill the earth with the light and warmth of hospitality." Thus, as a whole, this subclass discusses some form of prosperity, so this subclass will be known as the Wellness statements.

The second of the subclasses contained about 10% of the Spatially Oriented statements. Some of the key words for this class are "people", "healthier", "helping", "making", "worldwide", and "profitably". As implied by the first key word, all the statements in this class refer to people and making life better. The second key word seems to imply health care again, but few of the statements involve health care. For example, Dupont's vision statement reads, "Creating sustainable essentials to a better, safer, and healthier life for people." Thus, there is a concern for people's health without being a health care provider. One of the few health care organizations in this class is Varian Medical System whose vision statements is one of help and assistance to people, so this subclass will be known as the Enablers.

The third subclass of Spatially Oriented statements consisted of 7% of those statements. The top key words for this class are "energy", "clean", "reliable", "development", "preferred", "resources", and "safe". These key words seem to point to organizations involved in the energy industry and, upon reviewing the vision statements in this class, each one is related to energy, whether it be electricity, gas, or geothermal. One example in this category is PDVSA whose

statement reads, "To become the energy firm of world reference for excellence." This subclass will be known as the Energy statements.

About 14% of the Spatially Oriented statements clustered into the fourth subclass. The top key words for this subclass are "customers", "suppliers", "employees", "shareholders", "consistently", and "investors". Reading through these visions statements shows a focus upon the stakeholders in a firm. One example in this category is that of Benchmark Electronics Inc. which states, "To create superior value for our customers, employees, and shareholders." This subclass of statements will be known as the Stakeholder statements.

The fifth subclass consisted of about 18% of the Spatially Oriented statements. Key words for this group are "products", "services", "customer", "continue", "financial", "improve", and "best". These statements appear to refer to output, whether a product or service, of the firm. Often these statements refer to creating superior output for customers. One example is the statement of Gavilon that reads, "Our vision is to be the most effective provider of essential commodities and services in the world." This type of statement will be called the Producers.

The Spatially Oriented statements also had about 14% cluster into the six subclass. The key words for this class are "world", "fully", "trusted", "class", "experience", "matters", "seek", "want", and "team". While the parent class statements have the characteristic of focusing upon a geographic area, this subclass specifically focuses upon the world. But there also seems to be a goal of creating a connection between the firm and customers through trust or between other people. Ambev, the beverage manufacturer, has as its vision statement, "To be the best beer company, bringing people together for a better world." This group of statements will be called the World Unifiers.

The seventh subclass of the Spatially Oriented statements consists of about 17% of the statements. Key words for this group are "global", "solutions", "leader", "supplier", "industry", and "provider". The statements in this category discuss solutions, innovation, and creativity on a global scale. One such statement is from Tenneco: "Pioneering global ideas for cleaner air, and smoother, quieter and safer transportation." This group will be known as the Global Innovators.

The eighth and final subclass has about 14% of the data. The major key words for this class are "company", "respected", "successful", "leading", "existing", "globally", and "human". These statements have a theme of becoming the best – whether in image or in product or service. One such statement is from Minerva S.A.: "Our vision is to be the best developing, constructions, and sales company in Brazil." This subclass will be called Superior Organizers.

Achievementcentric Statements

This section discusses the second parent class of vision statements that were found to have a vision of having a high level goal. Analyzing the documents that clustered into this parent class, nine subclasses emerge. The rules for classifying statements into the subclasses are found in Appendix C. Each subclass is discussed below.

The first subclass that emerged contained 21% of the statements that were Acheivementcentric. The first few key words for this class are "bring", "better", "productive", "security", "social", "environmental", and "economic". These statements go beyond providing a superior goal-oriented product or service to delivering something that is safe and secure. For

example, Nucor Corp. has as its vision statement, "We are driven by our vision of being the safest, most profitable, and most customer-focused rebar contractor in North America." This subclass will be known as the Safety Deliverers.

The second subclass of the Acheivementcentrics contained about 12% of these statements. The main key words for this class are "provider", "benefit", "industry", "preferred", "related", "leading", "services", and "products". These statements focus upon becoming a leaders in the industry or group in which the company resides. One example is Pacific Drilling whose statement says, "To be recognized as the industry's preferred ultra-deepwater drilling contractor." These statements will be known as the Positionalists.

About 12% of the Acheivementcentrics placed into the third subclass. The top key words defining this class are "improve", "patients", "solutions", "market", "partner", "trusted", and "excellence". While the second word is "patients", these statements are not completely about health care. The first term, "improve", seems to capture the meaning of the group. These statements are about improving an existing product or service or about improving life. An example of this type of statement is that given by Indegene Pharmaceutical Solutions, Inc.: "To be a trusted and preferred partner to global healthcare organizations to improve health and business outcomes." This class will be known as the Improvers.

The fourth subclass of Achievementcentrics consisted of about 11% of those statements. Key words for this class include "growth", "value", "sustainable", "create", "stakeholders", "leadership", and "long-term". These statement indicate a growth of the firm, whether that be in shareholder value, growth in trust, or growth in leadership. One example of this type of vision statement is from MDU Resources Group Inc.: "With integrity, create superior shareholder value by expanding upon our expertise to be the supplier of choice in all of our markets while being safe and great place to work." This group of statements will be known as the Growers.

The fifth subclass contained about 6% of the Achievementcentric data. Some of the key words that determine this class are "health", "care", "nationally", "medical", "system", "high quality", and "region". At first glance this may seem identical to the Wellness subclass in the Spatially Oriented parent class. Unlike the Wellness class, this class is exclusively heath care affiliated with the organizations being hospitals, pharmacies, and governmental agencies to name a few. Also unlike the Wellness class, this class has some form of achievement in the vision statement. An example of these comes from Allianz: "Becoming a leading life and health insurer in the country." This class will be known as the Health Conscious.

The sixth subclass of the Achievementcentrics contained about 9% of the data. The top key words for this class are "business", "diverse", "businesses", "core", "grow", "customers", "operations", and "clients". Reading these statements shows a focus upon business, whether it be focusing upon businesses as customers and clients or a focus upon business practices. PepsiCo provides a good example of a vision statement in this group: "At PepsiCo, we aim to deliver top-tier financial performance over the long term by integrating sustainability into our business strategy, leaving a positive imprint on society and the environment." These statements will be called the Business Focused.

The Achievementcentrics have a seventh subclass that contains about 17% of the data. The top key words for this class are "customer", "service", "choice", "strong", "building",

"employees", and "client". The message through this class is of building relationships with customers, potentially using satisfied employees to accomplish the goal. One example is from Vectrus Inc.: "Be the customer's first choice and most trusted partner." These statements will be called the Relaters.

The eighth subclass of the Achievementcentrics clustered with about 4% of the data. The top key words are "best", "bank", "institution", "attract", "investment", "system", "consumers", and "driven". The parent group was typified by a goal and in this subclass that goal is of being the best, however "being the best" is defined for the firm. Every vision statement in this category uses the term "best". M&T Bank Corp. provides a good example of statements in this class: "M&T strives to be the best company our employees ever work for, the best bank our customers ever do business with, and the best investment our shareholders ever make." This subclass will be known as the Primo statements.

The ninth and final class of this parent group clustered with about 8% of the data. Key words for this class include "community", "activities", "children", "standards", "accessible", "clinical", and "enabling". This class tends to focus upon the community in which the organization resides, including elements of that community such as children, families, and drug addicts. One example is the Tompkin's Consolidated Area Transportation statement which reads, "To become a model community transportation system committed to quality service, employee management collaboration and innovation." This subclass will be known as the Community Focused statements.

DISCUSSION

The previous section discussed the methodology used to create seventeen subclasses of vision statements divided between two parent classes. The methodology included using text mining to analyze the wording in the sample of vision statements and derive the classification based upon the natural language found in them. This created the two main classes. Each of the parent classes were then examined in the same way to find the subclasses. This relatively new and unique approach has only been used a few times in research such as in Allison (2015a), Allison (2015b), and Allison (2017). Each class and its focus are provided in Appendix D.

Several interesting things were revealed in this taxonomy. The first is that of all the existing industries, only two emerged in the taxonomy – health care and energy. Not all statements from health care firms or energy firms clustered here, but enough did to create these classes. Health care vision statements appeared in the Wellness type statement under the Spatially Oriented statements as well as the Health Conscious type under the Achievementcentric statements. Energy vision statements appeared in the Energy type under the Spatially Oriented statements. The segregation of these two industries' statements into distinct classes and not others creates the need for an explanation. One explanation is that the statements in these classes are very similar to one another in wording and structure. This may suggest that many firms in these industries are not creating a vision statement. This theory is supported by MacLeod (2016), Lucas (1998), and O'Connell et al (2011) who all state that sometimes vision statements are created not to be implemented, exist for appearance only.

Another interesting detail is the similarity of some classes in the Spatially Oriented parent class with some class in the Achievementcentric parent class. Other than the similarity between the Wellness subclass and the Health Conscious subclass mentioned above, the Superior Organization subclass in the first parent class is very similar to the Primo subclass in the second parent class. Thus, there are many organizations that have the vision of being the best in an industry or group, but differ based upon whether they focus on a geographic area or not. The achievement focus in the analysis. There also seems to be some similarity in the World Unifiers subclass in the first parent class and the Relaters in the second parent class, again the difference being whether there is a focus on a geographic area.

This taxonomy supports existing theory on vision. Gulati (2016) published findings for a study on the vision statements of 312 acute care hospitals. What is notable here is the finding of two subclasses, one in each parent class, by the methodology above. This limitation may have unwittingly provided more validity in the Gulati (2016) results. In a different manner Price (2012) studied the vision statements of various federal agencies. While all the agencies are under the executive branch of the U.S. government, they all have vastly different missions. Price (2012) found the wording of the vision statements was used to frame each agency in the correct light, supporting the notion at a basic level of a classification of vision statements. Thus, the findings in this study relate to the studies mentioned in this paragraph and support different types of vision statements for organizations with different types of missions.

By examining vision statements through the lens of strategic communication, this study also provides support for literature of that genre. Dulek and Campbell (2014) state that a firm's strategic communication will depend upon its strategic intent. Since vision statements are a form of strategic communication relaying strategic intent, a taxonomy of various types of this strategic communication is natural. Similarly, George, Carlson, and Valacich (2013) develop a contingency approach to the media choice for strategic communication. The media choice is determined by the intent of the communication, which in the case of a vision statement, may be one of two things. First, the statement can be fiction created for the purpose of checking of a box in a things-to-do list (Lucas, 1998; MacLeod, 2016). In this event, the statement may not be communicated at all or in a manner that minimizes implementation and effectiveness. Second, in contrast to Lucas (1998) and MacLeod (2016), the statement can be an intellectually planned document to guide employee decisions. Under this assumption management would choose a medium to thoroughly communicate the statement to all stakeholders and maximize implementation. Consequently, this choice and strategic intent will ultimately require wording variations, thus creating various types of vision statements.

PROPOSITIONS

Vision statements are not only part of the strategic communication by an organization, they are also part of the organization's culture. Organizational culture has been defined as shared values and assumptions of an organization (Schein, 1983; Costanza, Blacksmith, Coats, Severt, & DeCostanze, 2015; McShane & von Glinow, 2015). As a guiding principle for an organization, a vision statement should be a shared assumption about where an organization is heading and

possibly even the values to which the organization wishes to aspire (Daher, 2016; Baum, 1994). This shared inspiration is a necessary component of the statement, often cited in the literature (e.g. Carver, 2011; Kantabutra & Avery, 2010; Meade & Rogers, 2001; Brown, 1998). However, one must be cautious under the discussion proffered thus far.

Caution must be exercised because not every vision statement can be classified as part of culture nor can it be classified as strategic communication. Management can create vision statements for a multitude of reasons, only one of which is for the benefit of the organization. MacLeod (2016) states that vision statements can be created for the purpose of checking off an item on a list. Lucas (1998) also states that vision statements can be pure fiction and not meant to be implemented. The same is echoed by O'Connell et al (2011). These statements then do not contain anything shared, but rather are just words and this attribute places the vision statement outside the context of organizational culture. Similarly, these statements may not exist for a strategic purpose and, therefore, do not qualify as strategic communication, if they are communicated at all. This paper will ignore these "false" vision statements and only examine those that are created for the shared purpose of guiding the firm.

O'Connell et al (2011) states there are three times vision is created: at organizational start up, after management change, and at a perceived need to change organizational course. During start up, management should be concerned with establishing the core values of the organization, partly by creating a culture for the organization that will allow the organization to work (Mariotti & Glackin, 2016). Language is an important part of culture (McShane & von Glinow, 2015) and, thus, may be a determinant in the creation of the vision statement. Based on the findings in the previous section of this paper, there are several types of vision statements based on language. Consequently, the type of vision statement chosen and the type of culture created should be related. The following proposition is made.

Proposition 1: During the initial formation of an organization, each of the vision statement types will be related to a unique organizational culture, all other factors being equal.

Vision can change in two other instances according to O'Connell et al (2011). These points in time are at management change and at a perceived need to change organizational direction. During both of these, organizational culture has already been established and may need to be changed to accommodate the primary change. However, a current vision statement is part of the organizational culture and, if organizational culture is to change, then the vision statement may need to change as well. Macleod (2016) states that vision statements are about intentions and philosophy, both of which often change during management transitions. Furthermore, both changes in management and in organizational direction can imply a change in organizational identity which can be accomplished by new strategic communication (Feldner & Fyke, 2016). Thus, an organization making these changes may want to alter organizational culture and organizational identity.

Changes in culture and identity may be accomplished in part by changing the vision statement. An organization with one type of vision statement portrays a particular culture and identity. To change both of these the organization may have to select a different type of vision

statement. For example, a firm having a Wellness vision statement with a geographic emphasis and related culture will not be able to fully change the culture to that of promoting health care with a goal without changing the vision statement to that of a Heath Care statement. Thus, the following proposition is made.

Proposition 2: A firm undergoing cultural change due to management change or a perceived need for direction change may need to change from one type of vision statement to another type of vision statement to help fully implement the cultural change.

The previous two propositions establish a link between the type of vision statement and organizational culture. Each type of vision statement may help create a unique organizational culture. Similarly, the vision statement should focus upon the major direction the organization is trying to achieve implying a necessary alignment with strategy (Brown, 1998). Kantabutra and Avery (2010) discuss how effectiveness of a vision statement is dependent upon its alignment with organizational processes and systems, part of which is organizational structure. From Chandler (1962) one learns that structure must align with strategy. Thus, for an organization to achieve the benefits from the alignment of culture, structure and strategy, the vision statement must be representative of the culture as well as the strategy of the organization.

Proposition 3: In order for an organization to realize fully benefits from the alignment of culture with structure and strategy, the vision statement type should align with the culture type.

DIRECTIONS FOR FUTURE RESEARCH

This paper previously discovered a hierarchical taxonomy of vision statements and developed three propositions, the latter developed with the assumption that the vision statement is communicated and implemented in the organization. This work begins to lay the groundwork for expanding the topic of strategic communication through vision statements. There is much theory advancement that still can be done.

Narrowing the discussion to communicated and implemented vision statements, Gulati (2016) found there was a relationship between effective vision statements and performance in the hospital industry. The question arises whether the effective vision statements were all of various types possibly indicating originality and the ineffective statements were of the Wellness or of the Health Conscious type, possibly showing lack of originality. Additionally, the previous discussion raises the issue of the need for an alignment of strategic communication by way of vision statements, strategy, and culture. Thus, research could be examined upon the hospital industry again but focusing upon vision statement type, culture type, and alignment.

Studies like Gulati (2016) have a tendency to focus upon effective decisions instead of ineffective ones. However, a study of effective and ineffective statements may be worth performing. Part of what needs to be examined is effectiveness as a result of several different dimensions. Lucas (1998) states that if a vision statement is "fiction", then lower effectiveness is a result. This is echoed by O'Connell et al. (2011) who state that management that creates a vision

statement focused on symbolism will concentrate more on implementing the statement rather than creating a quality statement. The seriousness of management about having an effective vision statement exists along a continuum rather than as a dichotomous choice. Secondly, how the statement is communicated is also important (O'Connell et al., 2011); the type of communication can determine effectiveness. Thus, one area of future study is to examine the type of vision statement, the culture type, how the statement was communicated, and the seriousness of management to determine how combinations of each determine effectiveness of the vision statement.

Arguably, the most important part of this research is establishing the link between strategic communication, organizational culture, and strategy. While vision statements do not establish a strong link by themselves, the addition of other documents such as mission statements and values statements can certainly aid in this process. Vision statements, mission statements, and values statements have all been traditionally part of strategic management (e.g. Hill et al, 2015). The performance effects of vision statements (e.g. Carver, 2011), mission statements (Alawneh, 2015), and vision statements (e.g. Jaakson, 2008) have all been studied as part of strategic management. Additionally, all have been established as part of strategic communication (Author, 2015a, 2015b, & 2017). As stated in this paper, the links between these and organizational culture are shared values and language. Using this link and these statements, research can be performed to explore the link between strategy, strategic communication, and culture. More specifically there may be a relationship not only between types of organizational statements, but also between types of organizational culture is used, then one could determine if classes of vision statements are related to classes of culture. This is why taxonomies are so important.

SUMMARY

This paper makes a unique contribution to the literature of strategic communication, organizational culture, and strategic management by examining vision statements. This paper develops the hierarchical taxonomy for vision statements by using the natural language found in vision statements rather than relying on predetermined classes. This taxonomy provides an overview of how vision statements are related, but it also provides a way for researchers to classify vision statements for analysis in more quantitative studies. This paper also develops several propositions linking vision statement type to organizational culture. Until now, vision statements have been viewed as a strategic management topic. This paper pushes that topic not only into organizational culture, but also into strategic communication.

The taxonomy developed in this paper allows for extended study. First, the taxonomy allows vision statements to be taught and understood on a much more simple level. Second, the taxonomy could allow empirical studies to be done through classifying vision statements and relating them to some other measurement such as organizational size or effectiveness.

The propositions in this paper extend theory to propose that there is a linkage between vision statements and organizational culture. While there has been literature that discusses the need for alignment between strategy, structure, and culture, the propositions here provide a specific linkage between strategy and culture by way of the vision statement. The type of vision statement

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adopted and implemented should align with the organizational strategy and the organizational culture.

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APPENDIX A

The scheme for classifying vision statements into a parent class

- Step 1: If the vision statement has "world", "company" but not "growth", "global", "people", "energy", or "customers", then it is to be classified as a Spatially Oriented statement.
- Step 2: If the vision statement has "partner", "leadership", "diversity", "investment", "market" but not "customers", "growth", "built", "region", "teamwork", "day", "outstanding", "cancer", or "maintaining", the it is to be classified as an Achievementcentric statement.

APPENDIX B

This is the scheme to classify the Spatially Oriented statements into subclasses.

- Step 1: If the statement contains the word "energy", then the statement should be classified as an Energy statement.
- Step 2: If the statement contains the word "care", then the statement should be classified as and Wellness statement.
- Step 3: If the statement contains "leader" but not "innovative" or "solutions", then the statement should be classified as an Enabler statement.
- Step 4: If the statement contains "world" and does not contain "global", "company", "solutions", "customers", or "services", then the statement is classified as a World Unifier.

- Step 5: If the statement contains "suppliers" and "customers" and not "products", "global", "energy", or "industry", then the statement is classified as a Stakeholder statement.
- Step 6: If the statement contains "company" and not "products", "people", "global", "energy", or "customers", then the statement is classified as a Superior Organization statement.
- Step 7: If the statement contains "global" and not "energy", then the statement is classified as a Global Innovator.
- Step 8: If the statement contains "products" and not "global", or if the statement contains "customer", "service", and "services", the statement is classified as a Producer.

APPENDIX C

This is the scheme to classify the Achievementcentric statements into subclasses.

- Step 1: If the statement contains "best", the statement is to be classified as a Primo statement.
- Step 2: If the statement contains "health" or "care", the statement is to be classified as Health Conscious.
- Step 3: If the statement contains "community", the statement is to be classified as Community Focused.
- Step 4: If the statement contains "business", the statement is to be classified as Business Focused.
- Step 5: If the statement contains "growth" or "value", the statement should be classified as a Grower.
- Step 6: If the statement contains "provider" or "industry", the statement should be classified as a Positionalist.
- Step 7: If the statement contains "improve", "patients", "market" or "partner", the statement should be classified as an Improver.
- Step 8: If the statement contains "customer", "service", or "choice", the statement should be classified as a Relater.

APPENDIX D

The listing of classes a	nd subclasses in the vision	statement taxonomv	and the focus of each.

Parent Class	Subclass	Focus
Spatially Oriented		These concentrate on a geographic area.
	Wellness	These focus on customer prosperity.
	Enablers	These focus on helping and assisting people.
	Energy	These focus upon energy creation and delivery.
	Stakeholder	These focus upon various stakeholders.
	Producers	These focus upon superior output for customers.
	World Unifiers	These focus on creating connections between
		people and organizations.
	Global Innovators	These focus on solutions on a global scale.
	Superior Organizers	These focus upon becoming the best.
Achievementcentric		These concentrate on goal accomplishment.
	Safety Deliverers	These focus upon delivering output that is safe
		and secure.
	Positionalists	These focus upon become a leader in the
		organization's group.
	Improvers	These focus upon improving output or life.
	Growers	These focus upon growing some attribute of the
		firm.
	Health Conscious	These focus upon health care.
	Business Focused	These focus upon businesses.
	Relaters	These focus on building relationships.
	Primo	These focus on being the best.
	Community Focused	These focus upon community elements.

SKILL GAPS, HUMAN CAPITAL FORMATION, AND STRATEGIC CHOICES: WHAT DO BUSINESSES DO WHEN FACING CRITICAL LABOR FORCE CHALLENGES?

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ABSTRACT

When employers face critical labor force challenges, what strategies do they pursue to remain competitive? Finding the right people for the job can be difficult, especially in fields with specialized knowledge and skills such as science, technology, engineering, and mathematics (STEM). To understand employers' strategic choices regarding workforce recruitment challenges, this study directed several questions to a panel of 200 managers from manufacturing and information technology sectors and 69 economic development professionals across Tennessee. Employers and economic development professionals were asked to rank eight current strategies they pursue when faced with critical workforce challenges, in order of importance. The same survey recipients were also asked to rank strategies they would prefer to use. This study aimed to investigate strategies organizations pursue in the search for talent to complete tasks, with a focus on STEM fields. This paper first reviews approaches and trends in literature with regard to human capital formation and recruitment strategies and then assesses the survey results within the context of strategic human resource management literature. Overall, research has found that managers use diverse methods to recruit and retain knowledge workers, and that there is a notable gap between managers' rankings of current actual and preferred strategic choices.

INTRODUCTION

Importance of Human Capital to Firms

Human capital has become an increasingly valuable asset to firms. Research has shown a significant contribution of strategic human resource management practices to the competitive advantage of firms (Arthur, 1994; Pfeffer, 1994; Becker and Huselid, 1998). Adequate human resource practices could influence organizationally relevant outcomes such as productivity and profitability (Delery and Doty, 1996). Empirical evidence, for example, suggests that a commitment to human capital could lower turnover rates twofold as compared with other methods and could lead to higher performance as found in a manufacturing setting (Arthur, 1994).

More important, an organization should adopt human resource practices that are contingent on firm strategy. In doing so, firms would reap higher profits, performing better on corporate financial performance measures such as return on assets and return on equity (Delery and Doty, 1996). Huselid (1995) and Youndt et al. (1996) studied the impact of universal and contingency approaches on human capital enhancement to evaluate the effect of skilled and committed human capital on multiple dimensions of operational performance. The findings suggest a direct relationship between particular approaches to human resources and firm performance. Because a firm's human capital is crucial to its success, there is a need to integrate human resources into the formulation of a firm's strategy (Wright, McMahan, and McWilliams, 1994).

Moreover, employees with the required core competencies and capabilities help develop new products, provide world-class customer service, and implement organizational strategy (Becker et al., 1997). A high-performance work system (HPWS) could serve as an inimitable resource, supporting the effective implementation of corporate strategy and the attainment of operational goals (Becker and Huselid, 1998). This HPWS should include rigorous recruitment and selection procedures, performance-contingent incentive compensation systems, and management development and training activities linked to the needs of the business (Becker, Huselid, and Spratt, 997).

Human Capital and Economic Growth

A firm's corporate goals very much depend on the performance of its human capital. Based on the universalistic and contingency approaches of human resource management, adequate human capital management could lead to higher profits, lower turnover, and improvement in human capital skills (Huselid, 1995). Taken at an aggregate level, positive and potentially strong returns from companies will lead to robust growth in the economy. An adequate human resource strategy is not only beneficial for the firm but also an asset for the employees themselves. In this view, development of a firm's workforce and its systems for managing people is seen as an investment rather than a cost to be minimized (Becker and Huselid, 1998). This investment in human capital through a high-performance work system should provide a significant and increasingly important source of value creation for the company, the market, and the economy as a whole. Becker, Huselid, and Spratt (1997) found that a one-standard-deviation improvement in the quality of a firm's HPWS is associated with changes in market value of \$15,000 to \$60,000 per employee. For a firm with 10,000 employees, that number is equivalent to multiple millions of dollars in market-value increase. More to the point, a firm's human resources have an asset value that corresponds to the present value of future cash flows derived from the skills, motivation, and adaptability of the firm's workforce.

Addressing Human Capital Shortages and Research Questions

Because of its importance to business competitiveness and economic growth, selecting employees constitutes one of the biggest tasks an organization faces. The process of selecting employees can come with many challenges, such as organizational constraints, cost, time, and labor market demand. This process can be even more difficult when organizations are seeking employees with unique skills. Unique skills might include those required for jobs in the areas of science, technology, engineering, and mathematics (STEM). Even as the organization must find the right candidate, the candidate must also find the right organization. Finding the right fit has many benefits for the organization as well as the employee. The current paper aims to investigate human resource management strategies through which organizations fulfill their need for employees with STEM skills. This paper particularly aims to answer the following four broad questions:

- What are the strategies organizations use to address critical skill shortages?
- Are there differences between revealed strategies and stated preferences on strategic choices to address the skill shortages?
- Does the industry in which a firm is located make a difference in a firm's strategic choices?
- How do a firm's attributes affect its strategic choices in addressing critical skill shortages or completing tasks in highly technical areas?

In the sections that follow, this paper first reviews the theoretical concepts regarding human capital formation. The second section introduces study challenges, hypotheses, and the construct used in this paper. The third section deals with study methodology. The fourth section presents the study's findings. The fifth section briefly discusses the implications and limitations of this study. The conclusion follows.

THEORETICAL BACKGROUND

Building Human Capital

Human capital investment has become a strategic decision for firms. By adopting a strategic human resource management (SHRM) framework, firms are building distinctive competencies, reorganizing competencies, and positioning business units more advantageously (Teece, 1984). By training employees to have skills with broader applicability, firms should be able to create a sustainable competitive advantage (Bhattacharya and Wright, 2005; Berk and Kaše, 2010). Depending on the needs of the firm or the need in the markets, the SHRM framework advises flexible types of human capital investment in line with corporate strategy. Common themes among adequate human capital development are selective staffing, comprehensive training, developmental appraisal, and externally equitable rewards (Snell and Dean, 1992; Flamholtz, 1971). Flamholtz (1971, 1972), focusing on internal extension or tightening of performance standards and budgets to improve employee productivity.

Improvements to human resource accounting are also imperative, in order to accurately measure the value of people as organizational resources (Flamholtz, 1972). Failure to measure and report the value of human resources to management can conceal suboptimal decision-making in organizations. Investment in human capital through training and development is critical if human capital is a key determinant of organizational success. Therefore, tools for monitoring and evaluating development programs in terms of their impact, result, and value is necessary (Flamholtz, Bullen, and Hua, 2003). Human resource accounting becomes a way of evaluating human resource decisions and provides a set of measures for quantifying the effects of human resource management strategies on the cost and value of people as organizational resources.

Several combinations of permanent, temporary, flexible, and shared methods exist in the human capital building literature. Traditional approaches to internal human capital investment are

still used by many firms. However, the high cost of training employees without a guaranteed return is a risk most companies are less and less willing to take. To avoid these human capital investment costs, firms turn to cheaper alternatives such as temporary workers, contract workers, and outsourcing (Abraham and Taylor, 1996; Bettis, Bradley, and Hamel, 1992; Davis-Blake and Uzzi, 1993; Foote and Folta, 2002; Pfeffer and Baron, 1988). Contracting out business services is generally influenced by wage and benefit savings potential, volatility of output demand, and availability of specialized skills possessed by the outside contractors (Abraham and Taylor, 1996). In part, externalizing work is a tool to smooth out the workload of the regular workforce. There is an increase in contracting out during peak period tasks. Bettis, Bradley, and Hamel (1992) warn about the improper use of outsourcing in the continuing decline of many Western firms. Outsourcing should be part of a firm's strategy to aid in competitiveness instead of a defensive operational measure. There should be a clear understanding of the relationship between narrowlybased sourcing decisions and broad-based competitive decline, in both firms and entire industries, caused by outsourcing. An adequate outsourcing strategy would generally focus on areas far removed from core competencies. Also, measuring outsourcing needs in strategic and financial terms needs to be a normal strategy review process.

Domestic or international alliances and cooperation among firms are also methods commonly discussed in the literature (Kogut and Kulatilaka, 1994; Brush and Chaganti, 1996; Gardner, 2005). Such alliances are characterized by a high degree of cooperative strategies that are, however, not central to core operations (Brush and Cahganti, 1996). Cooperative activities, partnerships, and alliances are gaining popularity in new and small businesses. Resource pooling, as well as facility, equipment, and personnel sharing are common. Gardner (2005) stated the growth of alliances is due to the fact that job security and career ladders are being replaced with a doctrine of employability according to which promises to keep employees' skills current and to develop them for opportunities in other workplaces are valued commitments. In general, cooperative strategies among firms are novel in nature, as they are counterintuitive to the competitive nature of the firm itself. Brush and Chaganti (1996) find that cooperation among firms is due mostly to resource constraints and not to an inherent desire to transfer technology. Inherent cooperation is common, however, in the high-tech industry.

The final approach considered is resource based, whereby the link between a firm's resources and sustaining competitive advantage is examined (Barney, 1991; Flamholtz, Bullen, and Hua, 2003; Koch and McGrath, 1996; Matusik and Hill, 1998). A firm's resources, including its physical, human, and organizational capital, must all be used within a defined strategy that aims to improve the firm's competitive advantage. Such an advantage is sustained by implementing a strategy that exploits internal strengths through responses to environmental opportunities. A sustainable value-creating strategy is based on several indicators, including value, rareness, inimitability, and non-substitutability. Koch and McGrath (1996) developed a human resource sophistication index that ranks investments in human resource planning and hiring practices that are positively associated with labor productivity. Their findings show that firms that aggressively sought more employees, obtained more information about them, and screened out those with undesirable characteristics benefited from higher productivity. Matusik and Hill (1998) promoted a concept of contingent work whereby a firm's investment in human capital would lead to

knowledge accumulation, value creation, and, subsequently, the establishment of a competitive advantage.

Three Theories and Four Employment Modes

Lepak and Snell (1999) reviewed theoretical perspectives on human resource architecture and concluded that three major theoretical perspectives on human resources (resource-based view of the firm, human capital theory, and transaction cost economics) converge around four different employment modes:

(a) internal development—investing in employee skill sets to make or grow the firm's own human capital;

(b) acquisition—buying human capital from competitive markets, both domestic and international (overseas);

(c) contracting—using temporary staffing agencies or contract workers to get the job done; (d) alliance—creating partnerships with other companies or entities to solve human resource challenges.

Depending on the type of tasks involved, firms may prefer one option to another. For example, if the tasks involve the firm's core competencies, the preference would be either to make their own human capital or buy (recruit) from the competitive market. For non-core tasks, the firms may use other, lower-cost available options. Using these four major frameworks, this paper developed eight different methods of human capital formation or completing critical tasks.

STUDY CONSTRUCTS AND HYPOTHESES

Recruiting STEM Employees

Human capital strategies for organizations are used to attract, engage, and retain employees as well as to increase performance (Graen & Grace, 2015). Recruiting employees can be completed both inside and outside the organization. While recruiting is important for the organization, it is also a costly process, estimated to require around \$3,500 per new hire (Fleming & Jia, 2016). Due to the high cost, organizations are developing strategic methods of hiring employees with unique skill sets.

Recruiting for STEM areas. Developing and promoting STEM field knowledge has typically been introduced to students from kindergarten through 12th grade (McDonald, 2016; Hernandez et al., 2014). STEM education refers to studying or gaining professional practice in one of the STEM areas (Hernandez et al., 2014). In terms of STEM employment, computer occupations are the most common at 45 percent, followed by engineers at 19 percent (Fayer, Lacey, & Watson, 2017). STEM careers matter to organizations because the jobs are growing at a rapid pace. For example, STEM jobs increased by 10.5 percent from 2009 to 2015, while non-STEM jobs increased at 5.2 percent (Fayer, Lacey, & Watson, 2017). This creates a challenge for organizations in recruiting and selecting this unique, sought-after talent.

Study Construct: Revealed and Stated Preferences

This study is part of a broader project that aims to identify critical challenges and issues due to STEM-related skill shortages in Tennessee. In 2017, the broader STEM project survey results identified several key challenges companies are facing in the area of STEM workforce. Primarily, many survey respondents indicated it is challenging to find skilled STEM workers. Nearly four in five respondents indicated such skill shortages will negatively impact their companies' growth. The survey then asked how these companies are currently addressing the skill challenges by ranking their current practices and how they would have addressed the challenges if circumstances were different (actual/preferred strategies). They ranked the eight strategies given in Table 1.

Table 1			
When facing skilled workforce challenges, please assess your company's strategy: (1= the lowest priority; 8= the highest priority)			
Revealed (Actual) Strategies in Order Stated (Preferred) Strategies in Order			
Investing in Existing Employees Investing in K-12 Education to Create Talent Pipeline Recruiting from the Competitive Market Using Temporary Staffing Agencies / Contract Work Using Less Skilled Internal Employees for the Task Recruiting from Overseas Outsourcing the Task to Be Completed (US) Outsourcing the Task to Be Completed (Overseas)	Investing in Existing Employees Investing in K-12 Education to Create Talent Pipeline Recruiting from the Competitive Market Using Temporary Staffing Agencies / Contract Work Using Less Skilled Internal Employees for the Task Recruiting from Overseas Outsourcing the Task to Be Completed (US) Outsourcing the Task to Be Completed (Overseas)		

Investing in Existing Employees for Skill Upgrade

Practitioners and researchers alike have provided reasons for investing in professional development. Little (2015) provides the following reasons for investing in professional development: 1) employees are happier if their employer expresses interest in their development; 2) organizations change, so keeping up with skills can be beneficial; and 3) when senior employees retire, the talent needs to be replaced and this process may be easier if other employees have been developed. In support of the stated reasons, the research also suggests that training and development opportunities can be factors in whether an applicant decides to accept or decline a job offer (Schmidt, 2007). Investing in employee talent through encouraging career adaptability can also increase both job satisfaction and retention (Coetzee & Stoltz, 2015). When looking specifically at employees in roles requiring constant contact with people, results have shown a high correlation between job training and overall job satisfaction (Schmidt, 2007). Research has shown that training helps employees, increasing their potential for career advancement and ultimate success (Coetzee & Stoltz, 2015). Some literature regards investing in employees' futures

as an important best practice for organizations (Biro, 2017). Developing a culture of continuous learning is a common method for retaining talent.

Fields focused on professional development. Among a sample of 284 engineers, research found a significant positive relationship between investment in training and development and organizational commitment (Coetzee, Mitonga-Monga, & Swart, 2014). Similarly, in a sample of information technology employees, results also showed that satisfaction with training and development practices and opportunities had a significant positive impact on retention (Renaud, Morin, Saulquin, & Abraham, 2015). Prior research has found that opportunity/lack of opportunity for training and development is significantly related to intent to leave among other IT professionals (Kim, 2012). Research conducted within samples of nurses also found a direct link between training and education offered and job satisfaction (Price & Reichert, 2017). As shown, investing in employees appears common across industries.

- *H1* Large firms are more likely to invest in their own employees.
- H2 Companies with research and development (R&D) expenditures are more likely to invest in their employees.
- H3 Companies with technologically strong infrastructure are more likely to invest in their employees.

Recruiting from Competitive Markets

In a recent survey administered by PricewaterhouseCoopers (2017), 53 percent of a total of 1,379 CEOs considered STEM skills very important. Furthermore, 12 percent stated it was difficult to recruit employees with STEM skills. Because of the distinctive requirements of the jobs, innovative recruiting techniques have been shown to be more beneficial than traditional methods (Rothwell, 2011; SHRM, 2016). Due to the complex nature of the work, organizations must attract technical talent by demonstrating intellectual challenges within the organization (Rothwell, 2011). Because STEM students have the training to understand multi-faceted issues and think logically through problems, organizations are challenged to demonstrate that their company can offer a more rewarding career than other companies (Kho, 2013). Recruitment techniques can be tailored to the anticipated market. For example, when technical employees are sought, recruitment methods that utilize technology may be more effective (APQC, 2012). Within a sample of 124 STEM students, prior research has shown that the offer of autonomy also plays a significant role in attracting STEM employees (Wei, 2016). Autonomy can refer to having control over work hours, work location (i.e., home or office), and decision-making authority (Wei, 2016).

"Knowledge workers" is the title that has been given to the group of individuals who have more specialized training with regard to acquiring specific knowledge (Rothwell, 2011). Students with a STEM education could be considered knowledge workers. Finding and hiring knowledge workers can be approached in a slightly different way from recruiting for traditional jobs. Organizations are often more strategic about attracting and retaining technical talent in a way that is linked to business needs and objectives (Rothwell, 2011). For example, one strategic model is to first identify short- and long-term business needs, then to identify the necessary talent necessary to fulfill the business needs, and finally to develop an action plan for attracting the talent (APQC, 2012). This process helps to ensure the strategy aligns with the objectives (Jansen & Ruse, 2008). To be strategic in recruitment of employees with technical skills, organizations need to be able to predict their future talent needs (Janesen & Ruse, 2008; SHRM, 2016). This is especially important when recruiting STEM employees, because the both the knowledge and skills required are highly developed (Jansen & Ruse, 2008).

To help select employees with the required STEM training, some organizations have switched to more innovative methods. Caterpillar, General Mills, and Lockheed Martin have all adopted an innovative method for talent acquisition (APQC, 2012). Through their process, employees in strictly technical roles are transitioned to take on more of a human resource role to contribute to the employee hiring process (APQC, 2012). For example, a mechanical engineer with 20 years of experience, who has demonstrated knowledge of the field and the skills required, may be included in the process of finding and selecting new talent in the field.

Recruiting from Overseas

In the past, recruiting from outside the United States was cost prohibitive. More recently, there has been a transition to recruiting from outside the United States because of the available talent world-wide (Manning, Massini, & Lewin, 2008). Attracting global talent can help with product development and innovation (Lewin, Massini, & Peeters, 2008).

Fields recruiting from overseas. Research suggests that looking globally for talent is becoming increasingly more common as fewer people in the United States are selecting careers in fields such as science and engineering (Lewin, Massini, & Peeters, 2008). Just as overseas talent is common in these two fields, it is also common in research and development (Manning, Massini, & Lewin, 2008). Furthermore, looking globally for talent is becoming common in technical areas which require specific knowledge and skills (Lewin, Massini, & Peeters, 2008). Trend analysis from 1990 to 2007 indicates that IT remains the field most heavily involved in overseas recruiting, followed by product development, administrative business processes, call centers, and procurement (Manning, Massini, & Lewin, 2008).

- *H4 Large companies are more likely to recruit from the competitive market either domestically or internationally.*
- *H5 Firms are more likely to recruit from the competitive market compared with other modes of recruitment.*

Using Temporary Staffing Agencies or Contract Work

Research suggests that according to executives, approximately 44 percent of the workforce in 2018 will consist of temporary positions or contractors (Shook & Knickrehm, 2017). Nearly 27 percent of the working-age population in the United States can be classified as independent workers (Manyika, Lund, Bughin, Robinson, Mischke, & Mahajan, 2016). Temporary or contract workers can benefit an organization through cost savings (Graff, 2012). As organizations make the transition to becoming leaner, more work can be completed with temporary workers. *Fields using temporary staff and contact workers.* The trend of using temporary workers does not appear to be limited to a single field. Temporary workers are being used in areas such as IT, human resources, and finance (Sorensen, 2012). That being said, some industries have more pressure to engage in independent work (Manyika, Lund, Bughin, Robinson, Mischke, & Mahajan, 2016). For example, 38 percent of teachers are independent workers because of necessity.

H6 Manufacturing firms are more likely to use contract workers as opposed to the firms in professional and technical services, and education and healthcare.

Using less skilled internal employees to handle jobs

As we have mentioned, hiring the right employee presents challenges. A reported one in three employers have difficulty finding qualified candidates for job openings (HR Specialist, 2011). One area in which it has been found that the most qualified candidates are not hired is the business of childcare. In a recent study, researchers found that applicants to positions in this field who had more experience or more education were not significantly more likely to be selected (Boyd-Swan, & Herbst, 2017). In order to explain this finding, researchers postulated that hiring the most qualified candidate is the more expensive option in the already expensive field of childcare. Alternatively, researchers also suggest organizations may not believe that hiring the most qualified candidate adds substantial value (Boyd-Swan, & Herbst, 2017). While these findings are of interest, it is difficult to find empirical research regarding underqualified employees.

H7 Smaller firms are more likely to rely on less skilled internal employees to complete tasks because of the cost of recruiting.

Investing in K-12 education to create a talent pipeline

The U.S. Department of Labor has funded a large grant to help organizations manage the talent pipeline. One of the primary functions of the grant is to help organizations close the gap between academic courses and skills required on the job (Eramo, 2017). While this grant is not necessarily geared toward kindergarten through 12th grade, it signifies an interest in investing in a talent pipeline. Developing relationships with high school programs has been identified as one of the first steps in building a talent pipeline (Chesney, 2017). Wells Fargo and WellCare are two organizations that capture the value of investing in teenagers (Join Wells Fargo, 2013). A review of multiple sources regarding building a talent pipeline revealed that only rare articles recommend starting before the undergraduate level (Skrzypinksi, 2017; Waters, 2017). While the government has increased the funding for STEM fields to develop this talent, there is a lack of empirical evidence that organizations are doing the same.

H8 Firms in professional and technical services, education, and healthcare are more likely to promote investing in a talent pipeline.

Outsourcing tasks to companies/individuals in the U.S./overseas

This option is similar to contracting with staffing agencies. In this case, a task is outsourced to an independent contractor. Many manufacturing firms use this option strategically to improve their competitive position. However, when firms do use this option, they often outsource tasks that are not related to their core competencies (Bettis et al., 1992).

H9 Firms that are involved in exports may have a strong preference for recruiting or outsourcing tasks overseas.

Revealed versus stated strategic preferences

The present study intends to help understand the difficulties organizations may face in recruiting unique talents, such as those in STEM fields. The study analyzes managers' revealed (actual) preferences and stated (preferred) preferences for addressing critical skill gaps in STEM-related areas.

H10 Firms' revealed strategies are expected to differ significantly from their stated strategies.

METHOD OF ANALYSIS

Data

In 2017, the Business and Economic Research Center (BERC) initiated a STEM workforce skill assessment survey in Tennessee. BERC followed a two-step approach to collect the data from a long survey: (1) sending the survey to businesses and educational and professional development organizations in the state, and (2) using a carefully screened panel of 200 participants who are in charge of their companies' operations or human resource functions. The former approach yielded about 69 usable responses. The latter approach was initiated in cooperation with Qualtrics, producing 200 usable responses. The breakdown of responses by major sectors is presented in Table 2.

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Distribution of Survey Responses by Major Sectors			
Major Sectors	Percent of Total responses		
Education and Healthcare	21.35%		
Manufacturing	24.72%		
Professional and Technical Services	36.70%		
Other	17.23%		
Total Responses	100.00%		

In identifying business panels, BERC in cooperation with Qualtrics used the following screening questions:

- What is your current role in the company?
- How would you describe your industry?
- How many employees work for your company?
- Where is your company located?

Variables Used in This Study

The STEM survey included more than 50 multiple-choice and open-ended questions. Of these, this paper will use the following variables in assessing the strategies companies pursue regarding skill gaps in STEM-related fields:

- What is your industry classification?
- How many employees work for your company?
- Does your company export goods and services overseas?
- Does your company participate in innovative activities such as research and development or the commercialization of patents?
- Are enough high-quality/competitive individuals being produced for STEM occupations in Tennessee?
- Are high schools and colleges in Tennessee equipping students with the proper skills for STEM-related jobs?
- Is the workforce in Tennessee going to meet the demands of advanced technology?
- How is your company positioned to take advantage of technological changes?
- When facing skilled-workforce challenges, please assess your company's current strategy by ranking each of eight options (1 = the lowest priority; 8 = the highest priority).

• When facing skilled workforce challenges, please assess your company's preferred strategy by ranking each of eight options (1 = the lowest priority; 8 = the highest priority).

Estimation Method

Given the nature of the dataset (ordinal rank preferences and discrete variables), this study uses two nonparametric assessment tools to test the study hypotheses: the Friedman test and Spearman's Rho correlations.

Friedman Test

The Friedman test is a nonparametric test used to compare more than two dependent samples. It tests the following null hypothesis for *k*-related samples: *Ho: The distribution of k-related samples are the same.* For each variable, sum of the ranks for cases is calculated and then averaged using the following formula (SPSS, version 23):

$$\overline{R}_1 = \frac{c_1}{N} \tag{1}$$

Where

 \bar{R}_1 = Mean rank C₁ = Sum of the rank of the cases

N = Number of cases

Using the Friedman test statistics, we then calculate χ^2 distribution.

$$Ftest = \left[\frac{12}{(N*k*(k+1))}\right] * \sum C^2 - [3*N*(k+1)]$$
(2)
Where N = number of cases
K = number of variables / groups
C = sum of the rank of the cases

Degree of freedom (df) is *k*-1.

The Friedman test may tell us whether the ranking among groups is significant, but it does not provide pairwise comparison. To understand how each group's ranking differs from the other, we perform the Wilcoxon signed ranks test.

Spearman's Rho

Spearman's Rho is a nonparametric test used to measure the correlation between two variables. Spearman's rank-order correlation is the nonparametric version of the Pearson product-moment correlation. The formula for Spearman's rank-order correlation is given below.

Spearman's Rho (
$$\rho \text{ or } rs$$
) = $1 - \frac{6\sum d_i^2}{n(n^2 - 1)}$ (3)

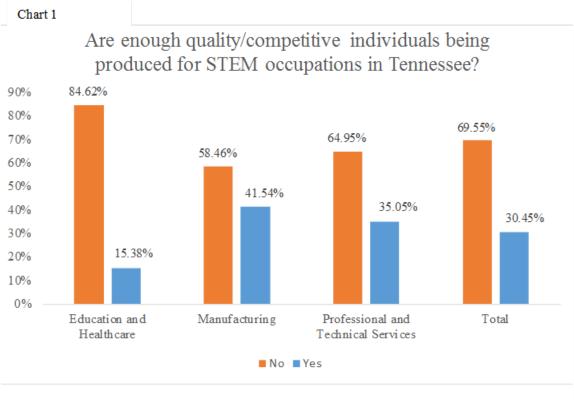
Where $d_i = difference$ in paired ranks N = number of cases

Spearman's rank-order correlation ($\rho \ or \ rs$) takes a value between +1 and -1; +1 indicating a perfect positive association; 0 indicating "no-association"; and -1 indicating a perfect negative association. We used SPSS to analyze the association between variables of interest.

RESULTS

State of the STEM Skill Pipeline in Tennessee

BERC's STEM survey asked businesses several questions regarding the state of STEM skills in Tennessee in 2017. The results do not show a promising outlook, as nearly 70 percent of businesses surveyed indicated there are not enough high-quality/competitive individuals being produced for STEM occupations in Tennessee (Chart 1).

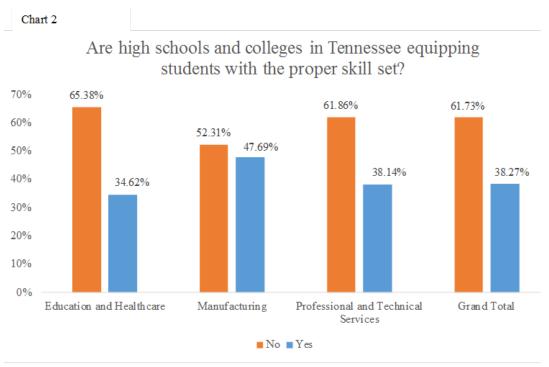


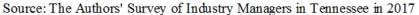
Source: The Authors' Survey of Industry Managers in Tennessee in 2017

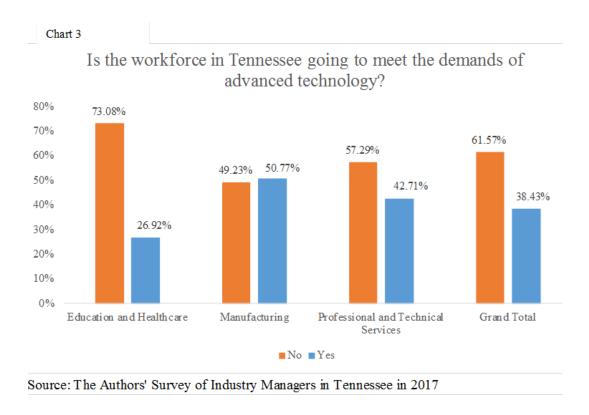
When we look at the results by sectors, the largest gap seems to be in the education and healthcare sectors, where nearly 85 percent of managers suggested there are not enough

competitive individuals produced for education and healthcare occupations in Tennessee, followed by professional and technical services (65 percent) and manufacturing (58 percent).

Are high schools and colleges in Tennessee equipping students with the proper skill set? Overall, 62 percent of managers indicated students are not acquiring the proper skill set. Similar to the responses to the previous question, more than 65 percent of managers in the education and healthcare sector suggested students are not equipped with the proper skill. Similarly, about 62 percent of managers in professional and technical services argued that both high schools and colleges are not properly training students. The manufacturing sector was almost evenly split on this question, with just over 52 percent of managers suggesting that skill set development is a problem (Chart 2).







Finally, we asked business managers whether the workforce in Tennessee is going to meet the demands of advanced technology. The results are very discouraging, as 62 percent of managers answered this question "No." Again, an overwhelming percentage of managers (73 percent) in the education and healthcare sectors argued the workforce in Tennessee is not going to meet the demands of advanced technology (Chart 3). The professional and technical services sector echoed this sentiment, albeit mildly. Managers in the manufacturing sector were split 50/50 on this issue.

Responses to these three questions by managers in Tennessee suggest that finding employees with the proper STEM skill set is a challenge for companies. When faced with this challenge, what human resource strategies do these managers use to make sure their business remain competitive in the market?

Firm Size, R&D Investment, and Technology Readiness

In this part of assessment, we tested three general hypotheses regarding the relationship between human resource strategies and firm attributes. Before analyzing the relationship, we conducted a nonparametric Friedman test. The Friedman test suggests the ranking across groups for both revealed and stated strategies is significant (Table 3).

Friedman Test: Is Preferen	ice Ranking Si	gnificant?								
Revealed	Preferences	: Descrip	tive Statis	tic s	Stated Preferences: Descriptive Statistics					
			Std.					Std.		
	N Me	an Rank 🛛	Deviation 1	Minimum N	faximum		N Mean	Deviation	Minimum	Maximun
Investing in Employees	217	6.94	1.47995	1.00	8.00	Investing in Employees	216 7.0185	1.30816	2.00	8.00
Investing in Pipeline	217	5.40	1.98153	1.00	8.00	Investing in Pipeline	216 5.5880	2.11564	1.00	8.00
Competitive Market	217	6.22	1.58818	1.00	8.00	Competitive Market	216 6.1204	1.47360	1.00	8.00
Contract Worker	217	4.45	1.56013	1.00	8.00	Contract Worker	216 4.6343	1.60827	1.00	8.00
Less Skilled Worker	217	4.27	1.92990	1.00	8.00	Less Skilled Worker	216 4.2500	1.63465	1.00	8.00
Recruiting from Overseas	217	2.74	1.67778	1.00	8.00	Recruiting from Overseas	216 2.7269	1.49866	1.00	8.00
Outsourcing Domestic	217	3.74	1.73412	1.00	8.00	Outsourcing Domestic	216 3.5602	1.74572	1.00	8.00
Outsourcing Overseas	217	2.25	1.73013	1.00	8.00	Outsourcing Overseas	216 2.1019	1.78333	1.00	8.00
Test Statistics*						Test Statistics*				
N	217					N	216			
Chi-Square	668.931					Chi-Square	720.401			
df	7					df	7			
Asymp. Sig.	.000					Asymp Sig.	.000			
a. Friedman Test						a. Friedman Test				

Table 3

We then tested the following three hypotheses to see how firm attributes affect human resource strategies:

- H1 Large firms are more likely to invest in their own employees.
- *H2 Companies with research and development (R&D) expenditures are more likely to invest in their employees.*
- *H3 Companies with a technologically strong infrastructure are more likely to invest in their employees.*

For the first hypothesis (H1), measuring the correlations between company size and human resource strategies, Spearman's Rho bivariate correlations do not support our hypothesis: large company size does not necessarily lead to investing in employees for skill development as a preferred human resource strategy. Both revealed and stated strategy rankings are not significant with regard to the relationship between firm size and investing in employees for skill development (Table 4).

Table 4									
10101	Spe arma:	n's Rho Corr	elations: Re	vealed (Actu	ual) Prefer	ences	-		
		Investing in	Investing in	Competitive	Contract	Less Skilled	Recruiting from	Outsourcing	Outsourcing
[l= the least preferred; 8= the mo	t preferred]	Employees	Pipeline	Market	Worker	Worker	Overseas	Domestic	Overseas
[H2]Does your company invest in	Correlation Coefficient	042	.036	.021	042	302**	.209**	012	.136
R&D? (Yes, No) [1,0]	Sig. (2-tailed)	.533	.595	.760	.538	.000	.002	.863	.04
	N	221	221	220	222	223	219	221	22
[H3] How is your company	Correlation Coefficient	.024	.132	022	005	261**	.093	.065	01
positioned technologically? (Weak	Sig. (2-tailed)	.719	.050	.747	.947	.000	.172	.334	.87
A verage, Strong) [0,1,2]	N	221	221	220	222	223	219	221	22
[H1] What is the size of your	Correlation Coefficient	071	060	.178**	.031	015	.001	048	.07
company? (Small, Medium, Large)	Sig. (2-tailed)	.294	.375	.008	.649	.823	.993	.479	.27
[0,1,2]	N	221	221	220	222	223	219	221	22
	Spe arma	n's Rho Corr	elations: Sta	ted (Preferre	ed) Prefer	ences			
		Investing in	Investing in	Competitive	Contract	Less Skilled	Recruiting from	Outsourcing	Outsourcing
[1= the least preferred; 8= the mo	t preferred]	Employees	Pipeline	Market	Worker	Worker	Overseas	Domestic	Overseas
[H2]Does your company invest in	Correlation Coefficient	-204 ^{**}	039	041	093	119	.268**	.118	.023
R&D? (Yes, No) [1,0]	Sig. (2-tailed)	.002	.566	.546	.171	.079	.000	.082	.73
	N	218	219	221	219	220	217	220	22
[H3] How is your company	Correlation Coefficient	070	.118	107	029	243**	.104	.067	08
positioned technologically? (Weak	Sig. (2-tailed)	.303	.081	.114	.672			.320	.20
A verage, Strong) [0,1,2]	N	218	219	221	219	220	217	220	22
[H1] What is the size of your	Correlation Coefficient	109	049	.082	.111	.022	001	047	.03
company? (Small, Medium, Large)	Sig. (2-tailed)	.109	.473	.225	.102	.747	.990	.490	.59
[0,1,2]	N	218	219	221	219	220	217	220	222
**. Correlation is significant at the	0.01 level (2-tailed).								

*. Correlation is significant at the 0.05 level (2-tailed).

What is the relationship between investing in R&D and investing in employees? Do the companies that invest heavily in research and development prefer creating their human capital through investing in their employees? Our findings do not confirm this hypothesis under the revealed strategy model. However, under the stated strategy model, the relationship is significant, in the opposite direction. At the same time, the relationship between R&D and recruiting from overseas is highly significant and positive. This suggests that companies with R&D expenditures prefer chasing the talent across the globe to investing in existing employees as a human resource strategy to fill shortages.

The third hypothesis (H3) involves the relationship between technology readiness and human resource strategies: companies with a technologically strong infrastructure are more likely to invest in their employees. This hypothesis was also not supported by the data. There is a strong negative relationship between technology readiness and using less-skilled workers to fill the skill gap in a company.

Company Size and Recruiting from Competitive Markets

Is there a relationship between company size and recruitment from competitive markets? To test this hypothesis (H4), we look at the Spearman's Rho correlations between company size and human resource strategy preference rankings under the revealed and stated preferences scenarios. The findings support the hypothesis. Indeed, there is a strong positive correlation between company size, measured as small, medium, or large, and recruiting from competitive markets under the revealed strategy scenario. However, data does not suggest either a positive or negative connection between firm size and recruiting from overseas (Table 5).

Table 5 Spearman's Rho Correlations: Revealed (Actual) Preferences Less Skilled Recruiting from Outsourcing Investing in Investing in Competitive Contract Outsourcing Worker Employees Market Worker Pipeline Overseas Domestic Overseas What is the size of your Correlation Coefficient -.071 -.060 .178 .031 -.015 .001 -.048 .073 company? (Small, Sig. (2-tailed) .294 .375 .008 .649 .823 .993 .479 .27 Medium, Large) [0,1,2] N 221 221 223 221 224 220 $\mathcal{D}\mathcal{D}$ 219 Spearman's Rho Correlations: Stated (Preferred) Preferences Investing in Investing in Competitive Less Skilled Recruiting from Contract Outsourcing Outsourcing Employees Market Worker Worker Domestic Overseas Pipeline Overseas What is the size of your Correlation Coefficient -.049 .082 .111 .022 -.001 -.047 .036 -.109 company? (Small, Sig. (2-tailed) .109 .473 .225 .102 .747 .990 .490 .591 Medium, Large) [0,1,2] N 218 219 221 219 220 217 220 222

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Competitive Market Recruitment versus Other Modes

Do firms prefer a competitive market recruitment strategy to other modes of recruitment? Based on the data, our hypothesis (H5) is partially supported. As highlighted in Table 3 above and Table 6 below, a competitive market strategy is the second-most preferred strategy among eight employment modes. This finding is consistent across the sectors this study covers. The mean rank value is second to investing in employees across major sectors.

Table 6

Friedman Test: Is Preferen		~ ~							
Revealed Preferences: Industry Comparison									
	Manı	Manufacturing		onal and hcare	Professi Technical		Other Industries		
[1= the lowest; 8= the									
highest]	Ν	Mean Rank	Ν	Mean Rank	Ν	Mean Rank	Ν	Mean Rank	
Investing in Employees	62	6.60	38	6.68	9 5	7.14	22	7.45	
Investing in Pipeline	62	5.42	38	5.47	95	5.46	22	4.95	
Competitive Market	62	5.95	38	6.13	9 5	6.41	22	6.27	
Contract Worker	62	4.08	38	4.95	9 5	4.51	22	4.41	
Less Skilled Worker	62	4.06	38	4.89	9 5	4.01	22	4.86	
Recruiting from Overseas	62	3.44	38	2.58	95	2.47	22	2.18	
Outsourcing Domestic	62	3.60	38	3.47	95	3.85	22	4.14	
Outsourcing Overseas	62	2.85	38	1.82	95	2.15	22	1.73	
Test Statistics ^a			Test St	atistics ^a	Test St	atistics ^a	Test Statistics ^a		
Ν	62		N	38	N	95	Ν	22	
Chi-Square	127.823		Chi-Square	131.009	Chi-Square	345.646	Chi-Square	93.182	
df	7		df	7	df	7	df	7	
Asymp. Sig.	.000		Asymp. Sig.	.000	Asymp. Sig.	.000	Asymp. Sig.	.000	
a. Friedman Test	a. Friedman Test a. Friedman Test a. Friedman Test							Test	

A further analysis using Wilcoxon Signed Ranks Test suggests that compared with seven other employment modes, preference ranking for recruiting from competitive markets is significantly different from the other seven employment modes. Especially in the areas of recruiting from overseas and outsourcing tasks overseas, the difference is significant and effect size is very large (r > 0.5) (Table 7).

Table 7											
Ranks and Wilco	xon Signed Ra	nks T est Stati	stics: Rev	ealed Prefe	rences	Ranks and Wilcoxon Signed Ranks T est Statistics: Revealed Preferences					
		N (Number						N (Number		Asymp.	
	Directions of	of Cases)	Z-Score	Asymp. Sig.	Effect Size		Directions of	of Cases)	Z-Score	Sig. (2-	Effect Size
Pair of Rankings (1)	Relationship (2)	(3)	(4)	(2-tailed) (5)	(r)(6)	Pair of Rankings (1)	Relationship (2)	(3)	(4)	tailed) (5)	(r) (6)
Competitive Market -	Negative Ranks	151	-5.149	.000	0.25	Less Stalled Worker -	Negative Ranks	173	-8.649	.000	0.41
Investing in Employees	Positive Ranks	67			Significant	Competitive Market	Positive Ranks	47			Significant
	Ties	0			but small		Ties	0			but
	Total	218					Total	220			medium
Contract Worker -	Negative Ranks	182	-9.014	.000	0.43	Recruiting from	Negative Ranks	197	-11.522	.000	0.55
Competitive Market	Positive Ranks	36			Significant	Overseas - Competitive Market	Positive Ranks	22			Significant
	Ties	0			but		Ties	0			and
	Total	218			medium		Total	219			krge
Competitive Market -	Negative Ranks	85	-4.196	.000	0.20	Outsourcing Domestic -	Negative Ranks	182	-9.984	.000	0.48
Investing in Pipeline	Positive Ranks	133			Significant	Competitive Market	Positive Ranks	37			Significant
	Ties	0			but		Ties	0			but
	Total	218			small		Total	219			medium
1. Difference in rankin	gs		-			Outsourcing	Negative Ranks	200	-11.767	.000	0.56
Cases ranked higher or lower for the reference group						Overseas -	Positive Ranks	19			Significant
3. Number of cases ei	ther higher or low	er for the refe	rence group	p		Competitive Market	Ties	0			and
4. Wilcoxon test score	(z-score)		_				Total	219			krge
5. Significance of rank	ing difference										
6. Effect size of rankir	g difference (r=	z-socre/square	root of all	cases (two gr	roups))						

Contract Work and Industry Relationships

As a human resource strategy, is contract work more associated with the manufacturing sector (H6)? Data indicates that as a human resource strategy, contract work in manufacturing is as common as in other sectors. The Friedman test shows a mean rank score of 4.08 for contract work, making it the fourth-preferred strategy in the manufacturing sector. In other sectors, we see a similar ranking for contract work as the fourth-preferred employment mode (Tables 3 and 6).

Company Size versus Less-Skilled Workers

We hypothesized that smaller firms are more likely to rely on less-skilled internal employees to complete tasks because of the cost of recruiting (H7). We expected to see a negative and significant relationship between the less-skilled worker mode of completing tasks and the company-size variable. Based on Table 5, the sign of the relationship is correct, but the relationship is not significant.

Investing in Talent Pipeline by Industry

Our eighth hypothesis (H8) is about the relationship between industry and investing in a talent pipeline. Our rationale behind this hypothesis that "the firms in professional and technical services, education, and healthcare are more likely to promote investing in a talent pipeline" was that many businesses in the professional services, educational, and healthcare sectors are driven by local needs and concerns and therefore more likely to invest in a talent pipeline. Findings (Table 6) suggest this is not the case. In the sectors we covered, the mean rank test shows investing in a talent pipeline is considered the third-preferred strategy across sectors.

Outsourcing and Exporting

We hypothesized that firms that are involved in exports may have a strong preference for recruiting or outsourcing tasks overseas (H9) or have a preference for overseas recruitment. We expect firms, through international involvement, to create alliances and a competitive space for their goods and services overseas. The findings in Table 8 suggest support for our hypothesis: a firm's export orientation is positively related to recruiting and outsourcing overseas under the revealed strategy scenario. Under the stated strategy ranking, export orientation is positively connected with recruiting overseas.

Table 8 Spearman's Rho Correlations: Revealed (Actual) Preferences									
		Investing in Pipeline	Competitive Market	Contract Worker	Less Skilled Worker	Recruiting from Overseas	Outsourcing Domestic	Outsourcing Overseas	
Correlation Coefficient	.030	063	034	098	212**	.292**	.031	.141	
Sig. (2-tailed)	.653	.350	.621	.147	.001	.000	.648	.035	
Ν	220	220	219	221	222	218	220	223	
Spea	arman's Rho	Correlation	ns: Stated (Pi	eferred) F	references				
		U U	Competitive Market	Contract Worker	Less Skilled Worker	Recruiting from Overseas	Outsourcing Domestic	Outsourcing Overseas	
Correlation Coefficient	072	017	023	077	111	.169*	.084	.125	
Sig. (2-tailed)	.291	.798	.735	.255	.100	.013	.215	.063	
Ν	217	218	220	218	219	216	219	221	
	Correlation Coefficient Sig. (2-tailed) N Spec Correlation Coefficient Sig. (2-tailed)	Correlation Coefficient .030 Sig. (2-tailed) .653 N 220 Spearman's Rho Investing in Employees Correlation Coefficient072 Sig. (2-tailed) .291	Investing in Employees Investing in Pipeline Correlation Coefficient .030 063 Sig. (2-tailed) .653 .350 N 220 220 Spearman's Rho Correlation Investing in Employees Investing in Pipeline Correlation Coefficient 072 017 Sig. (2-tailed) .291 .798	Investing in Employees Investing in Pipeline Competitive Market Correlation Coefficient .030 063 034 Sig. (2-tailed) .653 .350 .621 N 220 220 219 Spearman's Rho Correlations: Stated (Properties) Investing in Employees Investing in Pipeline Competitive Market Correlation Coefficient 072 017 023 Sig. (2-tailed) .291 .798 .735	Investing in Employees Investing in Pipeline Competitive Market Contract Worker Correlation Coefficient .030 063 034 098 Sig. (2-tailed) .653 .350 .621 .147 N 220 220 219 221 Spearman's Rho Correlations: Stated (Preferred) F Investing in Employees Investing in Pipeline Competitive Market Contract Worker Correlation Coefficient 072 017 023 077 Sig. (2-tailed) .291 .798 .735 .255	Investing in Employees Investing in Pipeline Competitive Market Contract Worker Less Skilled Worker Correlation Coefficient .030 063 034 098 212** Sig. (2-tailed) .653 .350 .621 .147 .001 N 220 220 219 221 222 Spearman's Rho Correlations: Stated (Preferred) Preferences Investing in Employees Investing in Pipeline Competitive Market Contract Worker Less Skilled Correlation Coefficient 072 017 023 077 111 Sig. (2-tailed) .291 .798 .735 .255 .100	Investing in Employees Investing in Pipeline Competitive Market Contract Worker Less Skilled Worker Recruiting from Overseas Correlation Coefficient .030 063 034 098 212** .292** Sig. (2-tailed) .653 .350 .621 .147 .001 .000 N 220 220 219 221 222 218 Spearman's Rho Correlations: Stated (Preferred) Preferences Investing in Employees Pipeline Market Worker Worker Recruiting from Overseas Correlation Coefficient 072 017 023 077 111 .169* Sig. (2-tailed) .291 .798 .735 .255 .100 .013	Investing in EmployeesInvesting in PipelineCompetitive MarketContract WorkerLess Skilled WorkerRecruiting from OverseasOutsourcing DomesticCorrelation Coefficient.030063034098212**.292**.031Sig. (2-tailed).653.350.621.147.001.000.648N220220219221222218220Spearman's Rho Correlations: Stated (Preferred) PreferencesInvesting in EmployeesCompetitive PipelineContract MarketLess Skilled WorkerRecruiting from OverseasOutsourcing DomesticCorrelation Coefficient072017023077111.169*.084Sig. (2-tailed).291.798.735.255.100.013.215	

Correlation is significant at the otor level (2-tailed)

*. Correlation is significant at the 0.05 level (2-tailed).

Revealed versus Stated Strategy Ranking

Finally, we hypothesized that (H10) firms' revealed strategy rankings are expected to differ significantly from their stated strategy rankings. In many cases, the realities of the business environment may lead managers to accept and implement less than optimal human resource recruitment strategies. Therefore, revealed ordinal utility function may differ significantly from

Table O

the stated ordinal utility function. To test this hypothesis, we obtained the Spearman's Rho correlation matrix for the revealed and stated strategy rankings. According to Table 9, rankings under the two different scenarios are positively correlated. In several areas, as expected, we see significant changes in ranking; for example:

- investing in employees is negatively correlated with recruiting overseas;
- investing in a talent pipeline is negatively correlated with contract workers and outsourcing domestically, suggesting managers prefer investing in a talent pipeline to resorting to contract workers and domestic outsourcing;
- contract workers are positively correlated with less-skilled workers;
- less-skilled workers are negatively correlated with investing in a talent pipeline;
- recruiting overseas is negatively correlated with investing in employees and less-skilled workers;
- domestic outsourcing is negatively correlated with contract workers;
- outsourcing overseas is negatively correlated with investing in a talent pipeline.

Negative correlations suggest revealed strategy ranking moves in the opposite direction of stated strategy ranking.

		Stated Preferences									
			Investing in	Investing in	Competitive	Contract	Less Skilled	Recruting from	Outsourcing	Outsourci	
			Employees	Pipeline	Market	Worker	Worker	Overseas	Domestic	Overseas	
	Investing in	Correlation Coefficient	.525**	019	009	.065	.033	140*	062	1	
	Employees	Sig. (2-tailed)	.000	.785	.895	.340	.625	.040	.361	.1	
		N	217	217	218	217	218	216	218	2	
	Investing in	Correlation Coefficient	076	.502**	111	137*	107	118	142*	1	
	Pipeline	Sig. (2-tailed)	.266	.000	.103	.043	.117	.084	.036	.0	
		N	216	217	217	217	217	217	216	2	
	Competitive	Correlation Coefficient	081	.057	.318**	.082	094	.009	042	1	
	Market	Sig. (2-tailed)	.237	.404	.000	.229	.166	.899	.533	.0	
e.		N	217	217	218	217	218	216	218	2	
Kev caled Preferences	Contract	Correlation Coefficient	.042	065	051	.229**	.167*	043	084	0	
5	Worker	Sig. (2-tailed)	.535	.335	.453	.001	.013	.531	.218	.1	
2		N	218	219	219	217	219	217	218	2	
÷.	Less Skilled	Correlation Coefficient	.014	201**	.067	. 108	.376**	117	121	0	
ĕ	Worker	Sig. (2-tailed)	.841	.003	.319	. 110	.000	.084	.075	.5	
Š.		N	217	219	220	219	220	217	219	2	
ž	Recruiting	Correlation Coefficient	147*	112	018	056	157*	.542	130	.1	
	from	Sig. (2-tailed)	.031	.099	.788	.410	.021	.000	.056	.0	
	Overseas	N	217	217	218	216	217	216		2	
		Correlation Coefficient	.075	090	070	205**	062	116	.461**	.0	
	Domestic	Sig. (2-tailed)	.268	.184	.299	.002	.366	.088	.000	.6	
		N	218	217	219	218	218	216	220		
	· ·	Correlation Coefficient	2.58**		122	039	091	.063	.121	.433	
	Overseas	Sig. (2-tailed)	.000	.050		.567	.181	.353	.073		
		N	218	219	220	219	220	217	220		

**. Correlation is significant at the 0.05 level (2-tailed).
 **. Correlation is significant at the 0.01 level (2-tailed).

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DISCUSSION AND LIMITATIONS

This paper is part of a broader project that assesses the state of the STEM workforce in Tennessee in 2017. This paper deals with the component of that project that addresses challenges associated with STEM skill shortages across industries. Overall, study findings indicate that those individuals with decision-making authority at their companies overwhelmingly argue that the STEM skill issue is a major problem across sectors in Tennessee. How do these managers address skill challenges? Informed by the literature, we constructed a survey to measure which human capital formation strategies these managers currently use and which measures they would prefer to use under ideal conditions.

Theoretically, the study findings confirm traditional approaches to human capital formation as the top two choices of managers across sectors: (1) creating human capital by investing in existing employees to improve their skill set in order to tackle STEM-related deficiencies, and (2) buying human capital by recruiting from the competitive marketplace. However, the third choice was investing in a talent pipeline, which does not easily fit into the "lease or ally" strategies of human capital formation. The approach of investing in a talent pipeline in a community is very much in line with the recent conceptual framework advanced by Porter and Kramer (2011), with their emphasis on creating shared values in a community to create a competitive advantage.

There have been a notable number of theoretical and empirical studies in the past two decades regarding several forms of outsourcing and international recruiting. Because of the prominence of this issue, we expected to see a relatively high level of preference for the strategy of outsourcing and overseas recruitment in addressing STEM-related skill challenges. However, the findings show that managers across industries ascribe the lowest preference to this strategy.

The last conceptual issue that requires attention is the inclusion of less-skilled internal employees among the human capital formation/task completion categories. It is interesting to note the mean rank for this category is higher than for others. The purpose of adding this category was to see whether managers prefer this suboptimal choice in handling STEM-related challenges. Indeed, findings show a relatively high preference for using existing, less-skilled employees to complete tasks that may be considered a firm's core competencies.

Methodologically, the survey questions captured some critical dimensions regarding the modes of employment or task completion. However, the survey and analysis components leave room for improvement. For example, forced ordinal ranking of employment modes may have biased the results. Alternatively, the survey could have asked managers to rank each category independently, from one to five or any other number. Furthermore, when answering questions regarding strategic human resource management approaches, managers may not have made a clear distinction between core versus non-core tasks when dealing with employment modes. Since we are discussing STEM-related issues, we made the assumption that the challenge was related to firms' core competencies.

Empirically, the study's findings suggest the skill challenge is prevalent across sectors in Tennessee. Managers can play an important role in creating a competitive business environment by making the right strategic choices regarding employment modes. In certain cases, there are

significant variations between managers' revealed and stated strategy rankings. Some actual strategies may result in extremely suboptimal results. For example, managers may be forced to use less-skilled existing employees to handle a task related to their firm's core competency instead of recruiting from the competitive market. In these areas, the findings provide an awareness of a menu of options managers can pursue to make a difference in their firms' sustainable competitive advantage.

Many of the survey challenges and methodological issues are also limitations of this study. In subsequent studies, there should be several improvements:

- 1- including additional questions to separate core from non-core competencies;
- 2- modifying the ranking of employment modes to reduce bias associated with forced ranking of one to eight;
- 3- increasing sample size and variation in rankings so that a factorial model can be constructed to identify unobserved latent indicators;
- 4- extending the geographical coverage of the survey across several states.

CONCLUSION

This study analyzes strategic challenges associated with STEM-related skill shortages. The study findings suggest that to address critical skill shortages, managers prefer two of the traditional approaches to human capital formation: creating their own human capital through investing in their employees and buying (or recruiting) highly competent individuals from the competitive marketplace. As a third preference, many managers chose investment in a talent pipeline as a strategic option. Although investing in a talent pipeline may be risky for companies in the short run, it may create a good return on investment in the long run. Choosing this option before contract work (leasing) and outsourcing (allying) suggests that managers look at the issue from the stakeholders' perspective rather than the firm's narrow, short-term shareholder profit perspective. On the other hand, the study also suggests that a substantial number of managers are willing to handle tasks related to their firms' core competencies with less-skilled internal employees. This suboptimal approach to addressing critical skill shortages may dramatically affect the firms' competitive advantage in the market. Finally, many firm attributes, such as technology readiness, size, R&D spending, and exporting, are not strongly associated with the managers' preferences for employment modes. This may be partially related to sample size and the geographical scope of the study. Further inquiry into these areas may provide additional insights regarding these shortcomings of this study.

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GETTING THINGS DONE: PROACTIVE INFLUENCE TACTICS IN MEXICO AND THE UNITED STATES

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ABSTRACT

As organizational success depends on the commitment of employees, supervisors inevitably attempt to influence task commitment of their subordinates in many ways. Previous research suggests that supervisor-subordinate influence tactics are culture-sensitive. With the internationalization of human resources in organizations, greater sensitivity is required to understand how "the rules of the game" may differ according to the national culture in question. In this study, a comparison of leadership behaviors of managers in Mexico and the United States is carried out. The results of our study indicate that the influence tactics of "rational persuasion" and "personal appeals" are more strongly correlated with task commitment in the US sample, while "legitimating", "pressure", and "organizational appeal" are more strongly associated with task commitment in the Mexican sample. The results also indicated that the quality of the supervisor and subordinate relationship, as measured by Leader-Member Exchange (LMX), plays a moderating role in the effectiveness of influence tactics used in both cultural settings to elicit task commitment. However, in the Mexican sample, LMX moderates pressure, legitimating, and organizational appeal while for the US sample, LMX moderates rational persuasion and inspirational appeal.

Keywords: cultural dimensions, leadership, LMX, influence tactics, task commitment

INTRODUCTION

One of the most important as well as challenging responsibilities of managers and supervisors is that of leading their subordinates in a manner that effectively motivates them to carry out and gain commitment to requests, proposals, and decisions (Yukl, 2010; <u>Yukl et al.</u>, 2008). Insufficient attention paid to the supervisor-subordinate relationship in organizations, and notably effective persuasion tactics, can contribute to employee demotivation, resistance and disengagement which can ultimately lead to a destabilizing high turnover rate (Bass 1990; Ferris 1985; Yukl 2010). Lam et al. (2015), in a US study, provide evidence that the quality of the supervisor-subordinate relationship is affected by the choice of the influence tactic used. Furthermore, the internationalization of human resources in organizations requires greater sensitivity to supervisor-subordinate persuasion tactics as "the rules of the game" may differ according to the national culture in question (Hofstede, 1998; Lin et al., 2007). The purpose of our study is to analyze which types of persuasion are used by managers in Mexico and the United States, and how the impact of these tactics on subordinate task commitment compares across these

two cultures. Of additional interest is whether the use of these influence tactics affect the supervisor-subordinate relationship differently in the two compared country cultures.

Proactive influence tactics are behaviors and actions taken to change an individual's behavior, attitude, or action (Yukl, 2010). Because organizational success depends on the commitment of employees, supervisors attempt to influence task commitment of their subordinates in many ways, including proactive influence tactics. One indicator of managerial ineffectiveness is a subordinate's resistance to tasks and proposals (Tepper et al., 2006). Hence, the use of proactive influence tactics might be one way to address this resistance (Yukl et al., 2008, 2005) and gain subordinates' commitment to their tasks. As such, the appropriate usage of proactive influence tactics is a precursor to effective leadership.

Prior research has argued that to optimize the effectiveness of the influence tactics, supervisors and managers alike use tactics that most closely fit with the objective of the task-athand. Other factors of importance are the appropriate type of relationship between the manager and the subordinate (Kipnis et al., 1980; Yukl, 1989; Yukl and Falbe, 1990) and the intrinsic values and beliefs of the subordinates which motivate the subordinates to complete the task. For instance, Trinkle et al. (2016) show how the values and beliefs held by accountants have a moderating effect on task commitment. When an individual identifies more strongly with the organization, influence behaviors that align with this (i.e., organizational appeals) are more likely to result in task commitment (Trinkle and Lam, 2014). To the extent that individuals in different cultures have common values and beliefs, they behave similarly (Javidan and Carl, 2005). Such research results lead to hypothesize that the differences in values and beliefs among cultures affect the usage frequency of various influence tactics.

Our contribution to the literature is twofold. First, we provide insight into the proactive influence tactics most frequently deployed by managers in Mexico and the United States. These two countries were chosen for several reasons. Both countries are members of the North American Free Trade Act (NAFTA). The United States is Mexico's largest trading partner and largest foreign investor while Mexico is the United States' third largest trading partner. Nearly a billion dollar worth of goods legally cross the US-Mexico border each day. In 2010, more than a million US citizens lived in Mexico (US Department of State, 2010) while 31.8 million citizens of Mexican origin lived in the US (US Census Bureau, 2010). From a methodological point of view, the two countries differ, sometimes quite significantly, according to leading culture measures in crosscultural comparisons (Hofstede, 1984). Second, we show how the effectiveness of various influence tactics in generating task commitment is moderated differently by the quality of the subordinate-supervisor relationship, as measured by LMX in Mexico and the United States. Prior literature has suggested that cultural values influence the leadership behaviors that are optimal (e.g. Howell et al., 2003; Javidan and Carl, 2005; Triandis, 1994). We extend this research by providing initial evidence that the optimal behaviors affect both the outcome as well as the quality of the supervisor-subordinate relationship.

The remainder of the paper is organized as follows. In section 2, we will discuss prior literature and develop our research question and hypotheses. In section 3, we will discuss the method deployed and describe the data. In section 4, we will cover data analysis and results.

Finally, in section 5, we will discuss and provide conclusions outlining implications for practice as well as the limitations of our research.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Influence Tactics

Proactive influence tactics are used to persuade someone to carry out a task or influence someone to complete a new task (Yukl, 2010). Yukl et al. (2008) argue that some tactics are more successful than others to gain task commitment from subordinates. The prior literature has found support for a taxonomy of 12 proactive influence tactics: rational persuasion, exchange, inspirational appeals, legitimating tactics, apprising, pressure, collaboration, ingratiation, consultation, personal appeals, coalition tactics (Yukl and Tracey, 1992; Yukl et al., 2008; 2005) and organizational appeal (Trinkle and Lam, 2014). Yukl et al. (2008) tested the validity of the Influence Behavior Questionnaire (IBQ) survey instrument using a US sample, and found that the four most often used influence tactics are collaboration, rational persuasion, consultation, and inspirational appeals. Trinkle and Lam (2014), based on their sample of US based Certified Public Accountants, report that organizational appeal was the fifth most used influence tactic after collaboration, rational persuasion, consultation, and inspirational appeals.

Results of a study aimed at investigating the effectiveness of influence tactics in 12 different countries, including the United States and Mexico (Kennedy et al., 2003), reveal that managers rated rational persuasion, consultation, and collaboration as effective in all 12 countries. A notable difference is the importance of collaboration. Participants in the United States scored collaboration higher (2nd) than the participants in Mexico (5th). We further note that the Kennedy et al. (2003) study did not use the IBQ survey instrument. Consequently, not all of the currently identified influence tactics (i.e., organizational appeal and legitimating) were measured in the study. Furthermore, one of the shortcomings of the Kennedy et al. (2003) study, as pointed out by the authors themselves, is that the research design using scenario-based analysis measures the perception of the effectiveness of such tactics.

Upward influence tactics are strategies used by subordinates to influence their supervisor (e.g., Deluga and Perry, 1991). The three upward influence dimensions in the Strategy of Upward Influence (SUI) are organizational beneficial behavior, self-indulgent behaviors, and destructive behaviors (e.g., Egri et al., 2000; Ralston et al., 2006). In a cross-cultural study of managers in the NAFTA region, Egri et al. (2000) find that the acceptability of upward influence tactics differs significantly across regions. We contribute to this literature by investigating if and how the use of downward influence tactics differs across cultures.

In our present study, we attempt to test results obtained by Kennedy et al. (2003) by investigating the usage and effectiveness of influence tactics from the subordinates' perspectives. We then extend this research by investigating how the use of influence tactics affect the relationship between the supervisor and subordinate. Furthermore, the effects of scenario-based analysis will be mitigated by using an empirical survey design research. Albeit survey research has its own limitations, as causality cannot be demonstrated, it offers the advantage of revealing

tactics actually used by managers. To that end, we aim to shed light on the following research question:

RQ: Are the most frequently used influence tactics of Mexican managers the same as the most frequently used influence tactics of US managers?

Cultural Dimensions

Hofstede (1984) defines culture as "the collective programming of the mind which distinguishes the members of one human group from another" (p. 260). Hofstede and his colleagues propose five dimensions of culture: individualism/collectivism, power distance, uncertainty avoidance, masculinity/femininity (Hofstede, 1984) and long-term orientation (Hofstede and Bond, 1988). GLOBE (House et al., 2004) is a competing framework (Yeganeh, 2014) that could have been used in the current study. Despite receiving criticism in the literature (e.g., Kelley et al., 2006; McSweeney, 2002) Hofstede's cultural indexes have been used as the foundation of the more recent Globe project (e.g., Hofstede, 2010; House et al., 2004), and are still viewed as an appropriate approach to describe culture (e.g., Bachman et al., 2016; Kaasa et al., 2014). Moreover, most empirical research on culture utilizes the framework (Taras et al., 2016).

One of the criticisms of Hofstede's approach is the use of data intended to measure employees' work related values to derive a cultural dimension (Kaasa et al., 2014). However, since our study builds on employee work related values, we use national culture proxied by Hofstede's dimensions as a moderator in this study.

Another criticism of Hofstede's model include the assumption that national culture is uniform and stable over time (e.g., Kelley et al., 2006; McSweeney, 2002; Steel and Taras, 2010). However, Hofstede (1997) argues that national values remain constant over time and recent replications show no loss of validity of the measures (e.g., Hofstede, 2001; <u>Sondergaard, 1994</u>), while, Taras et al. (2016) find that country is often a poor proxy for culture. In contrast, Minkov and Hofstede (2010) find that national borders are an appropriate way to delineate cultures geographically.

Country can be used effectively as a proxy for culture if the within-country variance is small and between-country variance is large (e.g., Taras et al., 2016). Furthermore, it is noted that the within country variation can sometimes be larger than the across country mean variation (e.g., Au, 2000). Consistent with the recommendations made by Harzing and Pudelko (2016), we select two countries for which the cultural differences are high but have few other differences. As mentioned previously, Mexico and the United States are both members of NAFTA and close in geographic proximity. However, Mexico and the United States score very differently on the dimensions of individualism/collectivism, power distance, and uncertainty avoidance. This suggests that for our sample, using country is an appropriate proxy for culture as the within-country variation would bias against finding results. However, we note that there is a relatively small difference in the masculinity/femininity score for both countries. It is to be noted that because long-term orientation is similar for the two countries, no analysis for this dimension is provided in the current study. Table 1 presents Hofstede's five cultural dimensions and results for Mexico and the United States.

Table 1: Cultural Dimension scores for Mexico and the United States						
Dimension	Mexico	United States				
Individualism	30	91				
Uncertainty	82	46				
Masculinity	69	62				
Power distance	81	40				
Long-term orientation	24	26				

In individualist cultures, such as the United States, social behavior is primarily guided by personal goals, while in collectivist cultures, such as Mexico, the goals of the collective have a dominant influence in shaping behavior (Triandis, 1989). In individualist cultures, individual success is considered a source of well-being (Van Oudenhoven et al., 1998). Moreover, members of collectivist cultures find that when interacting with members from individualist cultures they have to talk about personal accomplishments to establish personal relationships (Triandis et al., 1988). Collectivism implies permanence in that one can never really leave the group (Oyserman, 2006). In collectivist cultures, individuals are supposed to serve the needs and interests of the (in) group (Van Oudenhoven et al., 1998) and in return for their loyalty to the group, the members expect protection from the group (Hofstede, 1993). It can be hypothesized that in individualist cultures the influence tactic is used more frequently to show why the task is good for the individual while in collectivist cultures organizational appeal will be used more frequently to show why the task is good for the organization or in-group. The latter influence tactic was recently identified and tested in Trinkle and Lam (2014). This is formally stated, in the alternative form, in Hypothesis 1 below.

*H*₁: Organizational appeal will be used more frequently in collectivist cultures, relative to the usage in individualist cultures.

Power distance and individualism/collectivism are strongly correlated (e.g., Ghosh, 2011; Hofstede, 1984). Power distance refers to the degree to which status inequality is accepted as normal in a given culture (Hofstede, 1984). It measures the extent to which employees accept that they have less power than their superiors. In high power distance countries, such as Mexico, subordinates lose respect for managers who ask them for advice (Hofstede, 2001). This is consistent with the arguments made by Kathri (2009) who observes that employees in cultures with high power distance prefer that their supervisors make the decisions and give their employees instructions. Such results contrast with low power distance countries, such as the United States,

where subordinates' dependence on managers is limited and consultation is preferred (Lindell and Arvonen, 1996). Furthermore, in low power distance cultures the focus tends to be on training of the individual worker (Lagrosen, 2002) which would enhance the worker's knowledge and capacity to participate in decision-making. Such observations contrast with research results on cultures with high power distance, where there is lack of input from low-level employees as well as poor communication and information sharing (Ghosh, 2001; Van Oudenhoven, 1998). These previously outlined cultural norms create barriers for lower-level employees in high power distance to use their own judgment in decision-making (Tata and Prasad, 1998). It can therefore be hypothesized that legitimating and pressure tactics are less utilized in cultures with low power distance.

H₂: Legitimating and pressure are more frequently used in cultures with high power distance, relative to the usage in cultures with low power distance.

Uncertainty avoidance and power distance are the two most important dimensions for corporate governance since they are associated with power and rules (Hofstede, 1991). Uncertainty is reduced through informational influence when near-peers and friends inform individuals of their own personal experiences and perceptions of the system or when individuals can observe peers using the system (Hofstede, 1984). In cultures with low uncertainty avoidance, such as United States, people take life as it comes and are more easily engaged in new situations (Van Oudenhoven et al., 1998). Furthermore, managers from countries with low uncertainty avoidance (Van Oudenhoven et al., 1998). Such observations contrast with those made about high uncertainty avoidance (Van Oudenhoven et al., 1998). Such observations contrast with those made about high uncertainty avoidance cultures. Members of high uncertainty avoidance cultures, such as Mexico, prefer a clear organizational structure and clearly laid out rules (Blunt, 1988). In high uncertainty avoidance cultures, employees are more accepting of a manager's rules and policies (Wheeler, 2001).

In continuity with the above discussion, in a culture of high uncertainty avoidance, consultation, collaboration, and ingratiation are used more frequently by near-peers and friends. In a culture of low uncertainty avoidance, it can be expected that these tactics be used more frequently by managers, as they would be socially accepted by subordinates. Such observations can thus lead to the hypothesis that the influence tactics of consultation, collaboration, and ingratiation are used more frequently by managers in cultures with low uncertainty avoidance than managers in cultures of high uncertainty avoidance. This is formally stated in Hypotheses 3, below.

 H_3 : Consultation, collaboration, and ingratiation are used more frequently in cultures with low uncertainty avoidance, relative to the usage in cultures with high uncertainty avoidance.

Cultures that emphasize masculine values place value on work goals, assertiveness, and material success while cultures that emphasize feminine values place value on quality of life, nurturing, and modesty (Hofstede, 1997). In the workplace, employees in feminine cultures place

importance on maintaining a good relationship with their co-workers (Hofstede, 1984). Moreover, in feminine cultures, mutual help and social contacts are the key components of the ideal job (Hofstede, 2001, 1984). Furthermore, managers use intuition and strive for consensus in more feminine cultures (Lagrosen, 2002). According to Hofstede's work (1984), Mexico and the United States are both rated higher than the median as masculine cultures with Mexico rated slightly higher the United States.

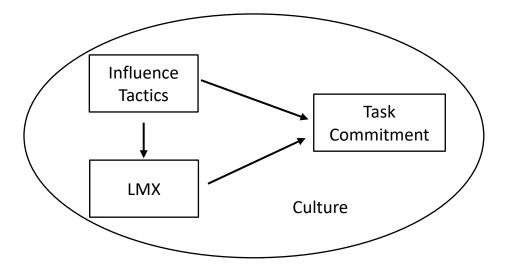
It can be thus be hypothesized that there is a more frequent usage of the hard influence tactics, such as pressure, coalition, legitimating in masculine cultures and a more frequent usage of soft influence tactics, such as ingratiation, rational persuasion and inspirational appeals in feminine cultures. Hypothesis 4 can thus be stated as the following:

*H*₄: *Rational persuasion, ingratiation, and inspirational appeals are used more frequently in feminine cultures, relative to their usage in masculine cultures.*

Leader-Member Exchange as a Moderator

The Leader-Member Exchange (LMX) theory first emerged in the 1970s and is still widely used today (e.g., Lam et al., 2015; Yukl et al., 2009; Yukl and Michel, 2006). It focuses on the relationship that develops between managers and members of their teams. The basic tenet of this theory is that leaders do not treat each subordinate the same and the quality of the exchange can range from low to high (Dansereau et al., 1975; Graen and Cashman, 1975; Graen and Uhl-Bien, 1995). The type and quality of exchange within distinct cultures lead to different subordinate outcomes which include level of performance, commitment, satisfaction (Gerstner and Day, 1997), and helping behaviors (Masterson et al., 2000). Some studies have shown that establishing highquality LMX relationships leads to many positive outcomes in individualist cultures (Gerstner and Day, 1997; Ilies et al., 2007); while high-quality outcomes through LMX relationships may be less easily achieved by leaders in collectivist cultures (Jiang and Cheng, 2008; Wasti and Can, 2008). Prior literature, using a US sample, has also pointed out that there are several benefits to establishing a high quality relationship for both the manager and the subordinate (see Gerstner and Day, 1997; Graen and Uhl-Bien, 1995). Not least of all, a subordinate who has a favorable relationship with his or her manager is likely to demonstrate more support of the leader (Yukl, 2010). The effectiveness of the various influence tactics might be a function of the strength of this relationship. Lam et al. (2015) provide evidence that, in a continuous improvement setting, the quality of the LMX relationship moderates the effectiveness of influence tactics. We will use the outcomes of this research to investigate whether the quality of the subordinate-manager relationship has a different moderating role in Mexico and the United States. Rockstuhl et al. (2012) report in their meta-analysis of 282 independent samples across 23 countries, that national culture does not affect the relationships of LMX with task performance, organizational commitment, and transformational leadership. We add to this research by investigating the moderating effect of LMX on the effectiveness of influence tactics in different cultures, i.e., the United States and Mexico. Our hypothesized relationship is depicted in Fig. 1 and formally stated in Hypothesis 5 below.

H5: The moderating role of relationship quality, as measured by LMX, is different in the US and Mexican cultures.



METHOD AND DATA

To test the hypotheses, data was collected in Mexico and the United States through an anonymous online survey created in Qualtrics. An electronic invitation was sent to 95 MBA students enrolled at universities in Mexico and the United States. Country differences are multidimensional and may affect managers in a variety of ways (Ambos and Håkanson, 2014). By using MBA students we tried to control for personal and environmental factors that might be alternative proxies for cultural difference (e.g., Taras et al., 2016). The MBA students are also a proxy for low- and mid-level managers. This means they have some experience in supervising others as well as being supervised.

Yukl et al.'s (2008) 44-item IBQ was used to measure the 11 influence tactics: rational persuasion, exchange, inspirational appeals, legitimating, apprising, pressure, collaboration, ingratiation, consultation, personal appeals, and coalition tactics. The 4-items developed to measure organizational appeal (Trinkle and Lam, 2014) were added to this scale. Validity and reliability of the IBQ has been provided in several studies including Yukl et al. (2008) and Trinkle and Lam (2014).

The 12-item multidimensional (i.e., MDM) version of the LMX scale, i.e., LMX-MDM (Liden and Maslyn, 1998) was used to measure the quality of the LMX relationship. The scale captures four dimensions of relationship quality: contribution, affect, loyalty, and professional respect. Additional construct validity of LMX-MDM has been provided in Erdogan and Enders (2007) and Wang et al. (2005). Further, Eisenberg et al. (2010) provide additional evidence that LMX-MDM can be used as a single measure or relationship quality.

As in Trinkle et al. (2016), task commitment was measured using a 4-item scale. The items measure attitude, enthusiasm, and level of commitment to the task-at-hand (Yukl et al., 1999) as

well as commitment of the participant relative to the commitment felt under previous supervisors (Trinkle et al., 2016).

As the IBQ, LMX-MDM, and task commitment scales were originally created in English, the questionnaire was translated in Spanish for the Mexican participants. Consistent with the recommendations made by Brislin (1970), two bilingual behavioral researchers translated the English instrument in Spanish. A third person translated the instrument back into English. Finally, the two versions were compared to ensure that they were equivalent.

Sample

From the 95 respondents who attempted the survey, 77 complete usable survey responses were obtained. For the respondents who did not complete all of the influence tactics usage questions, LMX questions, and task commitment questions were removed from the sample, thus resulting in a completion rate of 81.1%. Such an approach of reporting has been used in prior studies (Henderson et al., 2012, 2011) in lieu of the commonly reported response rate.

Out of the participants who completed the survey, 41 were male and 36 female. Forty responses were obtained from Mexico and 37 from the United States. The average work experience for the Mexican respondents (1.99 years) was slightly lower than that of the US respondents (2.87 years). Most of the participants indicated that they report to low- and mid-level managers (21 and 37, respectively) with fewer participants reporting to senior-level managers (15). Of the participants' supervisors, 35 were male and 40 female. There are no statistically significant differences between the Mexican and US participants in terms of age, gender, work experience, and gender of supervisor. See Table 2 below.

	Table 2: Sample Demog	raphics	
	Mexico	United States	Total
Respondents	40	37	77
Male	20	21	41
Female	20	16	36
Average Work Experience	1.99	2.87	2.40
Average Age	28.3	30.9	29.5
Supervisor			
Male	17	18	35
Female	23	17	40
Low-level	16	5	21
Mid-level	16	21	37
Senior-level	6	9	15

RESULTS

To test the previously presented conceptual models and measurement validation, SPSS 21 and SmartPLS 2.0.M3 (Ringle et al. 2005) were used.

We first investigate which influence tactics used by managers in Mexico and the United States are most strongly correlated with task commitment. We use simple linear regression to identify those influence tactics. The results are reported in Table 3, Panel A. Consistent with prior research, we find that rational collaboration, rational persuasion, consultation, and inspirational appeals are most strongly associated with task commitment (e.g., Trinkle et al., 2016; Yukl, 2008) for both the Mexican and US samples. In addition, ingratiation was strongly correlated with task commitment in the US sample, and organizational appeal was strongly correlated with task commitment in the Mexican sample. However, the survey measures the responses in the aggregate and managers likely use multiple methods simultaneously. Hence, to test our research question, we ran multiple regression models.

In the multiple regression model, the influence tactics most strongly associated with commitment for the Mexican sample were organizational appeal, legitimating, and pressure. The remaining coefficients in the model are not statistically significant (p > 0.10). The influence tactics most strongly associated with commitment for the US sample were inspirational appeal and rational persuasion. The remaining coefficients in the model are not statistically significant (p > 0.10). See Table 3, Panel B for results.

Table 3: Regression Results Panel A: Simple Linear Regression Results								
Panel A: Simple L	inear Regression Mexico	Results		United States				
	Coefficient	R ²	Rank	Coefficient	R ²	Rank		
Rational	0.541**	0.355	4	0.655**	0.438	1		
Persuasion								
Exchange	-0.302	0.236	10	0.385*	0.169	11		
Inspirational	0.595**	0.365	2	0.633**	0.409	2		
Appeal								
Legitimating	0.576**	0.344	6	0.331	0.175	10		
Apprising	0.550**	0.317	8	0.422**	0.193	9		
Pressure	-0.491*	0.279	9	-0.414*	0.207	8		
Collaboration	0.654**	0.433	1	0.508**	0.324	5		
Ingratiation	0.571**	0.336	7	0.583**	0.349	4		
Consultation	0.595**	0.362	3	0.623**	0.407	3		
Personal Appeals	0.006	0.148	12	0.130	0.146	12		
Coalition	0.209	0.208	11	0.307	0.218	7		
Organizational	0.580**	0.345	5	0.461**	0.239	6		
Appeal								
* Significant at the	0.05 level							
** Significant at the	e 0.01 level							

Panel B: Multiple Linear Regression Results							
	Mexico	United States	Hypothesis				
Organizational Appeal	0.270**		H1				
Legitimating	0.300**		H2				
Pressure	-0.336**		H2				
Inspirational Appeals		0.337*	H4				
Rational Persuasion		0.391**	H4				
Adj. R ²	0.587	0.458					
* Significant at the 0.05 leve	el		·				
** Significant at the 0.01 lev	/el						

Consistent with our first hypothesis, organizational appeal is significant for the Mexican sample (collectivist culture) and not for the US sample (individualist culture). Legitimating and pressure are significant for the Mexican sample (high power distance) and not for the US sample (low power distance) supporting our second hypothesis. Neither consultation nor collaboration are more frequently used in the US sample (low uncertainty avoidance) than in the Mexican sample (high uncertainty avoidance). Hence, our third hypothesis is not supported. This could be a result of the relatively few years of work experience of the participants in the study as they might not have gained sufficient management experience and expertise to feel comfortable in consulting subordinates on projects or engaging subordinates in collaborative modes of work. Finally, rational persuasion and inspirational appeal are more frequently used in the US sample (less masculine) than in the Mexican sample (more masculine) providing support for our fourth hypothesis. Such results concord with Hofstede's findings (1984): both countries score above average on the masculinity score, and the difference between the country sample scores is fairly small.

We next look at the role of the relationship quality as measured by LMX-MDM. Consistent with the findings in Lam et al. (2015), we find that for the US sample rational persuasion and inspirational appeals are associated with relationship quality. Unlike Lam et al. (2015) we do not find significant support for consultation, collaboration, and ingratiation. For the Mexican sample, we find evidence that pressure, legitimating, and organizational appeal are associated with relationship quality also serves a moderating role in the effectiveness of influence tactics to elicit task commitment. Hence, these results support Hypothesis 5.

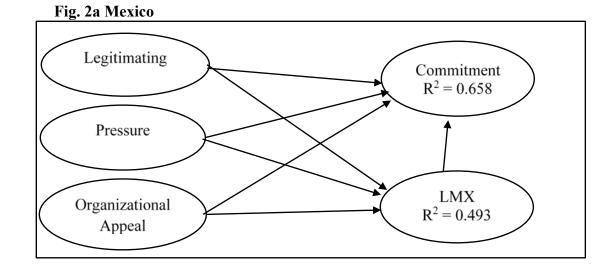
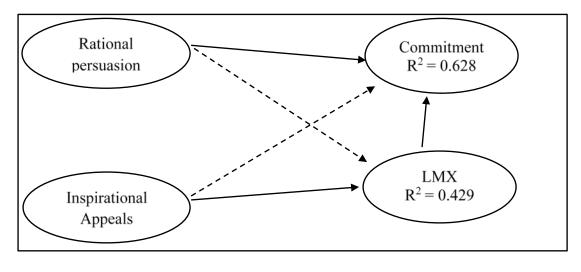


Fig. 2: Influence Tactics, LMX, and Task Commitment





 \longrightarrow Significant at the p = 0.01 level

Significant at the p = 0.05 level

CONCLUSION

In this study, we investigated which influence tactics were most frequently deployed by managers in Mexico and the United States. Our study provides support for the view that the effectiveness and usage of proactive influence tactics differ across countries with different cultures. We find that the difference in usage of influence tactics between Mexican and US managers is consistent with the differences in country scores on the cultural dimensions identified by Hofstede (1984): individualism/collectivism, uncertainty avoidance, masculinity, and power distance. In particular, in Mexico, a country with a more collectivist culture, organizational appeal is more strongly associated with task commitment than in the United States. Also, in Mexico, a country that has a larger power distance, legitimating and pressure are more strongly associated with task commitment. In the United States, a country that scores lower on the masculinity scale than Mexico, inspirational appeals and rational persuasion are more frequently used.

We next looked at how the usage of proactive influence tactics by managers in Mexico and the United States impacts the subordinate-supervisor relationship. For both the United States and Mexico, the usage of influence tactics and the quality of the relationship has large explanatory power for the variation in subordinates' level of task commitment. The main difference is the relative effectiveness of the various influence tactics in soliciting task commitment and the mediating role of the subordinate-supervisor relationship as measured by LMX. In the United States, LMX is a mediator for the effectiveness of persuasion and inspirational appeals, while in Mexico LMX is a mediator for the effectiveness of pressure, legitimating, and organizational appeals to solicit task commitment. These findings support and extend the work by Lam et al. (2015), where it was found that the supervisor-subordinate relationship was a mediator for the effectiveness of influence tactics to solicit commitment to continuous improvement projects. Indeed in the current paper we provide evidence that this relationship might be culture dependent.

Implications for Managers

The increasing globalization of business has heightened the importance for understanding national cultural influences on managerial effectiveness (Griffith et al., 2006). Failure to acknowledge cultural differences in the workplace can create barriers to understanding and may impact managerial performance outcomes (Li and Karakowsi, 2001). One of the key metrics of evaluating managerial effectiveness is assessing managers' ability to influence subordinates (Bass, 1990; Yukl, 2010). Indeed, for managers to be effective, they need to understand which influence tactics motivate subordinates' commitment and extra effort required to gain commitment to requests, proposals, and decisions (Bass, 1990). Managers, especially aspiring leaders in global settings, need to be attentive to how influence tactics can have a positive impact on relationships with subordinates, and the role played by culture.

Limitations

Like all studies, this study has limitations. For instance, in this study, the subordinates' commitment was measured in the aggregate, while their commitment to individual tasks was not assessed. Future research therefore warrants investigation on the effectiveness of the various influence tactics in soliciting task commitment for specific, individual tasks. As stated previously, the participants of the study had relatively little work experience hence primarily occupied managerial positions of lower levels. On that account, future research can investigate if our results

hold for employees with more work experience and with work experience at mid- and seniorlevels. Another limitation concerns the present study's use of surveys. While one advantage of survey studies is enhanced external validity, this approach is not able to show causality. Future research can therefore use an experimental approach to test the direct causal effect implied by our models. In this study perceptual data was used, which is a potential shortcoming of all survey research. However, prior research has found a strong positive correlation between self-reported measures and objective measures (Dess and Robinson, 1984; Ketokivi and Schroeder, 2004). Finally, this study compared the persuasion approaches used by managers in two countries, Mexico and the United States. Future research could investigate the use of influence tactics across a wider spectrum of countries and cultures.

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FACTORS INFLUENCING CONSUMERS' ATTITUDES TOWARDS COUNTERFEIT LUXURY FASHION BRANDS: EVIDENCE FROM VIETNAM

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ABSTRACT

This paper investigates the consumers' attitudes with two attributes, social factor and personal factor that relate to counterfeit luxury fashion brands. The results show how these factors influence the buying intention and drive to buying decisions. A survey was conducted on 249 consumers in Ho Chi Minh City, Vietnam, which is seen as a dynamic and great market, and an emerging market in Asia. This place also contains many sensitive issues relating to counterfeit luxury fashion brands. The research results show that brand image, social influence and previous experiences have a positive impact on consumers' attitudes towards the counterfeit fashion products. Personal satisfaction has a negative impact on counterfeit luxury fashion brands. Moreover, the study illustrates consumers attitudes have a strong and positive relationship with buying intentions of counterfeit product of luxury fashion brands.

Keywords: Counterfeit products, luxury fashion brand, consumer attitudes, Ho Chi Minh City

INTRODUCTION

Vietnam has deeply integrated into the world economy. It is completing the negotiation and signing new free trade agreements - FTA, such as the Trans-Pacific Partnership Agreement (TPP); Vietnam – European Union FTA; Vietnam - Eurasian Economic Alliances FTA, etc. These create the resonance in order to promote the economy, as well as all business communities entering a new phase. This is seen as an excellent opportunity for Vietnamese, as well as foreign investors, who have progressed their operations in the Vietnam market. However, it also has many difficulties and challenges that require more fierce and tough competition. In recent years, there have been many cases regarding violations of intellectual property laws associated with Vietnam. That is, Vietnam is listed among countries with the highest levels of violations. Thus, the Vietnam government, as well as the local corporate community, have been facing lawsuits about intellectual property infringements, not only from consumers but also from international organizations.

Counterfeit products have had a damaging impact in the Vietnam market. Particularly, Ho Chi Minh City as a dynamic and open market in Vietnam. This place is also the center of purchasing and consuming international counterfeit luxury fashion brands in Vietnam. The most popular luxury fashion brands are copied such as Louis Vuitton, Chanel, Gucci, Hermes, etc. Therefore, this study is conducted with the purpose of; (i) exploring factors influencing consumers' attitudes towards counterfeit luxury fashion brands, the case from Vietnam context; (ii) developing an analytical framework, a research model as well as research scales measurement in Vietnam context; (iii) measuring the impact of counterfeit products perception towards luxury fashion brand by consumers in Ho Chi Minh City, Vietnam.

THEORETICAL BACKGROUND AND HYPOTHESES

Studies on counterfeit products

Many scholars have discovered a number of factors that explain the need to consume counterfeit products. These include the value of money, social status benefits from the brand, fascination with novelty, price, physical characteristics of product, and psychological characteristics (Wee et al, 1995; Cordell et al, 1996), social influences, personal characteristics (such as materialism, perception of future social status, self-esteem perception) (Ang et al, 2001). Penz & Stottinger (2005) study the similarities and differences between genuine and counterfeit products. The study of Nguyen & Tran (2013), in Vietnam context, combines two models of Phau & Teah (2009) and Riquelme et al. (2012). The conceptual framework in this study expresses eight main elements such as brand image, personal appearance, value perception, social influence, personal satisfaction, purchasing experience, attitudes towards counterfeit fashion products, and buying intention to counterfeit fashion products.

The framework of Huang et al. (2004) express the relationship among concepts such as *the price perception, the quality and price references,* and *the perception of risks towards attitudes.* In particularly, *the attitude* towards the counterfeit consuming behavior is emphasized in this study. Further, the model of Nordin (2009) is extended from the model of Huang et al. (2004), De Matos et al. (2007), Phau & Teah (2009). In particularly, the model of Huang et al. (2004) has three components. The model of De Matos et al. (2007) has six elements. The model of Phau & Teah (2009) has eight elements. This study also follows the model of Nordin (2009) that is combined from these three models. Therefore, there are nine factors including (1) price awareness (from Huang et al., 2004); (2) sensitive ability to information; (3) sensitive ability to standards; (4) value awareness; (5) novelty seeking; (6) in-classed consumption (from De Matos et al., 2007); (7) risk perception (from Phau & Teah, 2009); (8) integrity; and, (9) personal satisfaction (from De Matos et al., 2007; Phau & Teah, 2009).

This study aims to explore consumer perceptions whether they are clear to the concept of luxury brands compared with the counterfeit ones. Especially, the study was conducted in Ho Chi Minh City, Vietnam, where it is seen as a dynamic market and one of a center of consumption of counterfeit luxury fashion brands. Normally, popular factors (such as quality, price) are used to judge between concepts such as luxury and counterfeit products.

Hypotheses and research model

This study follows mainly the framework of Nordin (2009). However, the study also inherites the framework of Huang et al. (2004), De Matos et al. (2007), Phau & Teah (2009). These studies have fully exploited *personal factors* and *social factors* in terms of consumers' attitudes towards counterfeit luxury fashion brands. Previous studies, such as Ang et al. (2001), Penz & Stottinger (2005), found no evidence in relationship between *personal satisfaction* and *attitudes*

towards counterfeit luxury fashion brands. Therefore, in this study, these two factors are excluded in the research model.

Attitudes towards counterfeit products

"Attitude" is a tendency to learn and behave in a convenient way, or not, towards certain people or items in a specific situation. Attitude is highly correlated with personal intentions that are reasonable predictions in his or her behaviors (Ajzen & Fishbein, 1975). This means, if a person has favorable attitudes towards counterfeit products, he or she will strongly consider buying counterfeit products. In contrast, if the attitude towards counterfeit products is unfavorable, it is likely that one will not consider buying counterfeit products (Huang et al., 2004). Normally, counterfeit products are usually cheaper than the genuine ones. This can be understood that it is not a significant difference in quality perception. Consumers are willing to pay for the visual attributes and basic functions of the product without paying for imagined quality (Cordell et al., 1996). Further, functional benefits are also important when buying counterfeit products. However, it is also desirable to possess the prestige and symbolic status that is similiar with the registered trademarks (Cordell et al., 1996).

The sensitive ability to information and the sensitive ability to standards

The concept *social influence* in purchasing refers to the effects of other people on an individual consuming behavior. There are two common forms of consumer sensitivity to social influence: *sensitive ability to information* and *sensitivitive ability to standards* (Wang et al., 2012). *The sensitive ability to information* relates to buying decisions that are based on expert opinions, or close people (Ang et al., 2001; Wang et al., 2012). This means, the assurance of others' opinions plays an important role as special references. This happens when the consumer has limited information or knowledge about the product or its brand that he or she intends to buy. The consumer may be sensitive to information when opinions from experts or other people strongly influence his or her choice (such as one person is unfarmiliar with or unaware of the product). *The sensitive ability to standards* happens when the consumer is more interested in how to create a positive impression to others. Therefore, the study proposes hypothesis:

H1: The sensitive ability to information has a negative impact on consumers' attitudes towards counterfeit products.

H2: The sensitive ability to standards has a negative impact on consumers' attitudes towards counterfeit products.

Price awareness

In marketing, price plays an important role in influencing consumer attitudess and has been extensively studied. When consumers are aware of the price factor, they are interested in how to pay a lower price, but with acceptable standards of product/service quality (Ang et al., 2001).

Normally, people usually use price ranges for setting upper and lower limits to price expectations. Reference price is seen as an important factor that influences purchasing behavior of consumer (Huang et al., 2004). Thus, the study suggests:

H3: The price awareness has a positive impact on consumers' attitudes towards counterfeit products.

Value awareness

Bloch et al. (1993) defines *value awareness* as consumers' assessments about the utility of a product/service based on what they have received or given. With most counterfeit products, consumers usually pursue the brand value, the brand prestige and the visual benefits. However, they are also unwilling to pay a high price for counterfeit products. Therefore, in terms of lower value but good product quality, counterfeit products are considered to be worth of the money (Bloch et al., 1993; Ang et al., 2001; Wang et al., 2012). Counterfeit products are perceived as providing the same functional benefits as genuine products, but their prices are normally a fraction of genuine products' price. Consumers are aware of their value when purchasing. They pay attention to purchasing at a low price but accept some quality product problems. In this study, it is proposed;

H4: The value awareness has a positive impact on consumers' attitudes towards counterfeit products.

Risk perception

Mitchell (1999) argues that risk perception is critical thinking about defining losses with two implications: uncertainties and bad consequences. Risk perception is one of the main explanatory variables for analyzing consumer behavior. It is very important in making a purchasing decision. It is suggested that consumers usually reduce the uncertainty and lack of comfort in their purchasing decisions. Mitchell (1999) points out that consumers tend to consider risk perception rather than maximize benefits perception when making purchasing decisions. Risk perception includes: *Functional, Financial, Social, Physical, Psychological, Time risk* (Mitchell, 1999). For those, there is:

H5: The risk perception has a positive impact on consumers' attitudes towards counterfeit products.

Novelty seeking

Wang et al. (2005) define seeking for novelty as the curiosity of individuals when they try to seek diversity and differentiation in purchasing. A consumer who is trying to explore any new products may have a positive attitude toward counterfeit products. However, consumers with

novelty seeking prefer to buy low risk products. Therefore, purchasing counterfeit products with low cost is appropriate to meet the curiosity as well as the necessity for counterfeit consumers' testimonials (Wee et al., 1995). Thus, this study aims to exploring this concept meaning by:

H6: The novelty seeking has a positive impact on consumers' attitudes towards counterfeit products.

In-classed consumption

The in-classed consumers are always aware of expressing their achievements or success (Phau & Teah, 2009). These consumers will buy, and even accept to pay more for, premium products or services. Colleagues, close-friends or family members should know these things. Therefore, when buying counterfeit products, the in-classed consumers usually feel their image is being lost. In addition, they have negative attitudes towards counterfeit products. Thus:

H7: The in-classed consumption has a negative impact on consumers' attitudess towards counterfeit products.

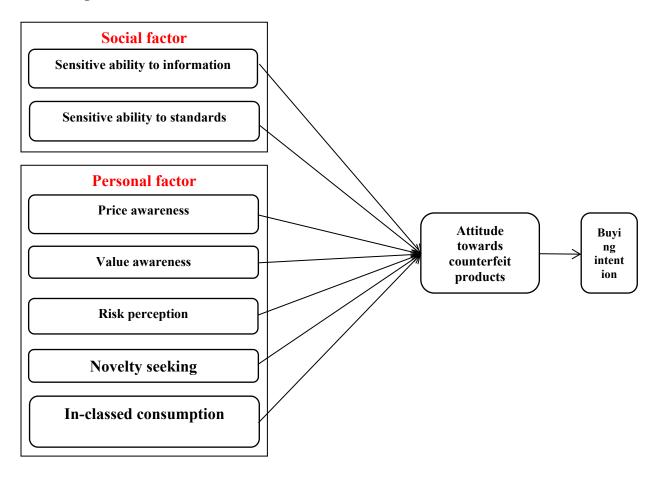
Buying intention

Attitude is one of the factors in predicting intention and behavior of consumers. It is considered a better prediction of consumer behavior rather than attitudes towards products (Ajzen & Fishbein, 1975; Ajzen, 1991). However, attitudes towards counterfeit products is also considered as an important factor influencing the intention in buying counterfeit products (Phau & Teah, 2009). Counterfeit products always contain financial risks. Further, if counterfeit products meet the expectations and demands of consumers, they could also make consumers satisfied when using them. Therefore, attitude towards counterfeit products is an important factor in predicting intention to purchase counterfeit products, especially for luxury fashion brands (Nordin, 2009). There is a positive relationship between favorable attitudess and buying intentions for buying counterfeit products (Ang et al., 2001; Huang et al., 2004; De Matos et al., 2007; Phau & Teah, 2009; Nguyen & Tran, 2013). In order to make clear this concept, the study suggests:

H8: The attitude towards counterfeit products has a positive impact on buying intention to counterfeit products.

Based on the relationship of proposed hypotheses above, as well as research objectives, the study presents the research model in Figure 1 as following,

Figure 1. Research Model



METHOD

This study uses a mixed-method approach including qualitative and quantitative methods. Qualitative was implemented through in-depth interview and focus group discussion. This phase aims to summarize concepts and develop an appropriate questionnaire for the main survey. The quantitative was conducted through a direct survey of 249 consumers who used counterfeit products in order to test research scales, as well as theoretical model. The scale was preliminarily tested with Cronbach Alpha reliability, the exploratory factor analysis – EFA, and the official verification using CFA and the SEM. The theoretical model with control variables was verified by multi-group analysis.

Research design and sample

This study was conducted through two steps: (1) the qualitative, to adjust and complement the scales, and (2) the quantitative, to collect and analyze the data, as well as to verify the scales and to test the theoretical models and hypotheses. The quantitative pilot study was undertaken by using face-to-face interviews with 50 consumers to preliminary assess the measures. The survey

was conducted in Ho Chi Minh City, Vietnam. The questionnaire was evaluated by experts in counterfeit luxury fashion brands. To test the proposed model, a sample of 300 respondents are consumers in counterfeit luxury fashion brands. There are 249 valid respondents.

Measures and Preliminary assessment

Cronbach alpha reliability and Exploratory Factor Analysis (EFA) were used to preliminarily assess the scales. Confirmatory Factor Analysis (CFA) was used to test the measurement models and the structural equation modeling (SEM) was used to test the theoretical model. Observation variables with the correlation coefficients <0.40 will be rejected. The Cronbach Alpha with 0.60 or higher are accepted (Nunnally & Burnstein, 1994). To measure the fit of the research model, study uses Chi-square (CMIN: χ 2). The model is considered appropriate when Chi-square has P-value> 0.05. The sample size N = 249 with all items were measured by using 5-point Likert scales anchored by 1 = *strongly disagree* and 5 = *strongly agree*. The main questionnaire has 37 observation variables and a few specific questions. The software SPSS for Windows 18.0 is used.

The sensitive ability to information (NCTT)

The sensitive ability to information reflects the intentions of consumer in future purchasing behavior. This scale is based on De Matos et al. (2007) with 4 observation variables, namely: NCTT1 \rightarrow NCTT4

The sensitive ability to standards (NCCM)

The sensitive ability to standards creates purchasing decisions based on the expectations and impressions of surrounding people. This scale is based on De Matos et al. (2007) with 4 observation variables, namely: NCCM1 \rightarrow NCCM4

Price awareness (YTGC)

Price plays an important role in influencing consumer attitudess. Consumers with price awareness are interested in paying a lower price but with acceptable standards of quality. This scale is based on Huang et al. (2004) with 4 observation variables, namely: $YTGC1 \rightarrow YTGC4$

Value awareness (YTGT)

Value awareness has been defined as consumers' assessment about the utility of a product/service based on what they have received or given (Bloch et al., 1993). This scale is based on De Matos et al. (2007) with 4 observation variables, namely: $YTGT1 \rightarrow YTGT 4$.

Risk perception (RRCN)

Risk perception means that consumers reduce the uncertainty and lack of comfort of purchasing decisions by themselves. Risk perception is one of the main explanatory variables in consumer behavior. It has an important implication in purchasing decisions. This scale is based on Phau & Teah (2009) with 4 observation variables, namely: RRCN1 \rightarrow RRCN4.

Novelty seeking (TKML)

Novelty seeking is the curiosity of individuals in seeking diversity and differentiation. This scale is based on Phau & Teah (2009) with 4 observation variables, namely: TKML1 \rightarrow TKML4.

In-classed consumption (TDDC)

The in-classed consumption consumers are more aware of expressing their success. They likely buy more and even pay more for a premium product. This scale is based on Phau & Teah (2009) with 4 observation variables, namely: TDDC1 \rightarrow TDDC4.

Attitudes towards counterfeit luxury fashion brands (TDSP)

Attitude is seen as a tendency to learn and behave in a specific situation by convenient or unfavorable ways. This scale is based on Phau & Teah (2009) with 4 observation variables, namely: TDSP1 \rightarrow TDSP4.

Buying intention towards counterfeit luxury fashion brands (YDMH)

Attitude towards counterfeit products is considered to be an important factor influencing the intention of buying counterfeit products (Phau & Teah, 2009). Buying intention is based on Phau & Teah (2009) with 5 observation variables, namely: YDMH1 \rightarrow YDMH5.

DATA ANALYSIS AND RESULTS

Measure validation

Cronbach alpha results are made for 7 concepts. Confirmatory Factor Analysis (CFA) was used to test the measurement models and the structural equation modeling (SEM) was used to test the theoretical model. The selected method for analysis is Principal Axis Factoring with Promax rotation. The analysis of 28 observed variables is used EFA standard. The result, study removes four variables: NCCM3, TKML1, TKML2, RRCN4. The study results show 7 factors including 24 remaining variables.

The coefficient KMO = 0.832, with Sigma significance is 0.000 (following Barlett's test). The results of 7 factors satisfied the conditions with KMO = 0.832 > 0.5. The factor loading is greater than 0.5. The extraction deviation is 64.714% greater than 50%, and the number of factors

are extracted. These measures were used in the main survey. Regarding the Cronbach alpha coefficients of 7 factors, all of them meet the coefficient of correlation above 0.4, and reliability are greater than 0.6. The study conducted EFA examination following deduction method Principals axis factoring with results for 7 components including 24 variables.

CFA results shows that the model achieves data compatibility with high appropriate indicators, such as Chi-squared = 742.557; df = 451; p-value = 0.000. The CMIN/df reaches 1.646 <2. These indexes show that the research data is quite consistent with market data in this study. Besides, there as have TLI = 0.900; CFI = 0.915; GFI = 0.847 are greater than 0.8, and RMSEA = 0.051 < 0.08. Therefore, all concepts achieve distinct value. Thus, we can conclude that the critical model achieves compatibility with market data.

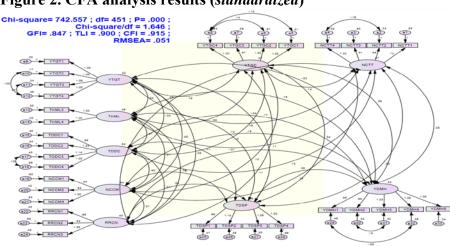


Figure 2. CFA analysis results (standardized)

Structural results

The theoretical model has total 9 research concepts. With the standard 90% of reliability, research concepts such as novelty seeking, sensitive ability to information, in-classed consumption are excluded from the theoretical model. The results of final SEM analysis shows that the model has df = 161, chi-squared = 333,315, p-value = 0.000, CMIN / df = 2.070 < 3. Moreover, other indicators such as TLI = 0.902, CFI = 0.917, GFI = 0.88 are all greater than 0.8, with RMSEA = 0.066 <0.08. Therefore, this model is appropriate with collected data from the market. Furthermore, with $\lambda i > 0.5$ and p < 0.05, the model has appropriate standard as well as statistically significant because the p values = 0.000.

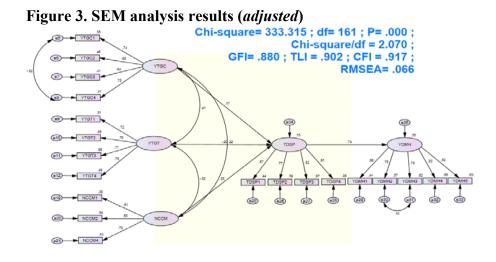


Table 1. The Cronbach alpha of research concepts

Variables	The average scales	Variance	Items tota correlation	l Alpha if items deleted	
The sensitive al	oility to information: Cronb	ach alpha = 0.783			
NCTT1	11.13	5.750	.546	.752	
NCTT2	11.10	5.325	.622	.713	
NCTT3	11.09	5.460	.605	.722	
NCTT4	11.22	5.336	.586	.733	
The sensitive al	oility to standards: Cronbac	h alpha = 0.755		•	
NCCM1	8.94	5.541	.600	.671	
NCCM2	9.30	5.629	.625	.658	
NCCM3	8.39	6.497	.443	.753	
NCCM4	9.61	5.593	.547	.702	
The price awar	eness: Cronbach alpha = 0.7	769			
YTGC1	10.66	5.208	.527	.736	
YTGC2	11.17	4.313	.627	.682	
YTGC3	10.97	4.975	.574	.713	
YTGC4	11.57	4.706	.560	.720	
The value awar	eness: Cronbach alpha = 0.3	826			
YTGT1	12.65	4.059	.634	.788	
YTGT2	12.67	4.116	.674	.772	
YTGT3	12.68	3.790	.678	.768	
YTGT4	12.55	3.967	.622	.794	
The risk percep	otion: Cronbach alpha = 0.7	05			
RRCN1	8.96	5.281	.429	.678	
RRCN2	9.44	4.836	.437	.674	

RRCN3	9.42	4.131	.632	.548
RRCN4	9.42	4.390	.479	.652
The novelty seeking	: Cronbach alpha = 0.716	1		
TKML1	9.33	4.238	.517	.649
TKML2	8.76	5.133	.422	.700
TKML3	9.48	4.710	.535	.636
TKML4	9.52	4.726	.551	.627
The in-classed cons	umption: Cronbach alpha	= 0.854		
TDDC1	8.64	7.820	.641	.837
TDDC2	9.02	7.008	.741	.795
TDDC3	8.70	7.098	.735	.798
TDDC4	8.50	7.420	.669	.826

 Table 2. The Cronbach alpha of intermediate variable and dependent variable

Variables	The average scales	Variance	Items total correlation	Alpha if items deleted
The attitude tow	ards counterfeit products: Cron	bach alpha = 0.	.805	
TDSP1	7.96	6.034	.599	.766
TDSP2	8.44	5.602	.648	.742
TDSP3	8.20	5.430	.696	.718
TDSP4	7.82	5.802	.544	.794
Buying intention	a: Cronbach alpha = 0.755	,	+	
YDMH1	10.98	11.229	.594	.882
YDMH2	11.13	10.277	.742	.849
YDMH3	11.19	9.906	.765	.843
YDMH4	11.08	10.328	.752	.846
YDMH5	10.89	10.439	.723	.853

DISCUSSIONS AND IMPLICATIONS

In this study, conducting the survey in Ho Chi Minh City market, there are 4 factors of 37 observation variables that are used in the theoretical model. The research results show that *the sensitive ability to standards* has the strongest impact on attitude. Further, *the value awareness* and *the price awareness* has a negative impact on *attitude towards counterfeit luxury fashion products*. The research result shows that attitude towards counterfeit luxury fashion products has a positive impact on *buying intention*. These results are also consistent with studies as Nordin (2009), Ang et al. (2001), Hidayat & Diwasasri (2013), Srivastava & Banerjeet (2014).

Moreover, the study shows that there are no impact of demographic factors (such as gender, marital status) on *consumers 'attitudes towards counterfeit luxury fashion brands* in Ho Chi Minh City market. However, the age has an impact on *consumers 'attitudes towards counterfeit luxury*

fashion brands. This means, the results of this study also support previous research findings. In addition, many previous studies have shown that counterfeit purchasers are mostly younger age groups (Bian & Moutinho, 2009; Swami et al., 2009; Wee et al., 1995). These people believe that the demands of product possession is the essence of life and add to their happiness. In particularly, the older people claim that in the past they rarely chose to buy counterfeit products.

Based on the research results of factors influencing consumers' attitudes towards counterfeit luxury fashion brands in Ho Chi Minh City, there are some suggestions offered to state policy makers as well as managers in enterprises as follows:

Firstly, *the attitudes towards counterfeit luxury fashion brands* is the strongest influencing factor to consumer *buying intentions*. Therefore, this is also the main factor to which company managers should pay attention before applying solutions, in order to reduce consumer demands in counterfeit products. On the other hand, regarding consumers, it is necessary to educate their perceptions when buying counterfeit products. Moreover, they should also be aware of their duties in fighting against counterfeit products. Further, manufacturers must spend their expenses in order to inform consumers in identifying counterfeit products. In addition, manufacturers also should have rewards policies to consumers who find counterfeit products.

Second, it is necessary to enhance the role of community in the orientation of legally consuming behavior. The study shows that *the sensitive ability to standards* has a positive impact on *the attitude towards counterfeit luxury fashion brands*. Consumers would not buy counterfeit products if they find the resistance from the people important to them. Therefore, enterprises and state departments should launch marketing campaigns encouraging word-of-mouth among groups of friends, or family members, and colleagues against counterfeit products. Thus, the effect of these campaigns will affect the spread in the community and to each consumer.

Third, *the attitude towards counterfeit luxury fashion brands* would decline if consumers perceived that supporting counterfeit products is unethical, unfair in consuming products, and damaging the national economy. Therefore, communication campaigns with content about counterfeit products have to be linked to the consumer perceptions relating to ethical issues, as well as promoting unfair competitions. Further, it needs to be proved that counterfeit product consumption is also harmful to national, sustainable, economic development. For example, it is necessary to show consumers that counterfeit products would lead to tax loss, increasing unemployment, and damage to social security.

Fourth, it is necessary to enforce the legal system related to counterfeit products. Especially, the Vietnam intellectual property rights must be completed as soon as possible. In Vietnam context, in order to help the state agencies to satisfactorily execute, the terms and conditions in the Law should be specifically guided. It is necessary to promote closer coordination among state departments and agencies with the market supervision departments. Moreover, it needs to increase both quantity and quality of staff in these departments. Vietnam government should invest in modern instruments for inspection and examination to prevent counterfeit products. Further, the level of punishments should also be considered in order to deterrent increasing counterfeit crimes.

Fifth, following previous studies, as well as impirical studies from other countries, it is important that the role of legal owning enterprises participate in the enforcement process. The

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Vietnam intellectual property law should stipulate not only the rights but also the responsibilities of enterprises in working, coordinating and cooperating with legal agencies. The alliance among manufacturers in the fight against counterfeit products should be stronger and tighter. Companies should not neglect in managing and monitoring their product consumptions. Moreover, they should not consider the fight against counterfeit products as only conducted by state agencies as well.

Sixth, the tendency in buying counterfeit luxury fashion products does not differ in gender, marital status, income, and education level. Therefore, the communication strategies are not necessarily categorized following these conditions. The genuine manufacturers should emphasize to their consumers by different ways about the importance of buying genuine products. This also means, genuine manufacturers need to express to the consumers that purchasing counterfeit products means they do not appreciate their work, as well as devaluing their working abilities.

LIMITATIONS AND FURTHER RESEARCH

This study also has a number of limitations. First, this study was conducted only in Ho Chi Minh City with convenient sampling. The model should be tested with a larger sample to enhance the generalization of the results. Thus, further studies could be repeated in other cities and provinces in Vietnam with random and larger sampling. Second, this study focuses on only three main factors that influence attitudes towards counterfeit luxury fashion brands. There may have been other factors that contribute to explaining the tendency of buying intentions of counterfeit luxury fashion brands. In addition, factors that influence *attitudes towards counterfeit luxury fashion brands* need to be studied in more detail. Last but not least, all data in this study is collected in 2016, therefore in the near future, the Vietnamese consumer behaviors to counterfeit luxury fashion brands may be changed. Therefore, future research is hoped to explore and offer more complete solutions in the fight against counterfeit luxury fashion products.

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THE EFFECT OF LAW ENFORCEMENT'S SOCIALIZATION PROCESS ON THE WHISTLE-BLOWING BEHAVIOR OF POLICE OFFICERS

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ABSTRACT

As we read our newspapers or listen to our televised evening news we become astonished by stories of employees who seem to have knowledge of illegal, immoral or illegitimate activities in their organizations but choose to keep silent about these activities. While researchers are providing new information concerning the organizational whistle-blowing process and how to properly manage that process, there seems to be a void in research that examines the perception and/or definition of what constitutes wrong-doing. The current article addresses that void by proposing that an individual's lack of whistle blowing behavior may not be based on a conscience choice to act unethically or illegally in an effort to cover up wrong-doing, but instead may be a result of a strong socialization process that internalizes a shared meaning and perceptions of accepted activities or behaviors. It has been suggested in research that law enforcement organizations have one of the strongest socialization processes of any organization. For that reason this article will focus on how law enforcement's strong socialization process affects the police officer's perspective of what constitutes an illegal and/or unethical act.

INTRODUCTION

As we read our newspapers or listen to our televised evening news we become astonished by stories of employees who seem to have knowledge of illegal, immoral or illegitimate activities in their organizations but choose to keep silent about these activities. The lack of reporting and covering up of acts of sexual abuse at Penn State university, the lack of reporting by Bernie Madoff's employees in reference to his Ponzi scheme, the failure to properly report information during the U.S. government's handling of the Benghazi situation and the almost endless reports of police and military officers not reporting the wrong-doing of fellow officers are just a few of the type stories that seem to be reported daily by our news media. It was reported in a workplace ethics survey (Hudson Employment Index, 2005) that 31% of U.S. employees stated they witnessed their company and/or their co-workers engaging in illegal and/or unethical behavior but only 52% of those employees reported that wrong-doing to authorities. As more and more of these situations and statistics are brought to the public's attention, the answer to the following question has continued to elude organizational researchers, management practitioners and society in general:

Why do so many seemingly normal people in organizations observe questionable activity but continue to allow the obvious wrong-doing to persist instead of simply blowing the whistle on the perpetrators?

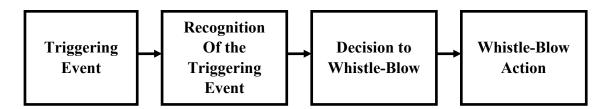
Researchers are starting to realize the importance of whistle-blowing as a form of governance in organizational operations. Miceli and Near (2005) stated that the most effective means for reducing the occurrence of unethical behavior in organizations is for the employees of the organization to step up and report witnessed unethical behavior to authorities. While researchers are starting to provide new information concerning organizational whistle-blowing behaviors and how to properly manage the whistle-blowing process (c.f., Miceli, Near, & Dworkin, 2008; Vadera, Aquilera & Caza, 2009) there seems to be a void in the research which focuses on understanding the intricate and complex individual cognitive process involved in the individual's recognition and/or identification of a wrong-doing, described by Miceli and Near (1992) as the first stage of the whistle-blowing process.

The present article addresses this gap in the literature by proposing that an individual's lack of whistle blowing behavior may not be based on a conscience cognitive choice to act unethically or illegally in an effort to cover up wrong-doing, but instead may be a result of a strong socialization process that internalizes a shared meaning and perceptions of accepted activities or behaviors.

It has been suggested in research that law enforcement organizations have one of the strongest socialization processes of any organization (Ashforth & Saks, 1996; Van Maanen & Schein, 1979) and also one of the most infamous reputations of not blowing the whistle (Van Maanen & Schein, 1979; Trautman, 2001; Rothwell & Baldwin, 2006). "The Brotherhood", "The Blue Curtain", and "The Code of Silence" are just a few of the descriptive titles that we commonly see in movies, news reports, books or magazines that allude to police officers' reputation of not reporting organizational wrong-doing. For that reason this article will focus on how law enforcement's strong socialization process affects the first stage of the police officer's whistle-blowing process (i.e. the recognition of illegal and/or unethical acts.)

WHISTLE-BLOWING PROCESS

To help in understanding this process, Miceli and Near (1992) offered a seminal model depicting the basic stages of the whistle-blowing process.



Model of the Stages of Whistle-blowing. Adopted from Miceli & Near (1992)

Miceli and Near (1992) state that the whistle-blowing process begins when a triggering event, defined as an illegal, immoral, or illegitimate act of commission or omission by an organization or organizational member, is recognized by an organizational member and a decision

is made on the part of the observer as to what to do about it. Agreeing with Miceli and Near's earlier work, Henik (2007) states that the first stage of the whistle-blowing process consists of four distinct judgments: 1) Judgment that the observed activity is problematic;

2) Judgment of whether the activity is deserving of action; 3) Judgment that the observer is personally responsible to act; 4) Judgment of what action is possible and appropriate.

In ethical research it has long been accepted that factors exist that affect individuals' perspectives of ethical and unethical activity (c.f., Barnett & Vaicys, 2000; Paolillo & Vitell, 2002). In stark contrast to this theoretical foundation of differences in ethical perspectives, it appears that the whistle-blowing literature mostly rejects the premise of idiosyncrasy in perceptions of ethical judgment. Instead, the whistle-blowing research seems to accept a more universal perception of ethical judgment wherein each observer of a questionable activity is assumed to have the same right/wrong perception (c.f., Dworkin & Baucus, 1998; King, 1999; Miceli & Near, 1992) and therefore, the only real ethical decision is whether or not to blow the whistle. No consideration is given for the possibility that some individuals might see an activity as illegal, immoral or illegitimate, thereby, constituting a "triggering event", while others see the same activity as a legal, moral and a legitimate activity. If the observer makes a judgment that the activity in question is not problematic, then the observer does not continue to the other three judgments suggested by Henik (2007). If the observer doesn't recognize the activity as a wrongdoing there will be no decision of whether or not to blow the whistle (Arnett & Hunt, 2002; Miceli & Near, 1992; Miceli & Near, 1985). In this case "perception becomes reality" to the observer; meaning, even if in reality the act is illegal or unethical, the observer will not treat it as such unless he/she perceives the act to be illegal or unethical.

Often this seems to be a strange occurrence to individuals who are not part of an organization where the activity in question takes place. Dalton (1959) described such a situation where an American company experienced a 15% loss of the firm's materials due to what was later described as "employee theft". When Dalton questioned the workers as to why they participated in the taking of the materials or did not report the individuals who took the materials, they stated that they felt the taking of the materials was a 'legitimate activity' within the organization; therefore, no one considered reporting it to authorities. A much more sinister example can be found in the history of the Nazi bureaucracy of World War II. Hitler's followers participated in the genocide of scores of innocent people without hesitation or remorse. While the outside world considered these followers to be evil inhuman monsters, the followers in later interviews described themselves as compliant, ambitious, patriotic members of a particular form of social organization to which they were blindly or mindlessly devoted (Bauman, 1989; De Mildt, 1996). The Nazi followers stated they never considered not participating in the activities, nor did they consider reporting the questionable activity, because to them, it was deemed to be normal activities inside the Nazi organization (Bauman, 1989; De Mildt, 1996).

ORGANIZATIONAL SOCIALIZATION

When an individual enters an organization he/she begins to experience the organization's distinct way of life complete with its own rhythms, rewards, relationships, demands, languages and potentials (Van Maanen & Schein, 1979). The individual entering the organization for the

first time is naive and begins searching for ways to make sense of the new environment and a means of relieving the stress associated with the ambiguity of the situation. The key to understanding this new environment, and thus becoming an effective member of the organization, lies in the acquisition of a variety of information and behaviors (Fisher, 1986; Weick, 1995). This learning process is referred to as "organizational socialization".

The value system of an individual is a product of personal, societal and cultural experiences. The more specific values are developed in later life as the individual joins social institutions and work organizations (Meglino & Ravlin, 1998). Organizational socialization can be defined as the newcomer's internalization of an organizational value system which standardizes which behaviors and perspectives are acceptable, customary and desirable, and which behaviors and perspectives are considered deviant, taboo and unacceptable (Ashforth & Saks, 1996). During the socialization process newcomers will begin to interpret their experiences within the context of the organization's milieu (Fisher, 1986; Van Maanen, 1976). Van Maanen and Schein (1979) state that the behaviors, values, and beliefs socialized by the individual will become just a "natural" response to the problematic environment encountered as a member of the organization, just as the Nazi followers behaviors seemed to suggest.

The more unique an organization's mission, identity, and culture, the more effort the organization devotes to changing the newcomer by divesting them of their incoming attributes and predispositions (Dyer, 1985). No organization receives more attention for devoting time and resources into making this type of personal change in the newcomer than do law enforcement organizations (Ashforth & Saks, 1996; Jones, 1986; Van Maanen & Schein, 1979). During initial training, law enforcement organizations use a type of "institutional" socialization process where they locate the new officers in a police academy environment which is isolated from the outside world. During these early days of the socialization process the officer is subjected to rules and regulations that disparage individuality and encourage conformity and internalization of organizational sanctioned behaviors, beliefs and values (Ashforth & Saks, 1996). Van Maanen (1975) refers to this internalization as "gaining the organizational perspective."

Upon successful completion of the police academy, the recruit will then be placed in the true work environment where he will experience firsthand the difference in the environment in which he works and the environment in which he lives as a civilian, thereby, reinforcing the belief that the internalization of the organizational culture is a survival decision (Van Maanen, 1973). The recruit has now entered into the "police brotherhood" (Van Maanen, 1975).

Theoretical and empirical evidence exists that suggests that at the completion of the socialization process, the police officer will share value patterns with others in their occupational group; while the police officer's value patterns will differ significantly from the value patterns of individuals in other occupations (Bjerregaard & Lord, 2004; Conser & Russell, 2000; Klockars, Ivkovich, Harver, & Haberfeld, 2000).

Therefore, the law enforcement socialization process may be said to manipulate the value systems of the recruits in order to create the new organizationally sanctioned value system which exists within the police environment- a value system that is distinctively different from the value systems of individuals in other occupational groups in the American society and likewise, different

from the value system the police officers have outside of the police environment (Rokeach, Miller, & Snyder, 1971).

The current article posits that this is possibly the reason that issues such as excessive force, individual rights violations, and profiling of individuals are viewed differently between police and non-police individuals. Often such situations are brought to the police organization's attention by concerned citizens but seldom does internal investigations by police departments find merit for these types of complaints; a finding that often astonishes complainants and the public at large. On April 29, 1992, the world got a glimpse of this phenomenon when four police officers were acquitted of any wrong-doing in the beating of Los Angeles resident Rodney King which was videotaped and viewed by millions. The police administration investigation concluded, and a criminal court jury later agreed, that the police officers were just following law enforcement procedures used in the apprehensive of aggressive suspects in the dangerous environment in which the police officers operate.

While members of the law enforcement's internal investigation team may see this type of aggressive behavior as wrong or even illegal outside of the police environment, they, like other socialized law enforcement officers have internalized a kind of "being in the same boat", or "us vs. them" paradigm. The socialized officers view themselves as individuals who perform society's dirty work in an environment like no other (Van Maanen 1975). Socialized law enforcement officers perceive their work environment as a setting where previously accepted values and behaviors are dangerously unacceptable and the internalization of the organizational culture is not just an option, but a means for survival (Van Maanen, 1973).

This current article suggests that the socialized police officers' perception of a questionable activity outside of the socialized police context is similar to individuals who are not socialized police officers; however, when the questionable activity occurs within the socialized police context the police officer's perception of the activity may significantly differ. This theoretical foundation seems to suggest that law enforcement's strong "institutional" socialization process will provide, instill and maintain guidelines for how a police officer distinguishes between right and wrong within the police context. The individuals outside the law enforcement context are not exposed to the same volatile environment or socialization process as the police officer and therefore, will not perceive the ethical situations in the same way. Therefore we posit the following propositions:

P1: Socialized police officers' perceptions of what constitutes right and wrong within the law enforcement context are significantly different than non-socialized individuals.

P2: Socialized police officers' perceptions of what constitutes right and wrong outside of the law enforcement context are not significantly different from the judgments of individuals who are not socialized police officers.

Ethical behavior research suggests that an inverse correlation exists between the perceived ethicalness of an activity and the propensity to report that activity to authorities capable of stopping the unethical behavior (Arnett & Hunt, 2002; Miceli & Near, 1992; Miceli & Near, 1985). Simply

stated, the desire to report an unethical behavior is dependent on the degree to which the individual sees the situation as an illegal or unethical behavior.

Since the socialized police officer shares similar judgments about the ethicalness of questionable activities outside of the police context with individuals who are not socialized police officers, the current article posits that they should share reporting behaviors as well. When the activities occur within the police context, where the officer has internalized the "police perception" of what constitutes a wrong-doing, different from the perception of a non-socialized individual, then the reporting behaviors should differ.

Based on this foundation the following propositions are given:

P3: Socialized police officer's reporting of questionable activity as unethical is not significantly different than individuals who are not socialized police officers when the questionable activity occurs outside the law enforcement context.

P4: Socialized police officer's reporting of questionable activity as unethical is significantly less than individuals who are not socialized police officers when the questionable activity occurs within the law enforcement context.

STUDY IMPLICATIONS

The present article will contribute to the body of research literature in many areas. First, if the study reveals that socialized police officers do indeed, perceive questionable activity differently than do non-police individuals, then this information can help law enforcement administrators understand the importance of socialization of the police officer. The administration should design their organization so the officers are being socialized to the values, beliefs, and perspectives that are sanctioned by the organization. Values, beliefs, and perceptions that are contrary to the policies and procedures of the organization should be eliminated from the socialization process when possible. With this knowledge, administrations and trainers can design more effective policies to manage police activities and develop training programs that would help officers and non-officers to understand the problems and situations which may occur as a result of these differences in perspectives.

Secondly, this research would add to the body of knowledge in the field of socialization research. This study will demonstrate that strong socialization processes can cause socialized individuals to have a homogeneous perspective of what constitutes wrong doing. A perspective that is often different from the perspectives of non-socialized individuals. This finding helps non-organizational members to understand why individuals inside an organization may share perspectives that are very diverse from the perspectives of non-organizational members.

Finally, this study leads to a greater understanding of the whistle-blowing phenomena by introducing a new concept to the whistle-blowing literature. The new concept is the suggestion that more attention should be given to the individual's perspective of what constitutes wrongdoing in an organization. Contrary to previous whistle-blowing literature, the whistle-blowing decisions

do not start once a wrong-doing has occurred, but instead, starts with the perception of what constitutes a wrong-doing. With this understanding, the researcher and practitioner have a better theoretical foundation from which to continue their research or develop better management practices.

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