EFFECT OF CULTURAL DIFFERENCES ON BUDGETARY SLACK

by

Shawn L. Robey

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Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

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Liberty University, School of Business

July 2019
Abstract

Budgeting enables the firm to allocate resources among subunits (Braun & Tietz, 2018). Gallani, Krishman, Marinich, and Shields (2018) noted that providing employees an opportunity to misreport private information is a disadvantage of employee participation in the budgeting process. Research suggests that perceptions of unfairness can result in increased misreporting by subordinates (Fisher, Peffer, Sprinkle, & Williamson, 2015). Individuals value fairness and equity in resource allocation settings (Drake, Matuszewski, & Miller, 2014). Ethics Position Theory (EPT) suggests that people’s reactions in morally toned situations can be traced to variations in their intuitive, personal moral philosophies. According to Forsyth, O'Boyle, and McDaniel (2008), cross-cultural consensus is lost when the discussion turns to less clear-cut issues. The purpose of this quantitative study was to examine the effect cross-cultural differences in perceived horizontal equity, self-efficacy, and ethical ideology of individuals from America and Brazil has on the created levels of budgetary slack. American and Brazilian responses were 413 and 390, respectively. The resulting analysis indicated statistical significance between horizontal equity and the creation of budgetary slack. Although there was no statistically significant difference between high/low self-efficacy conditions and budgetary slack levels, there was a statistically significant difference between low/high years of experience and budgetary slack levels. The results of the study are relevant to budgetary procedures that may impact an individual’s perceptions of fairness in pay compared to colleagues or peers with the same responsibility. In addition, it appears employees with more years of professional experience could benefit from education on how creating slack in their budgetary decisions can negatively impact the company and themselves.

Key words: Equity, self-efficacy, ethical ideology, budgetary slack, culture
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Dr. Kimberly Johnson, Dissertation Committee Member

Dr. Edward M. Moore, DBA Program Director
Dedication

This dissertation is dedicated to my father, Ken Robey. Nearly four years ago I called my father and told him I was THINKING about pursuing a doctoral degree. After our phone conversation he told his friends, “My son is becoming a doctor!” A few months later, at the age of 54, my father passed away from a heart attack. Unfortunately, he did not get to see me finish the journey, but I know he was with me the entire way. I love you, Dad! I did it!
Acknowledgements

This is where I thank those who have assisted and sacrificed while I pursued my education. There are so many people who have encouraged and helped me along this journey, but there are a few I would like to mention.

First, I could not have taken or completed this step in my life without my beautiful and supportive wife. Jamie, you have always believed in me and cheered me through the difficult times. You truly inspire me to continue to better myself. Thank you for all the sacrifices you have made and being so understanding when I had to miss things. Thank you for being my rock and my companion. I love you always and in all ways.

Dr. Shawn Thomas, thank you for your support as well. Even though you have your own family and kids to manage, you always made time for me. Thank you for coaching me through the difficult times. Without your guidance, I believe I would have gone completely gray!!!

Last but not least, I want to thank Dr. Kevin Celuch. I really appreciate your guidance and creativity. Thank you for coming in on the weekends. Your help was instrumental to the completion of this project. I look forward to working with you in the near future!
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Section 1: Foundation of the Study

Budgeting enables the firm to allocate resources among subunits (Braun & Tietz, 2018). Gallani, Krishman, Marinich, and Shields (2018) noted that providing employees an opportunity to misreport private information is a disadvantage of employee participation in the budgeting process. Research suggests that perceptions of unfairness can result in increased misreporting by subordinates (Fisher, Peffer, Sprinkle, & Williamson, 2015). Individuals value fairness and equity in resource allocation settings (Drake, Matuszewski, & Miller, 2014). Asymmetric information is an assumption of Agency Theory that can be used to predict the creation of budgetary slack (Andriyansah & Zahra, 2017). Budgetary slack is a result of misrepresenting private information by demanding resources in excess of the amount actually needed for project completion (Schreck, 2015). In other words, budgeted revenues can be underestimated, or budgeted expenses can be overestimated to allow a better chance of meeting performance numbers.

Background of the Problem

Two issues can quickly arise from the practice of budgeting using budgetary slack. First, departments or units could be incentivized to intentionally reduce spending during the early stages of the budgeting cycle. This creates the secondary issue, which is the accumulation of unused resources to cope with the uncertainty of future expenses facing the department or unit. Essentially, the manager creates a perceived “rainy day” fund for use within a department or unit, which could predicate an increase in departmental spending as the end of the budget cycle draws near. This issue arises from there being no incentive, in the department’s eyes, to save resources (Liebman & Mahoney, 2017). Amounts not spent may be reallocated or, in some cases, reverted back to the organization (Goldstein, 2005). Any unspent resources may indicate
a lack of need, leading to decreased funding in the future (Jones, 2005). The excess in resource allocation to a department can be viewed as slack in the budget, because the additional resources used are at the benefit of the department and not in the best interests of the organization (Church, Hannan, & Kuang, 2012).

Subordinates participating in the budgeting process can be a valuable tool for planning, control, and allocation of resources. These individuals are better informed than their superiors with regards to their abilities and environmental factors. Subordinates can use this information to reduce uncertainty, improve decision making, and positively impact profits. However, this information can be used opportunistically and benefit themselves at the expense of the company (Brink, Coats, & Rankin, 2018). Ethics Position Theory (EPT) suggests that people’s reactions in morally toned situations can be traced to variations in their intuitive, personal moral philosophies. EPT assumes that a person’s degree of idealism and relativism determines their ethical ideology (Forsyth, 1980). Society morally condemns people for deliberately lying, harming or killing an innocent, stealing valuables, turning away from those in dire need, or failing to keep a promise (Abratt, Nel, & Higgs, 1992). According to Forsyth, O'Boyle, and McDaniel (2008), cross-cultural consensus is lost when the discussion turns to less clear-cut issues.

There is a wealth of knowledge available with regards to budgetary slack. Despite over 40 years of attention to the issue of budgetary slack, little attention has been given to the effects of culture on the budgeting process (Douglas & Wier, 2005; Douglas, HassabElnaby, Norman, & Wier, 2007; Harvey, 2015; Wu, 2005). According to Harvey (2015), the literature does not offer any conclusive answers. In a recent study by Abdullah and Brink (2017), the authors examined the influence of horizontal equity, self-efficacy, and ethical position on the creation of budgetary
slack. The authors did not take into consideration how cultural differences affected individual’s perceptions of horizontal equity, self-efficacy, and their ethical position. Based on an initial literature review, additional literature is needed about the effect culture can have on the creation of budgetary slack.

**Problem Statement**

The general problem to be addressed is the opportunity to misreport private information when employees participate in the budgeting process which results in slack creation. Budgetary slack is a result of misrepresenting private information by demanding resources in excess of the amount actually needed for project completion (Schreck, 2015). Abdullah and Brink (2017) conclude that managers often have incentives to misreport their private information and inaccurately set budget targets in order to create budgetary slack. Slack negatively impacts a budget by taking resources away from future opportunities that could have awarded the department, unit or organization with a better return on investment. Budgetary slack is often the result of questionable ethical practices or ineffective management strategies related to budgeting. Unintended consequences of poor budget management and the development and existence of budgetary slack can have significant negative impacts on an organization and its financial position. Inefficient resource allocation, ineffective budgeting functions, and deceptive performance measurement are just a few negative impacts of slack (Robey & McKnight, 2018). The specific problem to be addressed is how cross-cultural differences in perceptions of horizontal equity, self-efficacy, and ethical ideology of Americans and Brazilians, affect their intention to create budgetary slack.
Purpose Statement

The purpose of this quantitative study was to add to the body of knowledge on budgetary slack. Over the past few decades, studies have examined the impact of different cultures with respect to budgetary slack. Davila and Wouters (2005) used managers from an MNC that is located in North America, Europe, Asia, and Southeast Asia to examine intentional budgetary slack. Douglas and Wier (2005) used Chinese and United States managers to compare ethical position with respect to budgetary slack. Douglas et al. (2007) used Egyptian and United States managers to compare ethical position and national culture with respect to budgetary systems. However, the literature on budgetary behaviors is relatively silent when it comes to Brazilian culture. This research examined the effect cross-cultural differences in perceived horizontal equity, self-efficacy, and ethical ideology of individuals from America and Brazil has on the created levels of budgetary slack. Participants for this study consisted of individuals from the United States and Brazil working in business-related fields. In recent studies, demographic information did not include country of (Abdullah & Brink, 2017; Harvey, 2015).

Nature of the Study

This section provides a discussion of the quantitative research method chosen and why it is best for the study. Multiple perspectives are provided to support the selection of method and design. The section includes rationale as to why other methods and designs were not selected.

Discussion of Method

The three core research methods available for research are the qualitative method, the quantitative method, and the mixed method. It is important to the researcher that the methodology aligns with and supports the research questions (Yin, 2006). Properly selecting the
method at the beginning of this study helped ensure alignment and that the research questions were supported.

**Qualitative method.** Creswell (2014) suggests qualitative methods can aid in exploring topics with multiple meanings with open-ended emerging data. Qualitative research primarily relies on the researcher’s perception and understanding (Stake, 2010). With regards to qualitative research, “the researcher him- or herself is an instrument, observing action and contexts, often intentionally playing a subjective role in the study, using his or her own personal experience in making interpretations” (Stake, 2010, p. 20). Qualitative research flows from a philosophical assumption, to interpretive lens, and on to procedure involved in the study of social or human problems. This form of research can be characterized by several characteristic, ranging from the use of multiple forms of data gathering to complex reasoning through both inductive and deductive logic (Creswell & Poth, 2018). All four philosophical worldviews align with the qualitative methodology. It is important to point out, qualitative research is “not bound by cause-and-effect relationships among factors” (Creswell & Poth, 2018, p. 44). The purpose of qualitative research is to understand the complex interactions between factors and to develop a complex picture of the issue under study (Creswell & Poth, 2018). The qualitative method was not appropriate for the problem identified because analyzing personal experiences was not appropriate to address the research questions.

**Mixed method.** The mixed method approach combines both qualitative and quantitative methods. According to Stake (2010), a mixed method approach attempts to provide a more thorough understanding of the research problem. The mixed method approach provides a clearer understanding than using only a qualitative or quantitative approach. A mixed method design should be used when a qualitative or a quantitative approach, each in isolation, does not provide
enough clarity to understand a research problem (Creswell, 2014). The qualitative portion of the mixed method disqualified the approach from use in this study.

**Quantitative method.** Creswell (2014) highlights that quantitative methods can be used as a method of inquiry to measure cause and effect of numerical variables. Insight can be gained based on the results of statistical analysis (Stake, 2010). The goal of this study was to examine the effect of cross-cultural differences in perceived horizontal equity, self-efficacy, and ethical ideology have on budgetary slack levels. This is in alignment with a quantitative research approach of testing theory through postpositive knowledge claims (Creswell, 2014), due to the need to identify and assess causes that influence budgetary slack levels.

**Discussion of Design**

The problem to be addressed, research questions, and availability of data will dictate the research design (Parylo, 2012). Several designs exist to conduct quantitative research: descriptive, correlational, and quasi-experimental.

**Descriptive.** According to Glass and Hopkins (1984), descriptive research involves gathering data that describe events and then organizes, tabulates, depicts, and describes the data collection. Descriptive research examines the situation, as it exists in its current state. The approach involves identification of attributes of a particular phenomenon based on the exploration of correlation between two or more phenomena (Williams, 2007). Surveys and other observational data gathering tools are often used in descriptive statistics, but no attempt is made to control or influence any variables (Spector, Merrill, Elen, & Bishop, 2013). Due to the manipulation of two independent variables, horizontal equity and self-efficacy, a descriptive design is not appropriate for this study.
**Correlational.** Thompson et al. (2005) stated that correlational studies are quantitative, multi subject designs in which participants have not been randomly assigned to treatment conditions. Correlation is a bivariate exploration that assesses the strengths of connection between two variables and the direction of the relationship (Salkind, 2013). The correlational approach could be used to analyze the relationships between the dependent variable (budgetary slack level) and the independent variables (culture, equity, self-efficacy, ethical position). In order to assess the causal relationship between variables, this study required subjects be randomly assigned to one of four conditions. The use of random assignment made a correlational design inappropriate for the study.

**Quasi-experimental.** Quasi-experimental designs examine if a specific treatment can influence the result of a specific test (Creswell, 2014). The use of a control variable is key in an experimental design. In a quasi-experiment, units are assigned to conditions using nonrandomized ways (Williams, 2007). This study gathered independent and dependent variable information through the use of a survey. Due to the ability to manipulate independent variables and assign participants to one of four conditions, the use of a quasi-experimental design was appropriate for this study.

**Summary of the nature of the study.** In summary, the use of quantitative methods would aid in measuring the effect cultural differences in non-pecuniary motivations have on budgetary slack. This study was not concerned with understanding the relationship of variables and how they correlate, nor was it concerned with defining naturally occurring, non-experimental behavior. The partially random assignment of participants to different conditions enables the use of a quasi-experimental design.
Research Questions

The following research questions guided the development of the conceptual framework proposed in the present research:

RQ1. Do cross-cultural differences in American and Brazilian perceptions of horizontal equity affect budgetary slack levels?

RQ2. Do cross-cultural differences in American and Brazilian perceptions of self-efficacy affect budgetary slack levels?

RQ3. Do cross-cultural differences in American and Brazilian ethical ideology affect budgetary slack levels?

Hypotheses

Many hypotheses could be tested using the model. Specific hypotheses to be tested might include:

H1: Americans will create the same levels of budgetary slack as Brazilians, regardless of equity or inequity.

H1_{01}: There is no significant difference in levels of budgetary slack between equity and inequity conditions.

H1_{02}: There is no significant difference in levels of budgetary slack between Brazilians and Americans.

H1_{03}: There is no difference in levels of equity between Americans and Brazilians.

H2: Americans will create the same levels of budgetary slack as Brazilians, regardless of high self-efficacy or low self-efficacy.

H2_{01}: There is no significant difference in levels of budgetary slack between high self-efficacy and low self-efficacy conditions.
H2_02: There is no significant difference in levels of budgetary slack between Brazilians and Americans.

H2_03: There is no difference in levels of self-efficacy between Americans and Brazilians.

H3: Americans will create the same levels of budgetary slack as Brazilians, regardless of high idealistic or low idealistic ideology.

H3_01: There is no significant difference in levels of budgetary slack between high idealistic and low idealistic ideology.

H3_02: There is no significant difference in levels of budgetary slack between Brazilians and Americans.

H3_03: There is no difference in levels of idealistic ideology between Americans and Brazilians.

H4: Americans will create the same levels of budgetary slack as Brazilians, regardless of high relativistic or low relativistic ideology.

H4_01: There is no significant difference in levels of budgetary slack between high relativistic and low relativistic ideology.

H4_02: There is no significant difference in levels of budgetary slack between Brazilians and Americans.

H4_03: There is no difference in levels of relativistic ideology between Americans and Brazilians.

**Theoretical Framework**

According to Creswell (2014), the theoretical framework for research studies is used to provide a foundation for which the research can be built. The two theoretical frameworks found in the financial literature that served as the foundation for this quantitative study were (a)
Agency Theory and (b) Ethical Position Theory. Agency Theory and Ethical Position Theory were used to further explain cross-cultural differences in morality and moral judgement. Furthermore, in this section, a description of variables and their inter-relation was provided.

Agency theory. Agency Theory is often used in research to explain why individuals engage in self-interested opportunistic behavior (Baiman, 1982, 1990; Eisenhardt, 1989). For example, slack may be created to improve performance evaluations in order to maintain or increase the manager’s compensation. In a participative budgeting scenario, a subordinate can have access to private information and the opportunity to misrepresent this information. When both factors are present, agency predicts self-interest will motivate the subordinate to participate in the creation of budgetary slack (Abdullah & Brink, 2017).

**Ethical position theory.** Ethical Position Theory (EPT) is based on Forsyth’s (1980) distinction between idealistic and relativistic ethics. An individual’s ethical ideology is determined by their degree of idealism and relativism (Forsyth et al., 2008). Idealism is negatively related to slack creation behavior, but relativism is positively correlated with such questionable budgetary practices (Douglas & Wier, 2005). EPT suggests that people’s reactions in morally toned situations can be traced to their personal moral philosophies (Forsyth, 1980). In addition, the theory suggests that an individual’s judgements of right and wrong have developed over time (Forsyth et al., 2008).
Figure 1. Relationships between theories and variables.

Discussion of relationships between theories and variables. The study aimed to extend the research into social and cultural motivations to participate in the creation of budgetary slack by examining the effect independent variables (equity, self-efficacy, ethical position, culture) have on the dependent variable (budgetary slack level). Fairness concerns have been shown to decrease budgetary slack (Daumoser, Hirsch, & Sohn, 2018; Schatzberg & Stevens, 2008). For example, perceived unfairness of vertical pay dispersion has a negative effect on
employees’ budgeting decisions (Guo, Libby, & Liu, 2017). Furthermore, Abdullah and Brink (2017) concluded in their study that self-efficacy impacts the intention to create budget slack. They found that participants with high self-efficacy showed significantly higher intention to create slack. An individuals’ ethical position can have an effect on slack creation. Douglas and Wier (2000) and Douglas et al. (2007) showed that relativism increases, and idealism decreases budgetary slack. Cultural and social norms can have an impact on an individual’s propensity to create budgetary slack. According to Abdel-Rahim and Stevens (2018), strong personal preferences for honesty will result in a conformation to such norms. Furthermore, managers showing weaker preferences for honesty can be motivated by social sanctions to report honestly. Peer influence can also have a negative impact on honesty. Brunner and Ostermaier (2017a) found that dishonesty increased when peers reported dishonestly. Therefore, conformation to preferences of the peer group influences behavior and thus honest reporting (Altenburger, 2017).

Summary of the conceptual framework. In summary, Agency Theory and EPT provided the theoretical foundation for the study. Agency predicts self-interest will motivate the subordinate to participate in the creation of budgetary slack (Abdullah & Brink, 2017). EPT suggests that people’s reactions in morally toned situations can be traced to their personal moral philosophies (Forsyth, 1980). Cultural and social norms can have an impact on an individual’s propensity to create budgetary slack. Peer groups can also influence behaviors, which impact honest reporting.

Definition of Terms

Budgetary slack: Budgetary slack is a result of misrepresenting private information by demanding resources in excess of the amount actually needed for project completion (Schreck, 2015).
**Culture:** Is a system of shared values, rules, norms and institutions, most of them unconscious and unwritten, socially transmitted, regulating the social life of groups (Hofstede, 2015). For the purpose of this research, culture is represented by those born in the United States or Brazil.

**Ethical position:** The stance taken regarding ethics, it underlies distinctions in ethical thought, which in turn has been shown to direct ethical decision-making and behavior (White, Peirce, & Jacobowitz, 2018).

**Horizontal equity:** Indicates fair treatment among colleagues and peers with the same responsibility (Matuszewski, 2010).

**Idealism:** One’s concern for human welfare and try to avoid making decisions that will bring harm to others (Elias, 2004).

**Relativism:** One’s tendency to ignore the universal moral principle when making ethical judgments (Singhapakdi, Gopinath, Marta, & Carter, 2008).

**Self-efficacy:** The belief in one’s ability to take on and succeed at challenging tasks (Blewitt, Blewitt, & Ryan, 2018).

**Assumptions, Limitations, Delimitations**

The following is a discussion of the assumptions, limitations, and delimitations that were used in the study. This information will be key to providing an additional perspective on the findings of the study (Yin, 2011).

**Assumptions.** Leedy and Ormrod (2010) posited, “Assumptions are so basic that, without them, the research problem itself could not exist” (p. 62). The assumption for the study was that individuals who participated in the study answered honestly and truthfully. Measuring budgetary slack, horizontal equity, self-efficacy, and ethical ideology involves obtaining
information regarding an individual’s personal perceptions and attitudes. There is some risk that individuals might not answer honestly in fear of their information and answers to the case getting out. In order to mitigate this risk, the researcher assured survey participants of their anonymity. The nature of the study required the responses obtained from participants to be utilized without question, and thus, all responses obtained from participants were accepted as provided, and were not vetted or validated in any way. Only incomplete responses or those who incorrectly answered manipulation check questions were not utilized.

**Limitations.** One limitation of the study was the lack of generalizability. Both contextual and industry-specific factors could potentially yield outcomes that vary significantly. For example, within different industries, timing of expenditures can differ greatly. Therefore, the use and interpretation of slack level information could vary across different industries and business models. Ultimately, spending surges later in a budgetary cycle may not be the direct result of the individual or department acting in unethical self-interest. Major purchases may be held until the end of a cycle to ensure financial resources are available as a necessary strategy for securing resources.

The measure of horizontal equity, self-efficacy, and ethical ideology is limited by the participants’ willingness to openly and honestly answer questions that measure non-pecuniary motivations for creating budgetary slack. Mental attitude and personal circumstances may affect an individual’s willingness to participate and answer truthfully. In addition, these factors might result in responses that do not accurately represent the individual’s perception of horizontal equity, self-efficacy, and ethical ideology.

**Delimitations.** The delimitations refer to the bounds or scope of the research. The boundaries described in the research were limited to individuals working in business-related
fields living in the United States or Brazil. Individuals outside the United States or Brazil were not included in the study. Participants were required to have been born in the United States or Brazil. The scope of the research was related solely to the creation of budgetary slack and non-pecuniary motivations influencing such behavior. The conclusions from the study apply only to individuals within the United States and Brazil.

**Significance of the Study**

This section will inform how this study will add to the understanding and existing body of knowledge of budgetary slack. The discussion used Scripture to make the connection between Biblical principles and the theories of the study. An explanation of how the study is related to international business will also be discussed.

**Reduction of gaps.** This study addressed a gap in the budgetary slack literature by focusing on the effect culture has on an individual’s decision to create slack. Currently, literature on budgetary slack highlights the growing importance of the individual’s ethical ideology on the propensity to create budgetary slack; however, there is minimal literature that focuses on the impact cross-cultural differences have on such practices. This research addressed the gap in the role of ethical ideology in business by empirically examining the influence of culture on an individual’s ethical ideology and their propensity to create budgetary slack.

**Implications for Biblical Integration.** It is important that as human beings, we remember that we steward God’s creation on God’s behalf. “The Lord God took the man and put him in the Garden of Eden to work it and take care of it” (Genesis 2:15). As Christians in business, it is vital that we understand God’s intention for business. It is equally vital to remember that God owns all earthly possession, including businesses. The biblical view of stewardship is traditionally defined as using and managing the resources God provides for the
glory of God and the betterment of his creation (Botha, 2014). Therefore, as stewards of God, we will need to manage business in accordance to His desires. Seeking to use resources efficiently not only allows for the organization to flourish, but it also honors God through being good stewards of the resources he has entrusted to the organization. Stewardship enables the possibility of congruent goals (Davis, Schoorman, & Donaldson, 1997). When people no longer think of “work as a simple way of making money, and nothing more” (Hardy, 1990, p. 103). Their job has now become a means to a higher end (Hardy, 1990). People then begin to think “How, with my existing abilities and opportunities, can I be of greatest service to other people?” (Keller & Alsdorf, 2012). This others-first perspective goes against the Agency Theory model of instrumental and individual motivation and replaces it with the intrinsic motivation that all gifts come from God.

**Relationship to field of study.** Budgetary slack is a costly issue facing organizations. As organizations continue to conduct international business, people from different cultures, with differing moral ideologies will continue to be brought together. International business dealings are shaped, in part, by ethics. However, when the discussion turns to budgetary slack, what is considered moral differs to some extent from one culture to another.

**Summary of the significance of the study.** In summary, the discussion focused how the study addresses the gap in the role of ethical ideology in business. Specifically, the study empirically examined the influence of culture on an individual’s ethical ideology and their propensity to create budgetary slack. Furthermore, the discussion connected Biblical principles and the theories of this study. As stewards of God, we must efficiently manage the resources God provides. The discussion explained how the study was related to international business.
When working with individuals from other countries, it is important to understand that morals differ from one culture to another.

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

The purpose of this section is to provide a literature review on budgetary slack and factors impacting the creation of budgetary slack. The organization of this section is as follows. First, the methodology of how the literature was attained for the review will be explained. The next three sections discuss the results of the literature. The first of these sections discuss budgetary slack. Next, agency perspective is discussed. The third section was divided into factors impacting the creation of budgetary slack. Section four provides a description of the variables used in the study. The literature review concludes with a summary of the section and provide a transition and summary of Section 1.

**Review methodology.** This review used a four-step process to select and analyze the literature. Step one involved briefly examining and selecting literature from multiple electronic databases. The second step involved a more extensive examination of the selected literature. This in-depth examination resulted in the exclusion of non-relevant literature from the relevant literature. In the third step, literature was separated into major categories: budgetary slack, Agency Theory, and factors impacting the creation of budgetary slack. Specific factors impacting budgetary slack creation include: a) ethical ideology, b) equity, c) self-efficacy, d) participative budgeting, e) information asymmetry, and f) culture. Within the culture sub-category, the discussion is divided into two components: Brazil versus United States cultural dimensions and an examination of the seven dimensions of Brazilian culture. Finally, the findings within the literature were summarized.
**Literature retrieval.** The focus of the review was on budgetary slack and factors impacting the creation of budgetary slack published in peer-reviewed journals. In order to gain a broad perspective on the topic, a number of terms were used to produce the necessary literature. The keyword terms used to limit the selection of literature included “Budgetary Slack,” “Ethical Ideology,” “Cross-Cultural Differences,” and “Slack-Creation Behavior.” These results provided a number of relative journals and article, including a few informative literature reviews. The results’ abstracts were scanned to identify relevancy.

**Budgetary slack.** A budget, usually in quantitative terms, is a detailed plan for the future (Noreen, Brewer, & Garrison, 2014). According to Kung, Huang, and Cheng (2013), budgets are the most used management tool for strategic planning, facilitation of management tasks and control. Budgets are used to establish challenging targets that help support the implementation of strategy, resource allocation and employee motivation (Drury, 2015). Budgeting establishes the basis on which to evaluate business units and employees. In addition, the budget serves as a decision-making and decision-influencing purpose (Endenich & Trapp, 2018). Therefore, organizations have a vested interest to hire managers who do not have a propensity toward creating slack. Creation of budgetary slack is in direct conflict with the economic interests of an organization. Financing costs, working capital management, and capital budgeting decisions are adversely affected by an inaccurate budget. These effects are further perpetuated as historical budgets are used as a basis for future planning (Harvey, 2015).

Budget preparation involves proposals financial and nonfinancial measures by the manager. Headquarters, through budget execution, allocates the requested resources to subunits. When budgetary information is communicated from lower hierarchical levels to higher hierarchical levels, managers have the opportunity to create budgetary slack. Managers benefit
directly and indirectly from the creation of slack. Direct slack benefits derive from using slack resources to increase the manager’s perquisites or remuneration. Slack resources can also be used to support projects that advance the self-interests of the manager (Church, Kuang, & Liu, 2018). In such cases, the manager’s benefits from budgetary slack are relatively indirect and may not be realized immediately (Shahzad, Mousa, & Sharfman, 2016). As a result, this generic form of budgeting places the company at a disadvantage (Hannan, Rankin, & Towry, 2006; Rankin, Schwartz, & Young, 2008).

Budgetary slack is the result of misrepresented private financial information to upper management by lower level managers. Budgetary slack implies the artificial overestimate of costs or underestimate of revenues and profits to obtain more achievable targets, resulting in higher financial and non-financial rewards (Endenich & Trapp, 2018). Slack is the variance between budget estimation and realization. In order to create slack, the subordinate overestimates costs and underestimates expected revenue (Asri & Agung, 2018; Widanaputra & Mimba, 2014). The opportunistic use of information is considered an ethical issue because the creation of slack may be inconsistent with role-related norms and desired virtues of managers (Maiga & Jacobs, 2007).

Creation of slack within the budgeting process results in unfair advantages due to misallocation of resources (Brunner & Ostermaier, 2017a). Misallocation of resources is detrimental to other units within the organization, investors, and other stakeholders (Douglas & Wier, 2000). Therefore, the creation of budgetary slack is an ethical dilemma, a predicament with a moral component on the part of the decision-maker (Douglas & Wier, 2005; Stevens, 2002).
Agency perspective. Agency Theory is the conflict of interest that arises between principal and agent that when both parties work to achieve competing goals (Asri & Agung, 2018). When a subordinate (agent) has private information and is able to conceal the information from upper level managers (principal), the individual may misrepresent the information to maximize their own utility. The principal and agent relationship can have opposing goals and interests; this conflict is termed as the agency problem (Panda & Leepsa, 2017). Under Agency Theory, slack is one form of increasing agency costs because decisions made regarding resource allocation are suboptimal due to the use of misrepresented information (Maiga & Jacobs, 2007).

Although Agency Theory suggests that self-interest serves as a primary motivation in the creation of budgetary slack, Abdullah and Brink (2017) suggest, in addition to self-interest, social preferences and values influence the decision to participate in the creation of budgetary slack. Furthermore, research suggests that social motives will provide insight into the discrepancy between theoretical predictions based on self-interest and observed behavior (Sprinkle, 2003).

The agency conflict between principal and agent comes at a cost. Agency costs occur due to the interest misalignment between both parties. Agency cost include the cost to a) examine and hire a suitable agent, b) collect data to correct performance benchmarks, c) monitor agent’s actions, d) setup and operate in accordance to the firm’s defined system, and e) inefficient decisions made by agent (Hastori, Siregar, Sembel, & Maulana, 2015; Panda & Leepsa, 2017).

Institutional ownership structure can play a positive role in reducing agency costs (Panda & Leepsa, 2017). However, results in the literature are mixed. Hastori et al. (2015) found that
ownership concentration does not significantly affect agency cost. In slight contrast, Yegon, Sang, and Kirui (2014) found institutional ownership affected agency cost while external ownership did not. A study of Agency Theory in non-financial Bangladesh firms proved that a free cash flow measure was positively affected by the institutional ownership (Rashid, 2015). Songini and Gnan (2015) examined family involvement in governance in small and medium-sized enterprises. The results of their study suggest that family involvement in governance has a significant, negative effect on agency cost, while family involvement in management had a positive and significant effect on agency cost.

Managerial ownership can help align the interests of the agent and principal. As the agent’s ownership increases, misuse of assets by the agent decreases. The change in behavior is attributed to the agent’s ability opportunity to share in the firm’s profit (Ang, Cole, & Lin, 2000). Some of the most recent studies done on managerial ownership and agency cost indicate that managerial ownership helps reduce agency cost (Panda & Leepsa, 2017). Managerial ownership has an inverse relationship with monitoring costs (Mustapha & Ahmad, 2011). Rashid (2015) found that managerial ownership reduces the asset utilization ratio under agency cost.

Good governance mechanisms can help reduce the agency conflict (Panda & Leepsa, 2017). A review of the literature resulted in the identification of different types of governance mechanisms used to mitigate the agency problem. Board structure, different committees, and CEO duality were identified as governance mechanisms. The size of a board positively affects the agency cost (Rashid, 2015; Siddiqui, Razzaq, Malik, & Gul, 2013). A large board will reduce the agency cost (Hastori et al., 2015). Rashid (2015) did notice that independent board members positively affected agency costs. In a study of 1,126 Chinese firms, the presence of audit committees reduced the agency cost (Cai, Hiller, Tian, & Wu, 2015). Although CEO
duality was identified as a governance mechanism impacting agency cost, Rashid (2013) did not find a significant relationship between CEO duality and agency costs.

Factors impacting slack creation. Agency Theory is one theory of human behavior among many theories posited in the literature (Maiga & Jacobs, 2007). Prior studies suggest factors such as social pressure (Young, 1985), aversion to lying (Chow, Cooper, & Haddad, 1991), personal integrity (Chow, Cooper, & Waller, 1988), and ethical considerations (Noreen, 1988) may potentially mitigate self-interested behavior, thus impact slack creation. Furthermore, an accounting study specifically incorporating ethical reasoning into an agency design find that moral reasoning reduces narrow self-interest behavior (Rutledge & Karim, 1999). Luft (1997) and Ghosh (2000) argued that it is important to consider ethics in terms of perceptions of equity, when researching accounting-related behavior.

Although ethics continue to be issues in budgetary slack research, ethical concerns might not decrease budgetary slack (Daumoser et al., 2018). In a study of ethical positions’ effect on budgetary slack, Douglas et al. (2007) showed that relativism increases budgetary slack, and idealism decreases budgetary slack. This conclusion is reinforced by Brunner and Ostermaier (2017a). The authors showed that managers used peer dishonesty to justify dishonest budgeting behaviors. Others argue that fairness and reputational concerns decrease budgetary slack (Arnold & Schreiber, 2013). For example, perceived unfairness of pay has a negative effect on employee budgeting decisions (Guo et al., 2017).

An individual’s past performance can affect their perception of self-efficacy, which can lead to a higher propensity to create budgetary slack (Abdullah & Brink, 2017). Involving managers in the budgeting process and information asymmetry levels may lead to increased slack. Research investigating participative budgeting and information asymmetry has yielded
mixed evidence (Daumoser et al., 2018). Social norms differ between cultures (Forsyth et al., 2008). Cross-cultural differences in social norms play a role in slack creation behavior (Abdel-Rahim & Stevens, 2018; Altenburger, 2017; Blay, Gooden, Mellon, & Stevens, 2018; Brunner & Ostermaier, 2017a).

**Ethical ideology.** There is a stream of empirical studies establishing the relationship between ethical ideology and ethical decision-making (Forsyth, 1980, 1992; Forsyth & Pope, 1984). Budgetary slack creation is viewed as an ethical issue (Nouri & Parker, 1998). The misrepresentation of subordinate capabilities, by failing to disclose all information, informed insights, and providing a distorted picture of possibilities, may result in the misallocation of financial resources. Thus, the creation of slack becomes an ethical dilemma (Merchant, 1985).

The concerns for ethics are determined by the situation and the individual (Jones, 1991). For example, when the subordinate internalizes social norms for honesty and fairness, and the view regarding slack creation is inconsistent with these norms, participation in the budgeting process will arouse ethical concerns in the subordinate (Maiga & Jacobs, 2007). Therefore, an individual’s ethical ideology plays a key role in judgement regarding ethically questionable actions and decisions in business settings (Beekun, Hamdy, Westerman, & HassabElnaby, 2008).

The ethical position of an individual underlies distinctions in ethical thought, which has been shown to direct ethical decision-making and behavior (White et al., 2018). Research suggests honesty is one of the most prominent social norms across cultures and in budgeting. Furthermore, research suggests that the preference to adhere to a norm of honesty constrains slack (Newman, 2014). However, when faced with challenging budgetary targets, managers may only focus on the financial aspects of their decisions and neglect the ethical aspects (Endenich & Trapp, 2018). In this setting, managers are more likely to adopt peer dishonesty than peer
honesty (Brunner & Ostermaier, 2017a). When the subordinate internalizes social norms for honesty and fairness, and the view regarding slack creation is inconsistent with these norms, participation in the budgeting process will arouse ethical concerns in the subordinate (Blanchette, Pilote, & Cadieux, 2002).

Ethical behavior is not only affected by individual factors but also by organizational factors (Craft, 2013). According to Blay et al. (2018), despite the claims for honesty’s role in reducing slack, prior research cannot directly attribute changes in slack to preferences for honesty. For example, when a manager’s pay is tied to their subordinate’s report, non-pecuniary factors, such as altruism and fairness, affect slack (Douthit & Stevens, 2015).

Prior studies suggest that the framing of rewards has a pronounced effect on employee behavior (Christ, Sedatole, & Towry, 2012; Presslee, Vance, & Webb, 2013). The way in which managers are compensated can affect their moral reasoning and, in turn, influence their decisions (Church et al., 2018). Noncash compensation may lead to the selection of easier performance goals, but employees are more committed to the goals, than cash compensation (Presslee et al., 2013). Monetary incentives mitigate, but do not remove the impact of affect when affect leads to dysfunctional behavior (Farrell, Goh, & White, 2014). Affect can support desirable behavior, through negative affect’s ability to drive preferences for honesty, despite incentives for opportunism. Preferences for honesty affect slack levels when a factual assertion of cost is required (Blay et al., 2018).

Individuals integrate multiple moral philosophies in decision making. An individual’s moral philosophy is based on a set of rules and principles. During decision-making, these rules and principles are used to distinguish between right and wrong (Schlenker & Forsyth, 1977). Furthermore, the measured difference between the three categories of philosophy (teleological,
deontological, and skepticism) represents an individual’s level of idealism and relativism. These two constructs help explain why individuals with similar backgrounds and characteristics interpret ethical situations differently (Forsyth, 1980).

**Idealism.** An idealistic individual is concerned with the welfare of others and believe in the production of positive consequences that benefit everyone involved (Li, Chao, Chen, & Zhang, 2018). The idealism construct captures the degree to which an individual believes a potentially harmful act is always avoidable. Adherence to universal moral rules is the criteria by which an action should be deemed moral or not (Forsyth, 1980). Moral judgement of an action is viewed in terms of consequences of the action or its effect on the welfare of others. When making an ethical judgment, idealistic individuals avoid choosing the lesser of two evils, since the decision would still result in harm to others (Li et al., 2018).

In a study of earnings manipulation, Nasir, Sallem, and Othman (2014) examined the relationship between ethical ideology of accounting practitioners and students and the propensity to behave in an unethical manner. Earnings management activities are a result of the conflict of interest between the shareholder and management. The results of the study showed a significant and negative relationship between idealism and earnings management behavior. In other words, as the idealism score increased, earnings management behavior decreased. This suggests that idealistic individuals are less likely to participate in earnings management activities, thus, idealistic individuals tend to reject unethical behavior.

An idealist believes morally correct actions will result in positive outcomes. In contrast, morally incorrect actions will lead to negative outcomes (Forsyth, 1980). Therefore, a highly idealistic (low relativistic) individual would be negatively correlated with the creation of budgetary slack (Abdullah & Brink, 2017). This can be attributed to the being less likely to
tolerate questionable behaviors that may lead to negative outcomes (Li et al., 2018). Individuals with high levels of idealism base their decisions on moral norms and principles. These individuals are more likely to make morally preferred judgement on a moral issue (Chao, Li, & Chen, 2016; Li et al., 2018; Rawwas, Arjoon, & Sidani, 2013).

**Relativism.** According to Forsyth et al. (2008), individuals with high levels of idealism “have more cognitive faith in moral principles, norms or laws and use these principles to define what is right and what is wrong” (p. 815). This is in contrast to individuals with high relativism (Li et al., 2018). Relativistic individuals believe that the morality of an action depends upon the nature of the situation and the individuals involved (Napal, 2014). Emphasis is placed on circumstances rather than on ethical principles or norms that were violated when making moral judgements (Forsyth, 1992).

Relativism is seen as a consequence perspective, that is, an individual’s position can change based on their view of the outcomes (White et al., 2018). The relativism construct represents the belief that an ethical judgement regarding a particular situation cannot be made on a predetermined set of morals. Individuals with high relativistic beliefs will reject the idea of reliance on universal rules. They are of the belief that alternative perspectives can be used to reach moral judgement. Factors such as the individual and situation should be considered. Furthermore, relativistic individuals believe moral and immoral actions can result in a combination of positive and negative outcomes (Forsyth, 1980). To a highly relativistic individual, appropriateness of an action depends on the situation and the individuals involved (Li et al., 2018).

A review of the literature suggests that relativism was positively correlated with unethical behavior (Greenfield, Norman, & Wier, 2008; Henle, Giacalone, & Jurkiewicz, 2005; Tian,
Nasir et al. (2014) found that idealism and relativism were significantly related to earnings manipulation behavior. The results of the study confirmed that there was a significant positive relationship between relativism and the unethical earnings management behavior. The author attributed this behavior to the likelihood of relativistic individuals to weigh circumstances more than ethical principles when making decisions. They gave an example using shareholder wealth maximization, stating that the individual would engage in earnings management activities to show artificial profits and not feel their actions were wrong since they are doing it for the shareholders.

In a study of budgetary slack, Harvey (2015) examined the influence of individual ethical factors. Specifically, the author examined the influence of and individual’s ethical ideology in relationship to their propensity to create budgetary slack. The results of the study indicated a positive correlation between propensity to create budgetary slack and the individual’s level of relativism. This was attributed to the inclination of relativistic individuals to make decisions on a situational basis rather than by applying moral rules. Individuals high in relativism are more likely to consider the situation and others involved rather than judging a specific action using universal principles or norms. To these individuals, harm is unavoidable, and sometimes you can only choose between the lesser of two evils (Li et al., 2018).

**Equity.** Horizontal equity is said to be present in an environment where fair treatment is perceived among colleagues or peers. In contrast, horizontal inequity is a result of an environment where the perception is one of unfair treatment compared to colleagues or peers with the same responsibility (Matuszewski, 2010). With regards to the influence of equity on budgeting settings, research suggests that managers are less likely to participate in the creation of budgetary slack whenever they have a fair perception of budgetary procedures (Fisher et al.,...
Given that pay relative to referents affects individuals’ pay satisfaction more than absolute pay (Williams, McDaniel, & Nguyen 2006), pay equity and social comparison play an important role in equity evaluation (Drake et al., 2014).

In a recent study, Guo et al. (2017) examined how pay dispersion across different levels within an organization affected decisions of employees. The study used a traditional budgeting setting where the proposed project budget was prepared by a subordinate and the superior sets cost thresholds for project funding. The authors provided evidence that suggests high vertical pay dispersion results in subordinates misreport to a greater extent than when vertical pay dispersion is low.

According to Guo et al. (2017), consequences of high vertical pay dispersion are twofold. First, in settings where vertical pay dispersion is high, superiors were likely to set significantly higher cost thresholds, which indicate a higher tolerance for cost overstatement. Furthermore, results suggested superiors in settings with high vertical pay dispersion were more concerned with equity than superiors in low vertical pay dispersion settings. Second, subordinates, on average, misreported to a greater extant in a high vertical pay dispersion setting. Their findings suggest that a firm’s budgeting environment can be compromised by high vertical pay dispersion due to the opportunistic action of misreporting information by lower-ranking employees may remain unchecked by higher-ranking employees.

When subordinates view budgetary targets as fair and achievable, they are likely to behave more ethically. This implies that subordinates are less likely to manipulate information in order to achieve financial and non-financial rewards (Clor-Proell, Kaplan, & Proell, 2015). In addition to budgetary procedures, perceived equity in reward systems are positively correlated with honesty in budgeting (Drake et al., 2014). However, when the perception of inequity is
present, negative reactions may result in order to restore equity (Clor-Proell et al., 2015). Demotivation can occur when employees think goals are unlikely to be achieved, even with significant effort (Endenich & Trapp, 2018). As a response to perceived unfairness, employees will misreport information. This setting increases incentives for employees to commit fraud (Clor-Proell et al., 2015; Drury, 2015).

**Self-efficacy.** Self-efficacy is a psychological construct that stems from social cognitive theory (Bandura, 1977). Self-efficacy is an individual’s belief about their chances of successfully completing a specific task or objective (Blewitt et al., 2018). Self-efficacy affects the choices made by an individual regarding tasks, goals, and roles they perform (Razek & Coyner, 2014). For managers, self-efficacy refers to the perceived capacity to be effective and influential within the firm (Fast, Burris, & Bartel, 2014).

Self-efficacy is influenced by an individual’s belief about the degree to which they are in control (Lussier, 2013) and enables them to apply self-control (Jayawardena & Gregar, 2013). According to Paglis (2010), self-efficacy positively impacts persistence of behavior. There is a strong positive connection between self-efficacy and ethical decision making (Welch, 2013). The significant and positive relationship between self-efficacy and ethical decision making was confirmed again by (Blewitt et al., 2018).

In a recent study, Abdullah and Brink (2017) examined the influence of self-efficacy on manager’s decisions to create budgetary slack. Individuals with high self-efficacy believe they can successfully complete a task or objective. In the study, individuals with high prior performance should believe in their ability to accurately set future cost targets. The authors hypothesized that individuals with high self-efficacy would create less budgetary slack than those with lower self-efficacy. The results of the study indicated that past performance can
affect perceptions of self-efficacy. Under inequity and high self-efficacy, the probability of slack creation was greater than when self-efficacy was low. When equity was present, the opposite was true. The probability of slack creation was lower when self-efficacy was high.

**Participative budgeting.** The intense budgetary target-setting process involves managers from all levels within the organization (Anthony, Govindarajan, & Dearden, 2007). This comprehensive and complex process profoundly impacts managers’ relationships with their firms (Kramer & Hartmann, 2014). Budgeting helps determine managers’ economic positions through specifying formal targets and resource allocation (Horgren, Datar, & Rajan, 2015). Budgeting practices can send different social signals, which can affect managers’ feelings about and attitudes towards the firm (Kyj & Parker, 2008).

In contrast to the traditional top-down approach, participative budgeting requires the firm to rely on managerial reporting. This bottom-up approach empowers managers to influence their day-to-day activities and performance targets (Heinle, Ross, & Saouma, 2014). According to Braun and Tietz (2018), one advantage of participative budgeting is the ability for managers to set goals, resulting in increased motivation to reach specified goals. However, one of the main criticisms of bottom-up budgeting is the opportunity for managers to benefit from strategically misreporting private information (Heinle et al., 2014).

Heinle et al. (2014) suggest, under top-down budgeting, to ensure truthful reporting, the budget must limit the principal’s payoff, which means surplus must be destroyed, shared with the manager via rents, or both. The authors find that total surplus is always maximized with bottom-up budgeting. They attribute this to the optimal bottom-up contract always sustains truth-telling with less surplus destruction than the optimal top-down contract. However, due to levels of information asymmetry, the principal will still prefer top-down budgeting.
Participative budgeting has been studied as an antecedent of managerial performance, using cognitive and motivational theories to test its direct and indirect affects, via trust (Lau & Buckland, 2001) and fairness (Lau & Tan, 2006). Participative budgeting has also been used to explain budgeting effectiveness via slack building behavior (Gallani et al., 2018). Because budgetary target-setting process involves managers from all levels within the organization, budgetary constraints may originate higher up in the organizational hierarchy (Merchant & Van der Stede, 2012). This can result in managers making tradeoffs between advancing self-interests and truthful reporting. When making such tradeoffs, managers face the temptation to increase personal wealth by misreporting information (Chen, Tang, & Tang, 2014).

According to Vohs, Meade, and Goode (2008), the financial measures in budget reporting activate the concept of money, which can trigger a market-based decision frame (Kouchaki, Smith-Crowe, Brief, & Sousa, 2013). This can result in a cost-benefit consideration, in making reporting decisions, where the primary aim is to improve one’s economic well-being. Bringing a manager’s own financial interests to the forefront can lead to self-interest dominant decision making (Kouchaki et al., 2013). The heightened desire to advance self-interests may outweigh a managers’ moral self-control (Kish-Gephart, Detert, Trevino, Baker, & Martin, 2014). Therefore, participation in budgetary target setting can be complemented by focusing on managerial responses to the process (Kramer & Hartmann, 2014).

Prior accounting studies have examined honesty in participative budgeting settings where managers directly benefit from slack creation (Brown et al., 2014; Church et al., 2018; Rankin et al., 2008). Findings suggest that managers tend to create slack in their budgeting reports. Church et al. (2018) studied how managers’ budget reporting behavior was influenced by measurement basis used in budget preparation and manager’s slack benefits in budget execution.
There were two notable findings of the study. First, financial measurement basis lead to significantly lower honesty than a nonfinancial measurement basis when managers received direct slack benefits. Second, the desire to advance self-interest mediated the effect of financial measurement basis on honesty. Indirect slack benefits lead to significantly lower honesty than direct slack benefits under nonfinancial measurement basis use; however, not when financial measurement use. This suggests that the effect of indirect slack benefits on honesty was mediated by a lessened moral concern in the decision-making process.

Motivating truthful reporting by subordinates is an important issue in organizations (Brown, Fisher, Peffer, & Sprinkle, 2017). Depending upon interests held by the individual, participation in the budgeting process can cause budgetary slack (Pello, 2014). Subordinates have the freedom to determine budgetary targets that are in their best interests at the expense of the firm (Asri & Agung, 2018). Proximity to operations provides subordinates opportunity to possess the private information necessary to create slack. If subordinates share their private information, they can positively impact the firm’s planning and control. However, subordinates benefit from misreporting (Blay et al., 2018). Gallani et al. (2018), noted that providing employees an opportunity to misreport private information is a disadvantage of employee participation in the budgeting process. Brown et al. (2017) suggested that a participative budgeting process can lead to budget ratcheting. When superiors set budgets based on subordinate private information, superiors anticipate strategic reporting and adjust budgets to reduce the slack in subordinates’ budgets.

Traditional theory does suggest that subordinates will maximize slack levels; however, there is a body of research that suggests subordinates have intrinsic preferences for adhering to social norms that influence their slack levels (Cardinaels & Yin, 2015; Douthit & Stevens, 2015).
Furthermore, when objectives are set collectively and agreed upon, managerial performance is expected to increase. This is attributed to the shared responsibility in creating the objectives. Under this form of participative budgeting, employees have a positive influence on budgetary slack (Saraswati & Usman, 2018). Higher participation in the budgeting process can result in decreased budgetary slack levels (Asri & Agung, 2018; De Baerdemaeker & Bruggeman, 2015).

In a study of top-down and bottom-up budgeting, Kramer and Hartmann (2014) developed a theoretical framework to predict individual responses to tightness versus looseness of the organizational process of budgetary target setting. The study focused on two behaviors: budgetary slack creation and managerial performance. The authors demonstrated that the effects of top-down and bottom-up budgeting on managerial performance and budgetary slack creation are mediated by managerial perceptions of the social or economic nature of the relationship with the firm. Their findings suggest that a dominance of top-down budgeting enhances managers’ perceptions of an economic relationship with the firm, which results in lower budgetary slack. In addition, their results suggest that bottom-up budgeting enhances managers’ perceptions of a social exchange relationship with the firm, which results in higher, self-reported, performance.

When the subordinate has wide discretion over the budget (Haesebrouck, 2017) and when budgets can be rejected (Brunner & Ostermaier, 2017b); honesty preferences are a significant driver of reporting behavior. In a study of 144 undergraduate students, Brown et al. (2017) examined the effect of budget framing and budget-setting process on managerial reporting. The authors found that framing did not significantly impact slack levels when either the subordinate or superior set the budget. However, the study did produce some counterintuitive findings. Superior’s welfare was greater when subordinates set the budget. This was attributed to subordinate budget reporting was more truthful when the subordinate set the budget. Second,
when superiors set the budget, they might set a budget level that resulted in subordinate rejection. Doing so resulted in no earnings for the superior or subordinate. This highlighted the non-pecuniary dimensions of the budget and reduced potential budgeting errors made by superiors. Therefore, increased budget-setting discretion on behalf of the subordinate can increase the superior’s welfare and avoid costly mistakes that occur when superiors set the budget.

**Information asymmetry.** Firms often use participative budgeting as a way to collect information in hopes of reducing uncertainty, improve planning, and increase profits (Brink et al., 2017). However, doing so can put the firm at a disadvantage because the employee has the opportunity to misreport private information (Gallani et al., 2018). Research demonstrates how superiors use private information in non-budgeting contexts. For example, when superiors hold better information regarding the subordinates’ abilities, the superior motivates subordinates to increase their efforts through the provision of biased information about their abilities (Rosaz, 2012).

Brink et al. (2017) examined an environment where the superior possessed and used private information in a budgeting context. Their results indicate that superiors strategically misrepresent cost system information. Specifically, cost accuracy was overstated when low cost ranges were reported and understated when high cost ranges were reported. The opportunity to strategically misrepresent information reduced slack and increased superiors’ earnings when budgets were unilaterally set by subordinates, but not when superiors had the final decision authority. Therefore, when subordinates unilaterally set their budgets, the superiors’ misrepresentation benefited the firm.
Culture. Culture is the system of shared values and norms that regulate the social life of groups (Hofstede, 2015). Current research considers the effects of social norms (Blay et al., 2018). Social norms can affect an individual’s behavior and how they try to conform to the norm. Types of behaviors supported by the social norms can vary among different cultures. Although honesty is a prevalent norm in many cultures, it is not uncommon that social norms favor dishonesty/opportunism (Altenburger, 2017; Cohn, Fehr, & Marechal, 2014).

Research on misreporting in participative budgeting suggests that subordinate preferences for adhering to an honesty norm reduce budgetary slack and firms can benefit from understanding these preferences for honesty (Douthit & Stevens, 2015). Even in the presence of information asymmetry and financial gain from misreporting, a strong personal preference for honesty will result in a conformation to this norm. Similarly, individuals with a weaker preference for honesty can be motivated by social norms to report honestly (Abdel-Rahim & Stevens, 2018).

Peer influence can affect honesty in reporting. In a study of peer influence on managerial honesty, Brunner and Ostermaier (2017a) found that dishonesty increased whenever peers participated in dishonest reporting; however, dishonesty did not decrease to the same degree when peers reported honestly. Justification to report dishonestly might be fueled by partial transparency and disappointment in peer behavior. Economic penalties can be used to influence social norms for honesty. Having a code of conduct without penalties result in higher dishonest reporting when compared to settings with penalties (Brink et al., 2017). If an individual is dedicated to honesty, they will report honestly. However, if an individual does not have a preference for honesty, honest communication is extremely costly for the firm (Daumoser et al., 2018). Cardinaels and Jia (2016) found that the presence of an audit system allows peer-
descriptive norms to influence reporting behaviors. Furthermore, audits tend to reduce the level of misreporting.

It is important for managers to understand that conducting business with individuals from different cultures can be difficult. For example, the management structure of Brazil is one where the superior protects and guides their subordinates. Protection and guidance are provided in exchange for loyalty. This web of reciprocal obligations can lead to positive and negative outcomes (Ardichvili et al., 2011). The structure is based on the use of favors with people in influential positions. This can be seen through the use of jeitinho, known to Brazilians as a way to exploit a personal relationship in order to attain an objective. People in this society believe that the group is more important than the individual, offering protection in exchange for loyalty (Mind Tools, 2017b).

Brazilian culture is more relationship oriented. Formation and maintaining of relationships are ingrained in the fabric of society. When compared to the United States, the country does not place as much emphasis on relationship building. This aspect alone can lead to major issues when doing business with individuals from Brazil. For Brazilians, trust is earned over time. It is custom for relationships to be formed prior to doing business. Brazilians use communication as a way to connect with others. With that, United States’ managers must take the high context Brazilian culture into consideration (Victor, 2018; Mainardes, Nunes, & Pinheiro, 2013).

High context refers to societies in which people have close connections. Since Brazilian culture is high context in nature, establishing relationships when conducting business is very important. The process must take place prior to the discussion of business (Victor, 2018; Mainardes et al., 2013). This may be an issue for a low context culture like the United States,
where business relationships begin and end quickly. Low context cultures, like the United States, view communication as a way to exchange information. Brazilian culture views conversations as a way to connect with each other. Often conversations use nonverbal elements such as voice tone, gestures and facial expressions to get the point across. Brazilians exaggerate when trying to make a point. To individuals from a low context culture, this may come off as being dishonest (Victor, 2018; Mainardes et al., 2013).

Within the context of nonverbal communication, Brazilians are very unique. When compared to United States’ nonverbal communication, Brazil’s contrasts significantly (Victor, 2018). One area in which the two nations differ, with regards to nonverbal communication, is personal distance. According to Victor (2018), the personal space distance is closer in Brazil, with an average of three to four inches closer than in the United States. Another area in which the two nations differ is in the emphasis to touch. Contrasting significantly from the United States, when greeting someone in Brazil, it is common to have a prolonged handshake, greeting kisses between men and women, and even hugs (Global Road Warrior, 2018a; Victor, 2018). Brazilians are also known to use more expressive when talking. Unlike the United States, who limit movement to just their arms and hands, Brazilians will also move their torsos to during conversations (Victor, 2018).

Another area where the difference in context could cause problems is disagreements. Brazilians take disagreements personally, which means any disagreement must be taken care of before work can continue. This could cause even more problems if an individual from a low context culture does not realize the impact of the disagreement, which is easy to understand since low context cultures depersonalize disagreements and attempt to handle them in a rational manner (Victor, 2018; Mainardes et al., 2013).
Brazil vs. United States cultural dimensions. Hofstede's (1983) 11-year study on
culture suggested that the diversity of approaches in national and even regional cultures affect
performance in management. Deep culture is acquired in infancy and resides in unconscious
shared values. Therefore, deep culture cannot be changed. In contrast, a more superficial culture
is acquired in adulthood. This form of culture is more conscious and amendable to change
(Hofstede, 2015). Cultural differences promote culturally specific ways of working, even within
the same organization (Hofstede & Tipton Murff, 2012). Furthermore, Wu (2005) believed
differences in culture play an important role in the application of Agency Theory, as well as in
concepts such as budgetary slack. Therefore, attitudes towards budgetary slack are expected to
differ. One culture may not see the function of budgeting from the perspective of another
culture. For example, differences between an individualist society and collectivist society impact
attitudes towards budgetary slack.

Power distance index (PDI). A country scoring a high PDI represents an acceptance of
inequality within their society. People understand their place and expect power to be distributed
unequally throughout society. A low PDI score represents an equal dispersion of power and the
society does not accept situations where power is not equal (Hofstede, 2013, 2015; Hofstede,
Dignum, Prada, Student, & Vanhée, 2015; Mind Tools, 2017a). Brazil scored a 69 in this
dimension, which reflects a society that believes in a hierarchical distribution of power. This
means that Brazilians with more power will have greater benefits than those with less power,
which is believed to be acceptable (Hofstede Insights, 2018).

When compared to the United States, with a score of 40, power appears to be more
evenly dispersed. Rather than only having manager make decisions, the United States likes to
involve others in the decision-making process. This is especially true if the employee will be
directly affected by the decision (Hofstede Insights, 2018). Within a Brazilian organization, only individuals “at the top” are viewed as having all the answers, while the United States view supervisors and employees as almost equals (Hofstede Insights, 2018).

Power distance can influence the level of budgetary slack (Curtis, Conover, & Chui, 2012; Lau & Eggleton, 2004). Low power distance is associated with high budget emphasis and high information asymmetry. This combination leads to low propensity to create slack. Low information asymmetry will have the opposite effect. In contrast, high power distance, low budget emphasis with high information asymmetry, leads to lower propensity to create slack (Andersen & Lueg, 2017).

**Individualism vs. collectivism (IDV).** Individualism is the degree of interdependence a society maintains among its members. Individualist societies look after themselves and direct family only. Collectivist societies view people as part of a group and take care of them in exchange for loyalty (Hofstede, 2013, 2015; Hofstede et al., 2015). A high IDV score indicates a weak connection with those outside of the small core group. Countries scoring low on the IDV dimension represents a society loyal to people in the large group (Mind Tools, 2017a). Brazil scored a 38 in this dimension, which means people are part of large, cohesive groups. Loyalty is exchanged for protection from the group (Hofstede Insights, 2018).

Unlike Brazil, the United States has a very individualistic society. This is reinforced by the United States scoring 91 on IDV. It is understood in the United States that you should look after your family only and do not expect much help from others. It is also believed that work and family should not mix (Hofstede Insights, 2018). Brazil is on nearly the complete opposite side of the spectrum, scoring 38. This score means people in Brazilian society are part of large, cohesive groups. Loyalty is exchanged for protection from the group (Hofstede Insights, 2018).
The dimensions of collectivism and uncertainty avoidance influence the communication of private information by subordinates. Collectivist and high uncertainty avoidance cultures will misreport less than individuals from individualistic and low uncertainty cultures, in the absence of face-to-face interaction (Chow, Hwang, Liao, & Wu, 1998).

**Masculinity vs. femininity (MAS).** Scoring high in this dimension represents a society driven by competition, while a low score means caring for each other and quality of life are the dominant values (Hofstede Insights, 2018). In masculine societies, men are supposed to be assertive and their roles hardly overlap with women’s. However, in feminine societies, there is a great overlap between male and female roles. Good relationships and cooperation have great importance within the society (Hofstede, 2013, 2015; Hofstede et al., 2015; Mind Tools, 2017a). Brazil is very intermediate with regards to MAS, scoring a 49.

Brazil is intermediate in this dimension, scoring 49. However, the United States tends to lean more towards masculinity, with a score of 62. Masculinity and individualism seem to go hand in hand (Hofstede Insights, 2018). Unlike the Brazilian society, the roles of men and women overlap less. In a masculine society, like the United States, demonstrating your success is seen as a positive characteristic. Money and achievements are deemed important to the United States, while the Brazilian society values modesty and quality of life (Mind Tools, 2017a). The masculinity dimension suggests that individuals would be motivated by the challenge to meet tight budget standards. Therefore, nations higher (lower) on the masculinity dimension would have greater (less) use of budget-based financial incentives and more (less) rigid management attitudes towards achieving budgetary objectives (Douglas & Wier, 2005).

**Uncertainty avoidance index (UAI).** Uncertainty avoidance reflects how well people in the society handle the unknown. Do these individuals feel threatened or anxious about
uncertainty? Or do individuals just let things happen? Brazil, like the majority of Latin
America, scored high on UAI with a 76. Laws and rules are seen as important to making the
world a safer place (Hofstede Insights, 2018). With that in mind, these societies are conservative
unless the situation requires a more flexible attitude (Mind Tools, 2017a). This is visible through
the concept of jeitinho brasileiro. According to Hofstede, Garibaldi de Hilal, Malvezzi, Tanure,
and Vinken (2010), jeitinho is the “knack for managing difficulties and adversities by exploring
the possibilities found in different systems of rules” (p. 349).

Brazilian society shows a strong need for rules; however, the need to follow the rules is
very weak. This is demonstrated by Brazil scoring high on UAI with a 76. Brazilians need these
rules to help keep structure in their lives. The United States on the other hand views rules and
structure a little bit differently. Scoring a 46 on UAI, the United States does not require a lot of
rules. And in comparison, to high-scoring culture, the United States is less emotionally
expressive (Mind Tools, 2017a; Hofstede Insights, 2018). Uncertainty avoidance is expected to
provide incentive to create budgetary slack at the individual level (Douglas & Wier, 2005).
Cultures that are more risk averse, high-scoring on UAI, are more likely to create budgetary
slack (Dunk & Nouri, 1998).

A concept that many Brazilians associate with their culture is jeitinho (Hofstede et al.,
2010). The term is a native paradigm known to and defines the Brazilian culture. According to
Amado and Brasil (1991), the jeitinho provides us with the key for understanding what it means
“to be Brazilian” and for deriving some insights into Brazilian management. Jeitinho is
problem-solving strategy that involves using social influence and bending or breaking rules to
achieve a goal or objective during a difficult situation (Duarte, 2006; Ferreira, Fischer, Porto,
Pilati, & Milfont, 2012; Rodrigues, Milfont, Ferreira, Porto, & Fischer, 2011). However, the
phenomenon known to Brazilian culture, makes getting anything done very cumbersome (Margolis, Bezerra, & Fox, 2001). Jeitinho influences the actions of Brazilians. To them, laws do not apply. In business, jeitinho brasileiro is a rule for the changing of rules (Hofstede et al., 2010).

Jeitinho is a way to circumvent bureaucracy, which can be viewed as breaking the law, or emotionally exploit an individual in order to attain an objective. The formation of jeitinho can be credited to the character dynamic of Brazilians. A stereotypical Brazilian prefers to enjoy more intimate and informal relationships. It is because of these two opposing social practices, jeitinho was able to emerge. The concept can be classified in one of two ways. There is positive and negative jeitinho. One does not cause harm, while the one does (Ferreira et al., 2012). Jeitinho can be used as a creative way to solve a problem where all parties involved receive a satisfactory outcome. However, this way of problem solving can be viewed as corruption (Torres & Dessen, 2008).

According to Moreno (2002), Latin American publics are, on average, more permissive of certain corrupt practices than most publics from Western Europe and East Asia. One of the most recent examples of corruption in Brazil involves the government. Considering that Brazil is one of the top-rated economies in the world, it is surprising to some that it rates somewhere between socialist Cuba and poverty-stricken Jamaica when it comes to corruption. Even when dealing with non-governmental people, Brazilians want a little something extra to do their job (Global Road Warrior, 2018b). In 2016, President Rousseff’s political party and the state-run energy company, Petrobras were involved in a major corruption scandal, which resulted in the impeachment of Rousseff. This scandal has resulted in a lower Corruption Perceptions Index
(CPI) score for 2015, reducing their CPI score in 2014 from 43 to 38 (Transparency International, 2018).

CPI is used as an indicator of corruption with regards to the public and political sectors of a country. The index varies from 0 to 100. The lower the value of CPI is the higher is the perceived corruption of the country. In contrast, a high value of CPI indicates a lower level of corruption. CPI uses many sources of corruption related data to derive an index value. There are 13 sources of data used to calculate the CPI of a country (Transparency International, 2018). However, not every country is measured by all thirteen sources. In fact, some countries are only evaluated by three sources, while other countries are evaluated using ten sources. This is due to the sources being used in the CPI differ in the number of countries they cover (Saisana & Saltelli, 2012). Currently, Brazil is ranked 96th out of 180 countries with regards to corruption, while the United States is ranked 16th. In addition, Brazil and the United States have a CPI score of 37 and 75 for 2017, respectively. This puts Brazil on the corrupt side of the spectrum, with a score of 0 representing highly corrupt and a score of 100 representing very clean (Transparency International, 2018).

**Pragmatic vs. normative (PRA).** This dimension is described as the degree to which change in status-power rules is accepted (Hofstede, 2013, 2015; Hofstede et al., 2015). High scoring countries are more pragmatic, thrifty, and long-term oriented. Low scores reflect a society that is more religious and nationalistic (Mind Tools, 2017a). Brazil scored a 44 in this dimension, which means a mixture of long-term and short-term focus. A combination of pragmatic and normative approaches reflects the importance of short-term gains and quick results and sees thrift and education as a valuable way to prepare for the future (Mind Tools, 2017a; Hofstede Insights, 2018).
**Indulgence vs. restraint (IVR).** This dimension reflects the ability of the society to control desires and impulses (Hofstede, 2013, 2015; Hofstede et al., 2015). A high IVR represents weak control or a country that encourages gratification. Scoring low in this dimension means the society has a higher level of restraint and emphasizes suppressing gratification (Mind Tools, 2017a; Hofstede Insights, 2018). With a high score of 59, Brazil is classified as a society that is more optimistic and releases their impulses and desires (Hofstede Insights, 2018).

With regards to the remaining dimensions, PRA and IVR, both countries score similarly. In the PRA dimension, Brazil scores 44 and the United States scores 26. Lastly, Brazil and the United States scored 59 and 68, respectively, in the IVR dimension (Mind Tools, 2017a).

**Seven dimensions of Brazilian culture.** After a decade of researching preferences and values of people across a number of cultures, Trompenaars and Hampden-Turner (2012) developed a seven-dimensional model distinguishing people from one culture to another. Each dimension scores a country on a scale of 0 to 100 percent (Mind Tools, 2017b). The following will examine the seven dimensions with regards to Brazil.

**Universalism vs. particularism.** Societies fitting within the universalism dimension place high importance on laws, rules, values, and obligations. Specifically, these societies believe rules should come before relationships (Mind Tools, 2017b; Trompenaars & Hampden-Turner, 2012). Based on this context and information previously presented in this paper, Brazil would identify better with the particularism dimension. According to Mind Tools (2017b), Brazil would be considered a typical particularistic culture. Particularistic cultures allow relationship to dictate the rules in which they live by as well as their response to a given situation (Bălan & Vreja, 2013). How and what rules Brazilians follow will differ depending on what is happening and who is involved (Mind Tools, 2017b).
**Individualism vs. communitarianism.** Individualistic societies believe that the individual achievement, that the individual has the power to make their own decisions and care for themselves (Bălan & Vreja, 2013). As in the Hofstede dimension on Individualism vs. Collectivism, Brazil is considered a more communitarian culture. People in this society believe that the group is more important than the individual, offering protection in exchange for loyalty (Bălan & Vreja, 2013; Mind Tools, 2017b; Trompenaars & Hampden-Turner, 2012).

According to Trompenaars and Hampden-Turner (2012), individualism is the degree of interdependence a society maintains among its members. Individualist societies look after themselves and direct family only. Collectivist societies view people as part of a group and take care of them in exchange for loyalty. Individualistic societies are of the mindset that it is “every man for himself” (Smith, 1991, p. 241). The attitude towards budgeting and the building of budgetary slack becomes part of the working environment (Covaleski & Dirsmith, 1983) and the tendency to build budgetary slack for self-preservation is prevalent (Onsi, 1973). In contrast, a collectivist society places the goal of the society comes before the individual. Furthermore, societal interests prevail over those of the individual and the creation of budgetary slack for self-preservation becomes secondary (Wu, 2005).

**Specific vs. diffuse.** This dimension examines how far people get involved. In a specific culture, work and personal lives are kept separate. The prevailing belief in this society is a good relationship is not necessary for people to work together, nor does it provide much impact on achieving work objectives (Bălan & Vreja, 2013; Mind Tools, 2017b; Trompenaars & Hampden-Turner, 2012). Relationships are at the core of Brazilian culture. Family members and work colleagues fall under the same category of family. This leads to an overlap of personal life and work life. To Brazilians, relationships are more binding than any contract. It is more important
to build a good relationship with someone before discussing or focusing on business objectives (Mind Tools, 2017b). These are all qualities of a typical diffuse culture (Bălan & Vreja, 2013).

**Neutral vs. emotional.** Brazil is considered to have an emotional culture. It is easy to see how Brazil fits into this dimension. People in emotional cultures express their emotions. In these cultures, it is acceptable to show emotion, even in work settings (Bălan & Vreja, 2013; Mind Tools, 2017b; Trompenaars & Hampden-Turner, 2012). Brazilians use conversations as a way to connect with each other. Often these conversations use nonverbal elements such as voice tone, gestures, and facial expressions to get the point across. Brazilians even exaggerate when they are trying to make a point (Victor, 2018).

**Achievement vs. ascription.** In achievement-oriented cultures, people value performance no matter who you are. Brazilian culture can be seen as more hierarchical. Power, title, and positions matter in this culture (Bălan & Vreja, 2013; Mind Tools, 2017b; Trompenaars & Hampden-Turner, 2012). Social class is very important in the Brazilian culture. They are very quick to size up the social distance that exists between themselves and others. In the event of disrespect, Brazilians are just as quick to demand recognition of their social class from those considered to be “lesser” (Margolis et al., 2001).

**Sequential time vs. synchronous time.** Sequential time-oriented cultures prefer things happen in order. High value is placed on stick to plans and with the schedule. People in this type of culture do not appreciate when their time is wasted. To them, time is money (Bălan & Vreja, 2013; Mind Tools, 2017b; Trompenaars & Hampden-Turner, 2012). Based on the description of this dimension, Brazilian culture leans more towards synchronous time orientation. According to Trompenaars and Hampden-Turner (2000), you can recognize synchronic time orientation when a culture views schedules as subordinate to relationships and
when there is a strong preference for following where relationships lead. Plans and commitments are often viewed as flexible (Mind Tools, 2017b; Trompenaars & Hampden-Turner, 2012).

**Internal direction vs. outer direction.** The final dimension reflects how people relate to their environments. Cultures having internal locus of control they control their environment to achieve goals. On the other side of the spectrum, outer-direction cultures their environment controls them and it is essential to work with the environment to achieve success (Bâlan & Vreja, 2013; Mind Tools, 2017b; Trompenaars & Hampden-Turner, 2012). Brazil appears to lean more towards having an internal locus of control. Although Brazilians do believe laws and rules are necessary, Brazilians will work within their environments to achieve their goals or objectives. Thus, Brazilians attempt to control their environments, which is visible through the concept of jeitinho.

**Variables in the study.** The research aimed to examine social and cultural motivations to participate in the creation of budgetary slack. Independent variables for the research were equity, self-efficacy, ethical position, and culture. Equity and self-efficacy were measured by Abdullah and Brink’s (2017) case instrument. Compensation rates and cost savings were used to create equity and inequity treatments. Research regarding equity concerns has shown perceptions of fairness can influence the creation of budgetary slack (Daumoser et al., 2018). For example, perceived unfairness in pay has a negative effect on employees’ budgeting decisions (Guo et al., 2017).

Perceptions of self-efficacy were created by embedding information regarding the participant’s past performance regarding department management and their ability to accurately set budgets. Two treatments were used in this study: high efficacy and low efficacy. From this
information, participants then judged their ability to complete the given task. Self-efficacy impacts the intention to create budget slack. High self-efficacy, under inequity, leads to significantly higher intentions to create slack (Abdullah & Brink, 2017).

Ethical position were measured using the Ethical Position Questionnaire (EPQ) developed by Forsyth (1980). Ethical position were divided into two ethical ideologies: idealism and relativism. Each ethical ideology was then divided into high and low levels. Ethical position can have an effect on slack creation. As an individual’s idealism increases, their intention to create slack decreases (Abdullah & Brink, 2017).

Culture was coded in order to differentiate between American and Brazilian participants. In addition to coding nationality, regional coding can be used. To make a more meaningful conclusion among cultures, participants can be distinguished by regions within their country (Forsyth et al., 2008). Brazil can be divided into five regions: North, Northeast, Central-West, Southeast, and South (Hofstede et al., 2010). Within each of these regions, a racial divide can be seen. People of African descent populate the Northeast. Brazilians of European and Japanese descent call the South and Southeast home. Indigenous people have migrated to the North and Central-West regions of Brazil (Every Culture, n.d.). Within America, regional variations in cultural dimensions have been identified (Forsyth et al., 2008). Because of these variations in culture, the United States was not simply divided into Eastern United States and Western United States. America can be divided into four census regions: Northeast, Midwest, South, and West (U.S. Census Bureau, 2015).

The dependent variable is the level of slack created in the budget setting measured by Abdullah and Brink’s (2017) case instrument. Participants were given a forecast of actual costs. The case instrument then measured slack by taking the difference between submitted costs and
forecasted costs. Participant answers to questions regarding their intentions to create budgetary slack enabled testing of the independent variable’s effect on participant’ propensity to deviate from the forecast.

**Summary of the literature review.** The focus of this study was to examine how cross-cultural differences in perceptions of horizontal equity, self-efficacy, and ethical ideology of Americans and Brazilians, affect their intention to create budgetary slack. The literature review began with a discussion of how budgetary slack is created and how budgetary slack is an ethical issue. The following section focused on Agency Theory and the costs associated with the conflicting self-interests of principal and agent. The literature indicated three ways to combat conflicting interests and reduce agency costs.

Next, the following section of the research reviewed six factors impacting slack creation. Various scholarly findings suggested that the ethical ideology of an individual influences their decision to participate in the creation of budgetary slack. The research indicated that an individual’s perception of fairness can contribute to propensity to misreport private information, thus creating slack. Multiple research studies suggested a significant and positive relationship between self-efficacy and ethical decision making. A review of the literature provided insight into how participative budgeting and information asymmetry can impact budgetary slack; however, studies produced mixed results.

Culture was the last factor discussed. This section was divided into two sections. In the first section, Brazilian and United States cultures were compared using Hofstede’s cultural dimensions. Section two provided an examination of Brazilian culture using Trompenaars and Hampden-Turner seven-dimensional model. The literature review concluded with a review of the variables in the study. The study examined the effect independent variables (equity, self-
efficacy, ethical position, culture) have on the dependent variable (budgetary slack level).

Information regarding the intention to create slack, slack levels, equity, self-efficacy, and ethical ideology will be gathered based on their answers to a budgeting case (Abdullah & Brink, 2017) and EPQ (Forsyth, 1980).

**Transition and Summary of Section 1**

Section 1 contained the foundation of this quantitative study. The problem addressed by the study, how perceptions of horizontal equity, self-efficacy, and ethical ideology of Americans and Brazilian, affect budgetary slack levels, was established in this section. The study’s purpose, to examine the effect cross-cultural differences in non-pecuniary motivations have on budgetary slack levels, was also established. In addition, the rationale for selecting a quantitative design was addressed, as well as the assumptions, limitations, and delimitations associated with this study. Section 1 provided the focus of this study by stating the research questions, establishing the conceptual framework, and by defining the key terms associated with this study. Finally, Section 1 concluded with a thorough review of the scholarly and professional literature.

In the next section, the researcher will give a detailed description of the project. This section will include a restatement of the Purpose Statement, describe the Role of the Researcher, and discuss Participants. In addition, the researcher will discuss Research Method and Design, Data Collection, and Data Analysis Techniques. Finally, the section will end with a discussion about Reliability and Validity.
Section 2: The Project

The focus of this quantitative study was to examine the effect cross-cultural differences in non-pecuniary motivations have on budgetary slack levels. Based on the previous literature review, additional literature is needed about the effect culture can have on the creation of budgetary slack. The budgetary behaviors of Brazilian culture was a distinction of this study as compared to previous research.

This section includes a discussion of the activities necessary to perform the study. Included within this section is a reminder of the purpose of this research project, role of the researcher, participant access, research methodology and research design, data selection, data collection methods, data analysis, and a review of validity and reliability of the data. These activities are necessary to properly conduct a quantitative based study.

Purpose Statement

The purpose of this quantitative study is to add to the body of knowledge on budgetary slack. Over the past few decades, studies have examined the impact of different cultures with respect to budgetary slack. Davila and Wouters (2005) used managers from an MNC that is located in North America, Europe, Asia, and Southeast Asia to examine intentional budgetary slack. Douglas and Wier (2005) used Chinese and United States managers to compare ethical position with respect to budgetary slack. Douglas et al. (2007) used Egyptian and United States managers to compare ethical position and national culture with respect to budgetary systems. However, the literature on budgetary behaviors is relatively silent when it comes to Brazilian culture. This research examined the effect cross-cultural differences in perceived horizontal equity, self-efficacy, and ethical ideology of individuals from America and Brazil has the created levels of budgetary slack. Participants for this study consisted of individuals from the United
States and Brazil working in business-related fields. In recent studies, demographic information did not include country of (Abdullah & Brink, 2017; Harvey, 2015).

**Role of the Researcher**

The researcher in this study served several important roles. The researcher determined the research method and research design most appropriate to answer the research questions for this study. The researcher played a limited role in the data collection process. Surveys were distributed to Americans and Brazilians in business-related fields via Qualtrics. Data collected in this manner would not allow an opportunity for the researcher to bias the data. The researcher served as the primary analyst of the data, including performance of statistical tests and reviewing data results. Finally, the researcher provided an interpretation of the statistical test results in order to determine if the information addressed the research questions and corresponding hypotheses.

**Participants**

The following were qualifications for the participants to be included in the study: a) the study targeted American and Brazilians working in business-related fields. There were a total of three surveys given. Two were given in the United States, while the third was given to participants in Brazil. The first survey was given to individuals born and located in the United States, working in business-related fields. The second survey was given to individuals born and located in Brazil, working in business-related fields. The third survey was given to individuals born in Brazil, but working in a business-related field, located in the United States.

Surveys were distributed by Qualtrics. As a panel aggregator, Qualtrics recruited participants from various sources, including website intercept recruitment, member referrals, targeted email lists, gaming sites, customer loyalty web portals, permission-based networks, and
social media. The ‘opt-in for market research’ process requires respondents to submit an initial registration form requesting to participate in market research studies. Potential respondents build their profile from a standardized list of questions. The panels then use the profiles to select studies that would best fit the case specifications. All of Qualtrics’ panels have a double opt-in requirement. Those who do not reconfirm were not contacted to participate in a survey. Consumer panel members’ names, addresses, and dates of birth are typically validated via third-party verification measures prior to their joining a panel. Panel members are sent an email invitation or prompted on the respective survey platform to proceed with a given survey. Members may unsubscribe at any time (Qualtrics ESOMAR 28, 2014).

To avoid self-selection bias, Qualtrics does not include specific details about the contents of the survey in the survey invitation. The typical survey invitation is generally very simple and generic. It provides a hyperlink which takes the respondent to the survey as well as mention the incentive offered. Incentives are based on the length of the survey, their specific panelist profile, and target acquisition difficulty. The specific types of rewards vary and may include cash, airline miles, gift cards, redeemable points, sweepstakes entrance, and vouchers (Qualtrics ESOMAR 28, 2014). All data collected from the study were anonymous and/or secured via encryption and passwords. Surveys can be protected with passwords and HTTP referrer checking (Qualtrics, 2018).

**Research Method and Design**

The three core research methods available for research are the qualitative method, the quantitative method, and the mixed method. It is important to the researcher that the methodology aligns with and supports the research questions (Yin, 2006). Properly selecting the method at the beginning of this study helped ensure alignment and that the research questions
were supported. Within the quantitative method, there are multiple research designs: descriptive, correlational, and quasi-experimental. For this study, a quantitative quasi-experimental study was selected as the appropriate method for addressing the research questions and purpose of the study.

**Discussion of method.** Creswell (2014) highlights that quantitative methods can be used as a method of inquiry to measure cause and effect of numerical variables. Insight can be gained based on the results of statistical analysis (Stake, 2010). The goal of this study was to examine the effect of cross-cultural differences in perceived horizontal equity, self-efficacy, and ethical ideology have on budgetary slack levels. This is in alignment with a quantitative research approach of testing theory through postpositive knowledge claims (Creswell, 2014), due to the need to identify and assess causes that influence budgetary slack levels.

The qualitative method was not appropriate for the problem identified because analyzing personal experiences was not appropriate to address the research questions. Creswell (2014) suggests qualitative methods can aid in exploring topics with multiple meanings with open-ended emerging data. Qualitative research primarily relies on the researcher’s perception and understanding (Stake, 2010). With regards to qualitative research, “the researcher him- or herself is an instrument, observing action and contexts, often intentionally playing a subjective role in the study, using his or her own personal experience in making interpretations” (Stake, 2010, p. 20). Qualitative research flows from a philosophical assumption, to interpretive lens, and on to procedure involved in the study of social or human problems. This form of research can be characterized by several characteristic, ranging from the use of multiple forms of data gathering to complex reasoning through both inductive and deductive logic (Creswell & Poth, 2018). All four philosophical worldviews align with the qualitative methodology. It is important
to point out, qualitative research is “not bound by cause-and-effect relationships among factors” (Creswell & Poth, 2018, p. 44). The purpose of qualitative research is to understand the complex interactions between factors and to develop a complex picture of the issue under study (Creswell & Poth, 2018).

The mixed method approach combines both qualitative and quantitative methods. According to Stake (2010), a mixed method approach attempts to provide a more thorough understanding of the research problem. The mixed method approach provides a clearer understanding than using only a qualitative or quantitative approach. A mixed method design should be used when a qualitative or a quantitative approach, each in isolation, does not provide enough clarity to understand a research problem (Creswell, 2014). The qualitative portion of the mixed method disqualified the approach from use in this study.

**Discussion of design.** A quantitative quasi-experimental study was selected for this study to examine the effect cross-cultural differences in perceived horizontal equity, self-efficacy, and ethical ideology of individuals from America and Brazil has on the created levels of budgetary. Quasi-experimental designs examine if a specific treatment can influence the result of a specific test (Creswell, 2014). The use of a control variable is key in an experimental design. In a quasi-experiment, units are assigned to conditions using nonrandomized ways (Williams, 2007). This study gathered independent (equity, self-efficacy, ethical position, culture) and dependent variable (budgetary slack level) information through the use of a survey. Due to the ability to manipulate independent variables and assign participants to one of four conditions, the use of a quasi-experimental design was appropriate for this study.

The research for this study was designed to answer the following research questions:
1. Do cross-cultural differences in American and Brazilian perceptions of horizontal equity affect budgetary slack levels?

2. Do cross-cultural differences in American and Brazilian perceptions of self-efficacy affect budgetary slack levels?

3. Do cross-cultural differences in American and Brazilian ethical ideology affect budgetary slack levels?

For this study, budgetary slack level was the dependent variable. Budgetary slack level as a dependent variable has been documented by other researchers (Abdullah & Brink, 2017; Daumoser et al., 2018; Guo et al., 2017; Harvey, 2015). Based on research questions 1-3, the first four independent variables were horizontal equity, self-efficacy, idealism, and relativism. These variables relate directly to the specific problem addressed in this study, which was how cross-cultural differences in perceptions of horizontal equity, self-efficacy, and ethical ideology of Americans and Brazilians, affect their intention to create budgetary slack.

**Summary of research method and design.** In summary, the research for this study is designed to answer the following research questions:

1. Do cross-cultural differences in American and Brazilian perceptions of horizontal equity affect budgetary slack levels?

2. Do cross-cultural differences in American and Brazilian perceptions of self-efficacy affect budgetary slack levels?

3. Do cross-cultural differences in American and Brazilian ethical ideology affect budgetary slack levels?

A quantitative quasi-experimental study was selected for this study to examine the effect cross-cultural differences in perceived horizontal equity, self-efficacy, and ethical ideology of
individuals from America and Brazil has on the created levels of budgetary. Budgetary slack level was the dependent variable. The use of budgetary slack level as dependent variable is documented by other researchers. Horizontal equity, self-efficacy, idealism, and relativism were independent variables. These variables relate directly to the specific problem addressed in this study, which was cross-cultural differences in perceptions of horizontal equity, self-efficacy, and ethical ideology of Americans and Brazilians, affect their intention to create budgetary slack.

Population and Sampling

The population of the research included Americans currently living in the United States and Brazilians currently living in Brazil. The target population of the study was limited to those currently working in a business-related profession. The sample populous included those who opted-in for market research and were included in the Qualtrics consumer database.

Discussion of population. According to van Rijnsoever (2017), a population is the total set of information resources that are possibly relevant to addressing the research question or questions. As of 2018, the total population of the United States and Brazil was 327 million and 211 million, respectively (U.S. Census Bureau, 2018; Worldometers, 2018). The total population of migrants from Brazil in the United States, as of 2017, is 368,000 (Migration Policy Institute, 2017). The population sampled was determined by those who responded to the email invitation or prompted on the respective survey platform to proceed with the survey. All participants were located within the boundaries of the United States and Brazil.

Discussion of sampling. A probability type of sampling strategy was used to select the participants. The probability sampling method offers increased validity to the research (Vogt, 2007). Specifically, simple random sampling was used. With a random sample, there is an equal chance of selecting each participant from the populations being studied when creating the sample
(Connaway & Powell, 2010). In addition, simple random sampling reduced the potential for human bias in the selection of participants included in the sample. Therefore, a simple random sample provided a highly representative sample of the populations being studied.

The research adopted a survey methodology to gather data utilizing a case study (Abdullah & Brink, 2017) and the EPQ (Forsyth, 1980) instrument with proven reliability and validity. According to Nayak (2010), a precise and accurate conclusion can only happen with an appropriate sample size. A smaller sample will give a result which may not be sufficiently powered to detect a difference between the groups and the study may turn out to be falsely negative leading to a type II error, resulting in a failure to reject the null hypotheses when it is not true. A very large sample size is also not recommended as it can result in the waste of time and money when an answer can be accurately found from a smaller sample. Using the Qualtrics sample size calculator, the ideal sample size for each of the three populations was calculated. A confidence level of 95%, a 5% margin of error, and respective populations were used to complete the calculation. In order to have a statistically significant sample size, the study required 770 participants or 385 participants from each population. Qualtrics was employed to provide a random sample of 385 Americans currently living in the United States and 385 Brazilians currently living in Brazil. The target population of the study was limited to those between the ages of 18 and 65, and currently working in a business-related profession.

**Summary of population and sampling.** The population of the research included those who opted-in for market research and were included in the Qualtrics consumer database. The population to sampled was determined by those who responded to the email invitation or prompted on the respective survey platform to proceed with the survey. All participants were located within the boundaries of the United States and Brazil. A simple random sampling
strategy was used to select the participants. The researcher adopted a survey methodology to gather data utilizing a case study and the EPQ instrument. Qualtrics was employed to provide a random sample of 385 Americans currently living in the United States and 385 Brazilians currently living in Brazil. The target population of the study was limited to those currently working in a business-related profession.

Data Collection

The data required to address and analyze the research questions and indicated hypotheses were collected through the employment of survey instruments as part of this quantitative quasi-experimental dissertation study. The below discussion details the data instruments, data collection techniques, and organization techniques that were employed throughout the process. A summary of the data collection process was also provided.

Instruments. This quantitative quasi-experimental research employed a survey design with the aim of reducing the knowledge gap in the budgetary slack literature by focusing on the effect culture has on an individual’s decision to create slack. A survey design provides a quantitative or numeric account of trends, thoughts, or views of a population by examining a sample of that population (Creswell, 2014). The primary goal of utilizing a survey design in this research was to collect quantitative, numeric data related to individuals from American and Brazilian and to examine the effect cross-cultural differences in perceived horizontal equity, self-efficacy, and ethical ideology of individuals have on budgetary slack levels. The case study, EPQ, and demographic portion made up the framework of the research instrument. Once all participants completed their survey containing the case study and EPQ, the data needed to conduct the statistical tests were obtained from Qualtrics. The data were downloaded directly into SPSS to perform the statistical analysis.
Case study. To meet the aim of this research, participants were invited to respond to Abdullah and Brink’s (2017) case study. The case study was used to measure the dependent variable (budgetary slack level) and two independent variables (horizontal equity and self-efficacy). The case study provided participants information regarding their role as a manager at a hypothetical manufacturing company. As a production manager, participants were required to set the cost target based on their best estimation of the actual cost. The case provided the manager with a private forecasting system that only the manager had knowledge of. With this knowledge, the participant used the forecast however they wanted when setting the production cost target for the period. Participants also received information regarding their compensation structure (horizontal equity) and past performance (self-efficacy). These independent variables were manipulated, creating an equal or unequal pay condition and a high or low prior performance condition in budget setting accuracy. Participants were randomly assigned to one of the conditions.

Horizontal equity. Horizontal equity is said to be present in an environment where fair treatment is perceived among colleagues or peers. In contrast, horizontal inequity is a result of an environment where the perception is one of unfair treatment compared to colleagues or peers with the same responsibility (Matuszewski, 2010). With regards to the influence of equity on budgeting settings, research suggests that managers are less likely participate in the creation of budgetary slack whenever they have a fair perception of budgetary procedures (Fisher et al., 2015). The case study informed participants that their peers have the same gender, level of experience, job description, responsibility, and work load. The compensation structure consists of a fixed wage and a share in the cost savings. Cost savings are defined at the excess of targeted production costs over actual production costs.
The independent variable, horizontal equity, was manipulated, creating an equal or unequal pay condition. Under horizontal equity, participants were told that the fixed salary and the share in the cost savings were the same for all production managers. The compensation equation, which is the same for all production managers, was: 50% of cost savings (target cost - actual cost) per production cycle + fixed wage. Under horizontal inequity, participants were told that the fixed salary was the same for all production managers. However, the proportion of cost savings was different from the other production manager. The participants received 50% share of their cost saving while their peers received 95% share of cost savings.

*Self-efficacy.* Self-efficacy is an individual’s belief about their chances of successfully completing a specific task or objective (Blewitt et al., 2018). Self-efficacy affects the choices made by an individual regarding tasks, goals, and roles they perform (Razek & Coyner, 2014). There is a strong positive connection between self-efficacy and ethical decision making (Blewitt et al., 2018; Welch, 2013). Consistent with Abdullah and Brink (2017), this study participants’ perception of self-efficacy regarding prior performance in budget setting accuracy.

The independent variable, self-efficacy, was manipulated, creating a high self-efficacy or low self-efficacy condition. In the high self-efficacy condition, participants read:

Despite the difficulties of reporting accurate cost targets, you have established an excellent record for working efficiently and reporting accurate cost targets. Your prior performance in setting accurate cost targets is derived from your exceptional ability as a production manager. This obviously indicates that you have mastered the skills and the knowledge required to effectively and successfully manage your production line.

In the low self-efficacy treatment condition, participants were informed that they did not have a good track record of efficiency or accuracy. Participants in the condition read:
You have not established a record for working efficiently and reporting accurate production cost targets. Your poor prior performance in setting accurate cost targets makes it questionable whether your skills and knowledge are sufficient to effectively and successfully manage your production line.

*Budgetary slack.* Budgetary slack is the result of misrepresented private financial information to upper management by lower level managers. Budgetary slack implies the artificial overestimate of costs or underestimate of revenues and profits to obtain more achievable targets, resulting in higher financial and non-financial rewards (Endenich & Trapp, 2018). In this study, participants were given a forecast of actual production costs. The budgetary slack variable is the variance between submitted production cost target and the forecast of actual production costs.

Participants were asked three questions about the production cost targets they set in response to three specific forecasts. Assumed forecast of production costs was in the amounts of $225,000, $400,000, and $575,000. The range of possible production cost targets ranged from $200,000 to $600,000. These forecasts provided participants with opportunities to create low, medium, or high levels of budgetary slack. For each question, the forecast was subtracted from the production cost target indicated by the participant to obtain a measure of budgetary slack.

After reading the case study, participants were asked questions designed to assess their likelihood to create budgetary slack. Participants were then asked manipulation check questions. This was to verify their understanding of the case study.

*Ethical position questionnaire.* The ethical position of an individual underlies distinctions in ethical thought, which has been shown to direct ethical decision-making and behavior (White et al., 2018). Research suggests honesty is one of the most prominent social
norms across cultures and in budgeting. Furthermore, research suggests that the preference to adhere to a norm of honesty constrains slack (Newman, 2014). However, when faced with challenging budgetary targets, managers may only focus on the financial aspects of their decisions and neglect the ethical aspects (Endenich & Trapp, 2018).

Participants completed Forsyth’s (1980) Ethical Position Questionnaire (EPQ). The EPQ was used to measure the independent variable, ethical ideology. The EPQ consists of 20 statements, divided into two sets of 10 statements each measuring idealism and relativism. Following Abdullah and Brink (2017), participants rated their degree of agreement or disagreement using a 9-point Likert-type scale ranging from 1 which equals “completely agree” to 9 which equals “completely disagree.” EPQ produced two scores, one score for idealism and the other for relativism. Each score was derived from summing the responses from idealism or relativism statements and divided it by 10. Scores were then categorized into high or low relativism and idealism relative to the median score.

**Idealism.** When making an ethical judgment, idealistic individuals avoid choosing the lesser of two evils, since the decision would still result in harm to others (Li et al., 2018). A highly idealistic (low relativistic) individual would be negatively correlated with the creation of budgetary slack (Abdullah & Brink, 2017). This can be attributed to the being less likely to tolerate questionable behaviors that may lead to negative outcomes (Li et al., 2018). Individuals with high levels of idealism base their decisions on moral norms and principles. These individuals are more likely to make morally preferred judgement on a moral issue (Chao et al., 2016; Li et al., 2018; Rawwas et al., 2013).

**Relativism.** Relativistic individuals believe that the morality of an action depends upon the nature of the situation (Napal, 2014) and the individuals involved (Li et al., 2018). In a study
of budgetary slack, Harvey (2015) indicated a positive correlation between propensity to create budgetary slack and the individual’s level of relativism. Individuals high in relativism are more likely to consider the situation and others involved rather than judging a specific action using universal principles or norms. To these individuals, harm is unavoidable, and sometimes you can only choose between the lesser of two evils (Li et al., 2018).

**Demographic portion.** A distinguishing feature of this research involved the collection of background data that, in turn, can be subjected to statistical analysis. Background data were collected using a questionnaire. This data enabled the researcher to differentiate between different sub-groups. Participants were not provided their name to maintain confidentiality and anonymity. The requested background information also ensured respondents were eligible to participate.

**Data collection techniques.** The data were processed through several stages. The data for the study fell into the following categories: a) initial collection, b) participant responses, and c) analysis. The initial collection consisted of the digital communications needed to create participant lists. Participants who opted-in for market research, received a generic invitation to take the survey. The invitation provided a hyperlink which took the respondent to the survey. The survey provided a series of preliminary questions to ensure respondents were eligible to participate. The raw data were collected within the survey software (Qualtrics) and exported into the software package SPSS for analysis. The raw data were grouped to provide a more accurate representation of the information needed to address the research questions.

**Data organization techniques.** SPSS was used to organize the data. All anonymous raw data completed by the respondents were maintained electronically on a secure server. All data, raw and coded, were stored on a password protected external computer hard drive. The
researcher plans to use data obtained in the study for future research. Therefore, all notes and the password protected external computer hard drive will be secured in a fireproof safe. Research data will be made available upon request.

**Summary of data collection.** In summary, the quantitative quasi-experimental research employed a survey design using a third-party data aggregator, Qualtrics. The raw data were collected within the survey software (Qualtrics) and exported into the software package SPSS for analysis. SPSS was used to organize the data. All data, raw and coded, will be stored on a password protected external computer hard drive for the use in future research.

**Data Analysis**

The data analysis methods chosen for this study were a one-way analysis of variance (ANOVA) and chi-square ($\chi^2$). ANOVA “is a statistical procedure that compares the amount of between-groups variance in individuals’ scores with the amount of with-in groups variances” (Gall, Gall, & Borg, 2007, p. 318). $\chi^2$ is a procedure for testing if there is a statistically significant relationship between two nominal variables (Morgan, Leech, & Barrett, 2012). Data analysis procedures were conducted via SPSS using a one-way ANOVA and $\chi^2$ for $H_1$, $H_2$, $H_3$, and $H_4$.

One-way ANOVA requires that each individual or case has scores on two variables: a factor and a dependent variable. The factor will divide individuals or cases into two or more groups or levels, while the dependent variable separates individuals on a quantifiable measure (Green & Salkind, 2011). The one-way ANOVA tests the null hypothesis by determining if there is a statistically significant difference between the means of any of the populations. Specifically, if the difference in the means is $p < .05$, the null hypotheses is rejected (Test That Your Data Meets Important Assumptions, 2013). This statistical procedure was chosen because
the research questions addressed one factor and a dependent variable, and each factor divided cases into two or more levels while the dependent variable described cases on a quantitative dimension (Green & Salkind, 2011).

The best test to use to compare pass/fail percentages is a chi-square test. “The chi-square ($\chi^2$) test is a nonparametric statistical test to determine whether research data in the form of frequency counts are distributed differently for different samples” (Gall et al., 2007, p. 324). The $\chi^2$ test determines whether the variables are independent and determines if the null hypothesis can be rejected. If the analysis has a significance of $p < .05$, the results show a statistically significant difference and the null hypothesis is rejected (Ling, 2008).

**Variables used in the study.** In order to address the first research question for this study, the first independent variable is equity ($X_1$). Based on the second research question, the second variable is self-efficacy ($X_2$). Addressing the third research question will require the third and fourth independent variables, idealism ($X_3$) and relativism ($X_4$). These variables relate directly to the specific problem to be addressed in this study, which is how cross-cultural differences in perceptions of horizontal equity, self-efficacy, and ethical ideology of Americans and Brazilians, affect their intention to create budgetary slack. The table below provides a listing of variables relevant to this study.

Table 1

<table>
<thead>
<tr>
<th>Variables</th>
<th>Classification</th>
<th>Type</th>
</tr>
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<tbody>
<tr>
<td>Equity</td>
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<td>Nominal</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>Independent</td>
<td>Nominal</td>
</tr>
<tr>
<td>Idealism</td>
<td>Independent</td>
<td>Nominal</td>
</tr>
<tr>
<td>Relativism</td>
<td>Independent</td>
<td>Nominal</td>
</tr>
<tr>
<td>Culture</td>
<td>Independent</td>
<td>Nominal</td>
</tr>
<tr>
<td>Budgetary Slack Level</td>
<td>Dependent</td>
<td>Scale</td>
</tr>
</tbody>
</table>
**Hypothesis 1.** Using the independent variable of equity (X1), the one-way ANOVA was used to determine if there was or was not a significant difference in the levels of budgetary slack created by Americans and Brazilians under horizontal equity (inequity). The one-way ANOVA ran with the alpha for determining significant difference p < .05. A $x^2$ test of independence ran on the equity and inequity populations with the alpha for determining significant difference p < .05. The independent variable of equity (X1) came from the case study (Abdullah & Brink, 2017). This independent variable was manipulated, creating an equal or unequal pay condition. Participants were randomly assigned to one of the conditions.

**Hypothesis 2.** Using the independent variable of self-efficacy (X2), the one-way ANOVA was used to determine if there was or was not a significant difference in the levels of budgetary slack created by Americans and Brazilians under high (low) self-efficacy. The one-way ANOVA ran with the alpha for determining significant difference p < .05. A $x^2$ test of independence ran on the high self-efficacy and low self-efficacy populations with the alpha for determining significant difference p < .05. The independent variable of self-efficacy (X2) came from the case study (Abdullah & Brink, 2017). This independent variable was manipulated, creating a high or low prior performance condition in budget setting accuracy. Participants were randomly assigned to one of the conditions.

**Hypotheses 3 and 4.** Using the independent variables of idealism (X3) and relativism (X4), two one-way ANOVAs were used to determine if there was or was not a significant difference in the levels of budgetary slack created by Americans and Brazilians based upon ethical ideology. The one-way ANOVA ran with the alpha for determining significant difference p < .05. A $x^2$ test of independence ran on the idealistic and relativistic populations with the alpha for determining significant difference p < .05. The independent variables of idealism (X3) and
relativism (X4) came from Forsyth’s (1980) Ethical Position Questionnaire (EPQ). EPQ produced two scores, one score for idealism and the other for relativism. Each score was derived from summing the responses from idealism or relativism statements and divided it by 10. Scores were then categorized into high or low relativism and idealism relative to the median score.

**Summary of data analysis.** In summary, the use of five independent variables (equity, self-efficacy, idealism, relativism) and the dependent variable (budgetary slack level) indicated an ANOVA analysis and chi-square was appropriate to examine the effect cross-cultural differences in non-pecuniary motivations had on budgetary slack.

Data analysis procedures were conducted via SPSS using a one-way ANOVA and $\chi^2$ for H1, H2, H3, and H4. Hypotheses 1, 2, 3, and 4 used one-way ANOVA to determine if there was or was not a significant difference in the levels of budgetary slack created by Americans and Brazilians based upon horizontal equity (inequity), high (low) self-efficacy, idealism, and relativism, respectively. Hypotheses 1, 2, 3, and 4 used a $\chi^2$ test on American and Brazilian populations to determine whether the variables were independent and determined if the null hypotheses could be rejected.

**Reliability and Validity**

Reliability and validity are essential in all scholarly research (Creswell, 2014). Reliability and validity are necessary to assure the integrity and quality of a measurement instrument (Kimberlin & Winterstein, 2008). Reliability is measured by the ability to reproduce similar results when testing is confirmed by independent researchers (Robson & McCartan, 2016). Validity seeks to ensure that research tools measure what they are supposed to and directly relate back to the hypothesis (Creswell, 2014). This section discusses the reliability and validity of the case study and Ethical Position Questionnaire (EPQ) survey instruments.
Reliability. This dissertation was quantitative in nature and relies on survey data provided by a third-party resource. In quantitative research methods, reliability addresses the ability of other researchers to confirm the results of the study and examines the accuracy of the data collection process (Creswell, 2014). Reliability measures consistency, precision, repeatability, and trustworthiness of a study (Chakrabartty, 2013). Reliability indicates the extent to which the study is without bias and insures consistent measurement cross time and across the various items in the instruments (Mohajan, 2017). Since this study used a quantitative research approach, the focus of reliability was on replication of the results and understanding the accuracy of the data.

Case study reliability. For the purpose of this study, a survey instrument was adapted from an instrument created by Abdullah (2013). To increase the reliability and validity of the instrument, Abdullah (2013) conducted a pilot test. The objective of the pilot test was to ensure the clarity and effectiveness of the instrument in capturing the required responses from participants. The pilot test allowed the researcher to also evaluate the manipulations used on the instrument.

EPQ reliability. Abdullah (2013) tested the Ethical Position Questionnaire (EPQ) utilizing 107 graduate business students from a public university in the United States. The researcher used Cronbach’s alpha used to measure internal reliability for ethical position. Cronbach’s alpha is one of the most effective measurements of multiple item measurement scales that contain interval levels of measurement (Cooper & Schindler, 2011). A value of at least 0.9 as excellent, of at least 0.8 good, of at least 0.7 as acceptable, of at least 0.6 as questionable, and of at least 0.5 as unacceptable (Field, 2009). The alpha coefficient for the idealism and relativism scales were 0.873 and 0.821, respectively.
**Study reliability.** Creswell (2014) defined reliability in terms of an instrument demonstrating internal consistency on item responses, consistency in test-retest correlations, and consistency in repeated administrations. Using the data collection and data analysis techniques discussed previously, any researcher will be able to replicate this study; however, results may differ depending upon the sample population. Each hypothesis will be testable, using the case study and EPQ as the basis for data collection. Based on previous research (Abdullah, 2013; Abdullah & Brink, 2017) these hypotheses will be answered by analysis of the data.

**Validity.** Research validity in surveys relates to the degree to which the survey instrument measures the correct components that need to be measured (Creswell, 2014). Validity is achieved when the results are considered accurate (Robson & McCartan, 2016). In the context of quantitative research, validity “refers to the degree to which a measure assesses what it purports to measure” (Fink, 2014, p. 106). The four potential threats to validity are internal validity threats, external validity threats, statistical conclusion threats, and construct validity threats (Creswell, 2014). This section will specifically discuss internal validity and external validity.

**Internal validity.** Internal validity in quantitative research is how legitimate are the study and the research findings (Creswell, 2014). Internal validity is present when there is enough evidence to substantiate a claim (Chong-ho, 2018). The researcher controlled the internal validity of this study by only including individuals from the United States and Brazil, ages 18 to 65, working in a business-related field. Using a historically valid instrument such as the Ethical Position Questionnaire (EPQ) also increased the validity of this study. Additionally, the author used survey data provided by an independent third party to reduce the threat to internal validity.
**External validity.** External validity of quantitative research methods addresses the issue of generalizability of the sample data to make inferences about the population (Creswell, 2014). Risks associated with generalizability center around incorrect conclusions derived from sample data (Robson & McCartan, 2016). Threats to external validity in research studies occur when generalizability of the results do not transfer to other samples, times, or situations (Taylor, 2014). To mitigate not being able to apply the sample results to the broader population, the sample for this study included statistically significant sample size of participants from each of the three populations. The threat to external validity regarding time cannot be completely overcome. According to Creswell (2014), the only way to overcome this threat is to replicate this study. Although this study is similar to the research performed by Abdullah and Brink (2017), this study is not a direct replication of previous research. The researcher addressed this threat in the recommendations for future research. The researcher minimized the threat to external validity posed by the situation by collecting data from the same source for all tests and used similar data processing.

**Summary of reliability and validity.** Reliability and validity are essential in all scholarly research so that findings and conclusions can be examined by others. Reliability indicates the extent to which the study is without bias and insures consistent measurement cross time and across the various items in the instruments. Validity is achieved when the results are considered accurate. The risks to reliability and validity for this quantitative research study were addressed.

**Transition and Summary of Section 2**

This section reviewed the purpose of the study, the stated research questions, and the hypothesis formed to answer the research questions. Additionally, the section discussed the
construction of the study by providing the role of the researcher, population and sampling process, data collection techniques, and data analysis strategy. Finally, reliability and validity were discussed as it specifically relates to this quantitative study.

Section 3 will provide a brief overview of the study. The findings and results of the study will be presented. Each research question will be examined, and the associated hypotheses tested. Applications to professional practice, recommendations for action, and suggested further actions are provided. Finally, insight into the research process from the perspective of the researcher concludes the section.
Section 3: Application to Professional Practice and Implications for Change

Subordinates participating in the budgeting process can be a valuable tool for planning, control, and allocation of resources. These individuals are better informed than their superiors with regards to their abilities and environmental factors. Subordinates can use this information to reduce uncertainty, improve decision making, and positively impact profits. However, this information can be used opportunistically and benefit themselves at the expense of the company (Brink et al., 2018). Ethics Position Theory (EPT) suggests that people’s reactions in morally toned situations can be traced to variations in their intuitive, personal moral philosophies. EPT assumes that a person’s degree of idealism and relativism determines their ethical ideology (Forsyth, 1980). Society morally condemns people for deliberately lying, harming or killing an innocent, stealing valuables, turning away from those in dire need, or failing to keep a promise (Abratt et al., 1992). According to Forsyth et al. (2008), cross-cultural consensus is lost when the discussion turns to less clear-cut issues. The purpose of this quantitative study was to examine the effect cross-cultural differences in perceived horizontal equity, self-efficacy, and ethical ideology of individuals from America and Brazil has on the created levels of budgetary slack.

The findings from this research are presented in this section. The findings may potentially contribute to the existing body of knowledge concerning budgetary slack by focusing on the effect culture has on an individual’s decision to create slack. This section includes: (a) overview of the study, (b) presentation of the findings, (c) applications to professional practice, (d) recommendation for further action, (e) recommendation for further study, (f) reflections, and (g) summary and conclusion of the study.
Overview of the Study

The purpose of this quantitative study was to examine the effect cross-cultural differences in perceived horizontal equity, self-efficacy, and ethical ideology of individuals from America and Brazil has on the created levels of budgetary slack. There is a wealth of knowledge available with regards to budgetary slack and nonpecuniary preferences in the decision-making process. However, little attention has been given to the effects of culture on the budgeting process (Douglas & Wier, 2005; Douglas et al., 2007; Harvey, 2015; Wu, 2005). The stream of budgetary slack research does not offer any conclusive answers (Harvey, 2015). Within the studies examining the impact of different cultures with respect to budgetary slack, the literature on budgetary behaviors is relatively silent when it comes to Brazilian culture. This dissertation study was developed and conducted to contribute to the current body of available knowledge to fill the identified gap.

The research for this study was designed to answer the following research questions:

1. Do cross-cultural differences in American and Brazilian perceptions of horizontal equity affect budgetary slack levels?
2. Do cross-cultural differences in American and Brazilian perceptions of self-efficacy affect budgetary slack levels?
3. Do cross-cultural differences in American and Brazilian ethical ideology affect budgetary slack levels?

To address the first research question for this study, the first independent variable was equity. Based on the second research question, the second independent variable was self-efficacy. Addressing the third research question required the third and fourth independent
variables, idealism and relativism. The dependent variable used in this study was budgetary slack level.

The independent variables of equity and self-efficacy came from the case study (Abdullah & Brink, 2017). The independent variables of idealism and relativism came from Forsyth’s (1980) Ethical Position Questionnaire (EPQ). The EPQ produced two scores, one score for idealism and the other for relativism. Each score was derived from summing the responses from idealism or relativism statements and dividing by 10. Scores were then be categorized into high or low relativism and idealism relative to the median score. The dependent variable, budgetary slack level, came from the case study (Abdullah & Brink, 2017).

Participants were asked three questions about the production cost targets they will set in response to three specific forecasts. Assumed forecast of production costs were in the amounts of $225,000, $400,000, and $575,000. The range of possible production cost targets ranged from $200,000 to $600,000. These forecasts provided participants with opportunities to create varied levels of budgetary slack. For each question, the forecast was subtracted from the production cost target indicated by the participant. To obtain a measure of budgetary slack, an average of the three slack levels was computed for each participant.

Participants were recruited through Qualtrics panel aggregation from various sources, including website intercept recruitment, member referrals, targeted email lists, gaming sites, customer loyalty web portals, permission-based networks, and social media to participate in the study. A total of 829 individuals voluntarily participated in the study after reading the consent form and passing screening questions. Of the 829 participants that started the survey, 803 participants were used in analysis. American and Brazilian responses were 413 and 390, respectively. One-way ANOVA and $x^2$ were the statistical methods used to analyze the data.
This information was used to reject or fail to reject the null hypotheses and ultimately answer the research questions. A detailed discussion of the findings from this study is provided in the following section.

**Presentation of the Findings**

The next section presents the findings of this dissertation research study. This paper proposed four hypotheses with respect to the effect cross-cultural differences in perceived horizontal equity, self-efficacy, and ethical ideology of individuals from America and Brazil had on the created levels of budgetary slack. The following investigation was designed to address the research questions outlined in Section 1. The associated hypotheses are provided with a description of how each hypothesis was tested.

All of the hypotheses were tested using the same population. This paragraph includes a discussion of demographics to include age, gender, occupation, education level, and years of professional experience. The first demographic presented is the age of the study participants. The mean (standard deviation) age of the participants was 35.03 (11.468) years; their mean (standard deviation) years of professional experience was 14.36 (10.403); there were 323 (40.2%) male and 480 (59.8%) female participants; 17 (2.1%) completed some high school education, 150 (18.7%) completed their high school education, 120 (14.9%) completed some undergraduate education, 287 (35.7%) completed their undergraduate education, 61 (7.6%) completed some postgraduate education, and 168 (20.8%) completed their postgraduate education. Among the participant’s occupations, 337 (41.8%) worked in management, professional or related occupation, 211 (26.2%) worked in sales and office occupation, and 255 (31.6%) worked in a government related occupation.
Assumptions of ANOVA. ANOVA is based on three assumptions: a) observations are independent, b) homogeneity of variances, and c) normally distributed populations (Moder, 2010; Morgan et al., 2012). To ensure the first assumption was met, Qualtrics used a simple random sampling strategy to select participants. Furthermore, each participant was in only one group and had only one score on each measure.

Test of Homogeneity of Variances, located in Appendix A, provided the Levene’s test to check the assumption that the variances on the dependent variable were equal across groups. For equity, self-efficacy, culture, and idealism the Levene’s tests were not significant. Thus, the assumption was not violated. For relativism, Table 2 shows a p-value of .001. This p-value is considerably smaller than the alpha of .05. Therefore, the Levene’s test is significant and thus the assumption of equal variance is violated. According to Rasch, Kubinger, and Moder (2009), the problem can be handled using the Welch test. Table 3 provides the results of the Welch test. The p-value for the F-statistic is .134. This p-value is larger than the alpha of .05, indicating that there is not statistical significance. This is consistent with the standard f test in the following section and also consistent with the notion that ANOVA is a robust test even given the violations of assumptions.

Table 2

<table>
<thead>
<tr>
<th>Test of Homogeneity of Variances</th>
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<tbody>
<tr>
<td>Mean_Slack</td>
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<tr>
<td>Levene Statistic</td>
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<tr>
<td>11.418</td>
</tr>
</tbody>
</table>
Table 3

Robust Tests of Equality of Means

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<thead>
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<th>Mean_Slack</th>
<th>Statistic(^a)</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welch</td>
<td>2.248</td>
<td>1</td>
<td>768.316</td>
<td>.134</td>
</tr>
</tbody>
</table>

\(^a\) Asymptotically F distributed.

There are two main methods of assessing normality: numerically and graphically. Appendix B provides the Tests of Normality to check the assumption that the dependent variable is normally distributed for each group. For equity, self-efficacy, culture, relativism, and idealism the p-value for the Shapiro-Wilk test is considerably smaller than the alpha of .05. This indicates significance and thus the assumption of normal distribution is violated.

However, normal distribution can also be determined graphically through the use of histograms and normal Q-Q Plots. In Q-Q Plots, if the data points stray from the line in an obvious non-linear fashion, the data are not normally distributed. In histograms, if the data points are clearly skewed left or right of the mean, the data are not normally distributed. As we can see from the normal Q-Q plots (see Appendix C) and histograms (see Appendix D), the data are not extremely divergent from being normally distributed. It is also important to note that a large sample size and equal group size makes parametric tests robust to violations of normality (Statistics Data Sciences, 2015).

**Hypothesis 1.** To address hypothesis 1, two ANOVA tests were performed. The first ANOVA test determined if difference in levels of budgetary slack between equity and inequity was statistically significant. The second ANOVA test determined if the difference in levels of budgetary slack between Brazilians and Americans was statistically significant. In addition, a \(\chi^2\) test determined if there were differences in levels of equity between Americans and Brazilians. Table 4 below shows the results of the first ANOVA test. The p-value for the F-statistic is .027.
This p-value is considerably smaller than the alpha of .05, indicating that there is a statistically significant difference between equity/inequity conditions and budgetary slack levels. Based on these results, the null hypothesis that there is no significant difference in levels of budgetary slack between equity and inequity conditions is rejected.

Table 4

<table>
<thead>
<tr>
<th>ANOVA</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean_Slack</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>25897.991</td>
<td>1</td>
<td>25897.991</td>
<td>4.892</td>
<td>.027</td>
</tr>
<tr>
<td>Within Groups</td>
<td>424083.203</td>
<td>801</td>
<td>5294.486</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4266781.194</td>
<td>802</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Prior studies suggest that the framing of rewards has a pronounced effect on employee behavior (Christ et al., 2012; Presslee et al., 2013). The literature suggests a perceived unfairness of pay has a negative effect on employee budgeting decisions (Daumoser et al., 2018; Drake et al., 2014; Guo et al., 2017). According to Fisher et al. (2015), managers are less likely to participate in the creation of budgetary slack whenever they have a fair perception of budgetary procedures. Guo et al. (2017) provided evidence in support of previous findings. The author suggests that high vertical pay dispersion results in subordinates misreport to a greater extent than when vertical pay dispersion is low. As a response to perceived unfairness, employees will misreport information. This setting increases incentives for employees to commit fraud (Clor-Proell et al., 2015; Drury, 2015). Table 5 below shows the mean differences in slack levels for the low equity and high equity groups. Results are consistent with the literature. The low equity group created a slack level of nearly $21,000, whereas the high equity group created slack of less than $10,000. Participants in the low equity treatment created over twice as much slack as participants in the high equity treatment.
Table 5

Descriptives
Mean_Slack

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>396</td>
<td>20.7130</td>
<td>72.96307</td>
<td>3.66653</td>
<td>13.5046</td>
<td>27.9213</td>
<td>-184.33</td>
<td>200.00</td>
</tr>
<tr>
<td>High</td>
<td>407</td>
<td>9.3538</td>
<td>72.56825</td>
<td>3.59707</td>
<td>2.2826</td>
<td>16.4250</td>
<td>-200.00</td>
<td>200.00</td>
</tr>
<tr>
<td>Total</td>
<td>803</td>
<td>14.9556</td>
<td>72.93954</td>
<td>2.57398</td>
<td>9.9030</td>
<td>20.0081</td>
<td>-200.00</td>
<td>200.00</td>
</tr>
</tbody>
</table>

Table 6 shows the results of the second ANOVA test. The p-value for the F-statistic is .989. This p-value is considerably larger than the alpha of .05, indicating that there is not a statistically significant difference between Americans and Brazilians and budgetary slack levels. Based on these results, the null hypothesis that there is no significant difference in levels of budgetary slack between Brazilians and Americans cannot be rejected.

Table 6

ANOVA
Mean_Slack

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1.074</td>
<td>1</td>
<td>1.074</td>
<td>.000</td>
<td>.989</td>
</tr>
<tr>
<td>Within Groups</td>
<td>4266780.120</td>
<td>801</td>
<td>5326.817</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4266781.194</td>
<td>802</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7 below shows the mean differences in slack levels for the American and Brazilian groups. The American group created a slack level of nearly $15,000, whereas the Brazilian group created slack levels slightly less than the American group. American and Brazilian participants created nearly the same levels of budgetary slack. These results are not consistent with the literature.
Cultural differences promote culturally specific ways of working, even within the same organization (Hofstede & Tipton Murff, 2012). Attitudes towards budgetary slack are expected to differ. One culture may not see the function of budgeting from the perspective of another culture. For example, differences between an individualist society and collectivist society impact attitudes towards budgetary slack (Wu, 2005). Unlike Brazil, the United States has a very individualistic society. This is reinforced by the United States scoring 91 on IDV (Hofstede Insights, 2018). Brazil is on nearly the complete opposite side of the spectrum, scoring 38. This score means people in Brazilian society are part of large, cohesive groups (Hofstede Insights, 2018; Trompenaars & Hampden-Turner, 2012).

Uncertainty avoidance is another key cultural dimension where both cultures differ. Uncertainty avoidance reflects how well people in the society handle the unknown. Brazil, like the majority of Latin America, scored high on UAI with a 76. The United States on the other hand views rules and structure a little bit differently. Scoring a 46 on UAI, the United States does not require a lot of rules (Mind Tools, 2017a; Hofstede Insights, 2018).

The dimensions of collectivism and uncertainty avoidance influence the communication of private information by subordinates. Collectivist and high uncertainty avoidance cultures will misreport less than individuals from individualistic and low uncertainty cultures, in the absence of face-to-face interaction (Chow et al., 1998). In the case of Americans and Brazilians, this does not appear to be the case. Both cultures created nearly the same amount of budgetary slack.
Table 7

Descriptives

<table>
<thead>
<tr>
<th>Mean_Slack</th>
<th>95% Confidence Interval for Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Mean</td>
</tr>
<tr>
<td>American</td>
<td>413</td>
</tr>
<tr>
<td>Brazilian</td>
<td>390</td>
</tr>
<tr>
<td>Total</td>
<td>803</td>
</tr>
</tbody>
</table>

To investigate whether Americans and Brazilians differ on whether they have high or low equity, a $\chi^2$ statistic was conducted as a check on the equity manipulation. Assumptions were checked, and Table 8 shows they were met. Within the Expected Count values shown, there was confirmation that all cells had an expected value greater than 5. Table 9 below shows the Pearson $\chi^2$ results and indicates that Americans and Brazilians are not significantly different on whether or not they have high or low equity ($\chi^2 = .485$, df = 1, N = 803, p = .486). Phi, which indicates the strength of the association between the two variables, is .025. There was not a significant association between equity and culture. Based on these results, the null hypothesis that there is no difference in levels of equity between Americans and Brazilians cannot be rejected, which supports the success of the intended manipulation.

Table 8

Equity *Culture Crosstabulation

<table>
<thead>
<tr>
<th>Equity</th>
<th>Culture</th>
<th>Count</th>
<th>Expected Count</th>
<th>% within Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>American</td>
<td>188</td>
<td>183.1</td>
<td>45.5%</td>
</tr>
<tr>
<td></td>
<td>Brazilian</td>
<td>168</td>
<td>172.9</td>
<td>43.1%</td>
</tr>
<tr>
<td>High</td>
<td>American</td>
<td>225</td>
<td>229.9</td>
<td>54.5%</td>
</tr>
<tr>
<td></td>
<td>Brazilian</td>
<td>222</td>
<td>217.1</td>
<td>56.9%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>413</td>
<td>413.0</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>390</td>
<td>390.0</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>% within Culture</td>
<td>803</td>
<td>803.0</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Table 9

Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymptotic Significance (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>.485</td>
<td>1</td>
<td>.486</td>
<td>.486</td>
<td></td>
</tr>
<tr>
<td>Continuity Correction</td>
<td>.391</td>
<td>1</td>
<td>.532</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>.485</td>
<td>1</td>
<td>.486</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td></td>
<td></td>
<td></td>
<td>.523</td>
<td>.266</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.485</td>
<td>1</td>
<td>.486</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>803</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 172.90.
b. Computed only for a 2x2 table

Hypothesis 2. To address hypothesis 2, two ANOVA tests were performed. The first ANOVA test determined if difference in levels of budgetary slack between high self-efficacy and low self-efficacy was statistically significant. The second ANOVA test determined if the difference in levels of budgetary slack between Brazilians and Americans was statistically significant. Results of the second ANOVA can be seen in Table 5 and Table 6. In addition, a $\chi^2$ test determined if there were differences in levels of self-efficacy between Americans and Brazilians. Table 10 below shows the results of the first ANOVA test. The p-value for the F-statistic is .348. This p-value is considerably larger than the alpha of .05, indicating that there is not a statistically significant difference between high/low self-efficacy conditions and budgetary slack levels. Based on these results, the null hypothesis that there is no significant difference between high/low self-efficacy conditions and budgetary slack levels cannot be rejected.
Table 10

ANOVA
Mean_Slack

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>4693.528</td>
<td>1</td>
<td>4693.528</td>
<td>.882</td>
<td>.348</td>
</tr>
<tr>
<td>Within Groups</td>
<td>4262087.666</td>
<td>801</td>
<td>5320.958</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4266781.194</td>
<td>802</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to Abdullah and Brink (2017), an individual’s past performance can affect their perception of self-efficacy, which can lead to a higher propensity to create budgetary slack. The results of their study suggest that the probability of slack creation was lower (higher) when self-efficacy was high, and equity was high (low). Research suggests a strong positive connection between self-efficacy and ethical decision making (Welch, 2013). The significant and positive relationship was confirmed again by (Blewitt et al., 2018). Table 11 below shows the mean differences in slack levels for the low self-efficacy and high self-efficacy groups. There was no statistically significant difference between high/low self-efficacy conditions and budgetary slack levels, so results were not consistent with the literature. The low self-efficacy group created a slack level of nearly $12,600, whereas the high self-efficacy group created slack of more than $17,000. Participants in the high self-efficacy treatment created a mean slack level of nearly $5,000 higher than participants in the low self-efficacy treatment. Although, based on prior research, this effect was in the right direction, it was not statistically significant. Based on prior research, an efficacy effect may be tied to an equity effect.
To investigate whether Americans and Brazilians differ on whether they have high or low self-efficacy, a $x^2$ statistic was conducted as a check on the self-efficacy manipulation.

Assumptions were checked, and Table 12 below shows they were met. Within the Expected Count values shown, there was confirmation that all cells had an expected value greater than 5. Table 13 below shows the Pearson $x^2$ results and indicates that Americans and Brazilians are not significantly different on whether or not they have high or low self-efficacy ($x^2 = .038, \text{df} = 1, N = 803, p = .845$). Phi, which indicates the strength of the association between the two variables, is .007. There was not a significant association between self-efficacy and culture. Based on these results, the null hypothesis that there is no difference in levels of self-efficacy between Americans and Brazilians cannot be rejected, which supports the success of the intended manipulation.
Table 12

Self Efficacy * Culture Crosstabulation

<table>
<thead>
<tr>
<th>Self Efficacy</th>
<th>Count</th>
<th>Expected Count</th>
<th>% within Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>168</td>
<td>166.6</td>
<td>40.7%</td>
</tr>
<tr>
<td>High</td>
<td>245</td>
<td>246.4</td>
<td>59.3%</td>
</tr>
<tr>
<td>Total</td>
<td>413</td>
<td>413.0</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Self Efficacy</th>
<th>Count</th>
<th>Expected Count</th>
<th>% within Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>156</td>
<td>157.4</td>
<td>40.0%</td>
</tr>
<tr>
<td>High</td>
<td>234</td>
<td>232.6</td>
<td>60.0%</td>
</tr>
<tr>
<td>Total</td>
<td>390</td>
<td>390.0</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Hypothesis 3. To address hypothesis 3, two ANOVA tests were performed. The first ANOVA test determined if difference in levels of budgetary slack between high idealistic and low idealistic ideology was statistically significant. The second ANOVA test determined if the difference in levels of budgetary slack between Brazilians and Americans was statistically significant. Results of the second ANOVA can be seen in Table 5 and Table 6. In addition, a $\chi^2$ test determined if there were differences in levels of idealistic ideology between Americans and
Brazilians. Table 14 shows the results of the first ANOVA test. The p-value for the F-statistic is .318. This p-value is considerably larger than the alpha of .05, indicating that there is not a statistically significant difference between high/low idealistic ideology and budgetary slack levels. Based on these results, the null hypothesis that there is no significant difference between high/low idealistic ideology and budgetary slack levels cannot be rejected.

Table 14

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>5322.398</td>
<td>1</td>
<td>5322.398</td>
<td>1.000</td>
<td>.318</td>
</tr>
<tr>
<td>Within Groups</td>
<td>4261458.795</td>
<td>801</td>
<td>5320.173</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4266781.194</td>
<td>802</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Adherence to universal moral rules is the criteria by which an action should be deemed moral or not (Forsyth, 1980). When making an ethical judgment, idealistic individuals avoid choosing the lesser of two evils, since the decision would still result in harm to others (Li et al., 2018). In a study of earnings manipulation, Nasir et al. (2014) found a significant and negative relationship between idealism and earnings management behavior. This suggests idealistic individuals tend to reject unethical behavior (Chao et al., 2016; Li et al., 2018; Rawwas et al., 2013). Therefore, a highly idealistic (low relativistic) individual would be negatively correlated with the creation of budgetary slack (Abdullah & Brink, 2017). Although there was no statistically significant difference between high/low idealistic individuals and budgetary slack levels, results were not consistent with the literature. Table 15 below shows the mean differences in slack levels for the low idealistic and high idealistic individuals. Low idealistic individuals created a slack level of nearly $12,200, whereas the high idealistic individuals
created slack of more than $17,000. Participants in the high idealistic group created a mean slack level over $5,000 higher than participants in the low idealistic group.

Table 15

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Idealism</td>
<td>369</td>
<td>12.1635</td>
<td>70.62582</td>
<td>3.67663</td>
<td>-182.33</td>
<td>-200.00</td>
<td>200.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Idealism</td>
<td>434</td>
<td>17.3295</td>
<td>74.84970</td>
<td>3.59290</td>
<td>24.3912</td>
<td>-200.00</td>
<td>200.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>803</td>
<td>14.9556</td>
<td>72.93954</td>
<td>2.57398</td>
<td>20.0081</td>
<td>-200.00</td>
<td>200.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To investigate whether Americans and Brazilians differ on whether they have high or low idealistic ideology, a $\chi^2$ statistic was conducted. Assumptions were checked, and Table 16 below shows they were met. Within the Expected Count values shown, there was confirmation that all cells had an expected value greater than 5. Table 17 below shows the Pearson $\chi^2$ results and indicates that Americans and Brazilians are significantly different on whether or not they have high or low idealistic ideology ($\chi^2 = 34.099$, df = 1, N = 803, p < .001). Phi, which indicates the strength of the association between the two variables, is .206. There was a significant association between idealism and culture. Based on these results, the null hypothesis that there is no difference in levels of idealistic ideology between Americans and Brazilians can be rejected. For this sample, Brazilian responses show a higher proportion of high idealistic individuals than American respondents.
Table 16

Ideal *Culture Crosstabulation

<table>
<thead>
<tr>
<th></th>
<th>Culture</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>American</td>
<td>Brazilian</td>
<td>Total</td>
</tr>
<tr>
<td>Ideal</td>
<td>Low</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>231</td>
<td>138</td>
<td>369</td>
</tr>
<tr>
<td>Expected Count</td>
<td>189.8</td>
<td>179.2</td>
<td>369.0</td>
</tr>
<tr>
<td>% within Culture</td>
<td>55.9%</td>
<td>35.4%</td>
<td>46.0%</td>
</tr>
<tr>
<td>High</td>
<td>Count</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>182</td>
<td>252</td>
<td>434</td>
</tr>
<tr>
<td>Expected Count</td>
<td>223.2</td>
<td>210.8</td>
<td>434.0</td>
</tr>
<tr>
<td>% within Culture</td>
<td>44.1%</td>
<td>64.6%</td>
<td>54.0%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>413</td>
<td>390</td>
<td>803</td>
</tr>
<tr>
<td>Expected Count</td>
<td>413.0</td>
<td>390.0</td>
<td>803.0</td>
</tr>
<tr>
<td>% within Culture</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 17

Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymptotic Significance (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>34.099</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correction</td>
<td>33.276</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>34.375</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td></td>
<td></td>
<td>.000</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear</td>
<td>34.056</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Association</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>803</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 179.22.
b. Computed only for a 2x2 table

**Hypothesis 4.** To address hypothesis 4, two ANOVA tests were performed. The first ANOVA test determined if difference in levels of budgetary slack between high relativistic and low relativistic was statistically significant. The second ANOVA test determined if the difference in levels of budgetary slack between Brazilians and Americans was statistically significant. Results of the second ANOVA can be seen in Table 5 and Table 6. In addition, a $\chi^2$ test determined if there were differences in levels of relativistic ideology between Americans and
Brazilians. Table 18 shows the results of the first ANOVA test. The p-value for the F-statistic is .134. This p-value is larger than the alpha of .05, indicating there is not a statistically significant difference between high/low relativistic ideology and budgetary slack levels. Based on these results, the null hypothesis that there is no significant difference between high/low relativistic ideology and budgetary slack levels cannot be rejected.

Table 18

<table>
<thead>
<tr>
<th>Mean Slack</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>11968.944</td>
<td>1</td>
<td>11968.944</td>
<td>2.253</td>
<td>.134</td>
</tr>
<tr>
<td>Within Groups</td>
<td>4254812.249</td>
<td>801</td>
<td>5311.875</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4266781.194</td>
<td>802</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Relativistic individuals believe that the morality of an action depends upon the nature of the situation and the individuals involved (Napal, 2014). Relativism is seen as a consequence perspective, that is, an individual’s position can change based on their view of the outcomes (White et al., 2018). A review of the literature suggests that relativism was positively correlated with unethical behavior (Greenfield et al., 2008; Henle et al., 2005; Nasir et al., 2014; Tian, 2008). Harvey (2015) examined the influence of and individual’s ethical ideology in relationship to their propensity to create budgetary slack. The results of the study indicated a positive correlation between propensity to create budgetary slack and the individual’s level of relativism. Table 19 below shows the mean differences in slack levels for the low relativism and high relativism groups. Although there was no statistically significant difference between high/low relativistic individuals and budgetary slack levels, results were consistent with the literature. The low relativistic individuals created a slack level of around $11,000, whereas the high relativistic
individuals created slack of nearly $19,000. Participants in the high relativistic group created a mean slack level nearly $8,000 higher than participants in the low relativistic group.

Table 19

<table>
<thead>
<tr>
<th>Descriptives</th>
<th>Mean_Slack</th>
<th>95% Confidence Interval for Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Mean</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Low Relativism</td>
<td>404</td>
<td>11.1188</td>
</tr>
<tr>
<td>High Relativism</td>
<td>399</td>
<td>18.8404</td>
</tr>
<tr>
<td>Total</td>
<td>803</td>
<td>14.9556</td>
</tr>
</tbody>
</table>

To investigate whether Americans and Brazilians differ on whether they have high or low relativistic ideology, a \(\chi^2\) statistic was conducted. Assumptions were checked and Table 20 below shows they were met. Within the Expected Count values shown, there was confirmation that all cells had an expected value greater than 5. Table 21 below shows the Pearson \(\chi^2\) results and indicates that Americans and Brazilians are not significantly different on whether or not they have high or low relativistic ideology \(\left(\chi^2 = .918, \text{df} = 1, N = 803, p = .338\right)\). Phi, which indicates the strength of the association between the two variables, is \(-.034\). There was not a significant association between relativism and culture. Based on these results, the null hypothesis that there is no difference in levels of relativistic ideology between Americans and Brazilians cannot be rejected.
Table 20

<table>
<thead>
<tr>
<th>Rela</th>
<th>Culture Crosstabulation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>American</td>
</tr>
<tr>
<td>Rela</td>
<td>Count</td>
<td>201</td>
</tr>
<tr>
<td>Low</td>
<td>Expected Count</td>
<td>207.8</td>
</tr>
<tr>
<td></td>
<td>% within Culture</td>
<td>48.7%</td>
</tr>
<tr>
<td>High</td>
<td>Count</td>
<td>212</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>205.2</td>
</tr>
<tr>
<td></td>
<td>% within Culture</td>
<td>51.3%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>413</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>413.0</td>
</tr>
<tr>
<td></td>
<td>% within Culture</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 21

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>df</th>
<th>Asymptotic Significance (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>.918a</td>
<td>1</td>
<td>.338</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correctionb</td>
<td>.788</td>
<td>1</td>
<td>.375</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>.918</td>
<td>1</td>
<td>.338</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td></td>
<td></td>
<td>.359</td>
<td>.187</td>
<td></td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td></td>
<td></td>
<td>.338</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>803</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 193.79.
b. Computed only for a 2x2 table

**Relationship of hypotheses to research questions.** As previously discussed, there were three main research questions. The first research question focused on cross-cultural differences in perceptions of horizontal equity and their effect on budgetary slack levels. The second research question focused on cross-cultural differences in perceptions of self-efficacy and their effect on budgetary slack levels. The third research question focused on cross-cultural differences in ethical ideology and their effect on budgetary slack levels. Each question is
presented below. In the following section the results of each of the hypotheses will be addressed as it relates to the applicable research question.

**Research Question 1.** The first main research question was to gain insight in to how the cross-cultural differences in perceptions of horizontal equity affect budgetary slack levels. Perceived unfairness of pay has a negative effect on employee budgeting decisions (Daumoser et al., 2018; Drake et al., 2014; Guo et al., 2017). As a response to perceived unfairness, employees will misreport information. This setting increases incentives for employees to commit fraud (Clor-Proell et al., 2015; Drury, 2015). Hypothesis one examined American and Brazilian budgetary slack levels under equity and inequity treatments. The first null hypothesis for this research question was that there is no significance between equity/inequity conditions and budgetary slack levels. Based on the results of this study, the first null hypothesis has been rejected. The second null hypothesis for this research question was that there is no significance between American budgetary slack levels and Brazilian budgetary slack levels. Based on the results of this study, the second null hypothesis cannot be rejected. The third null hypothesis for this research question was that there is no difference in equity levels between Americans and Brazilians serves as a manipulation check. Based on these results, the third null hypothesis that there is no difference in levels of equity between Americans and Brazilians cannot be rejected.

**Research Question 2.** The second main research question was to gain insight in to how the cross-cultural differences in perceptions of self-efficacy affect budgetary slack levels. Research suggests a strong positive connection between self-efficacy and ethical decision making (Welch, 2013). The significant and positive relationship was confirmed again by (Blewitt et al., 2018). Hypothesis one examined American and Brazilian budgetary slack levels under low self-efficacy and high self-efficacy treatments. The first null hypothesis for this
research question was that there is no significance between high/low self-efficacy conditions and budgetary slack levels. Based on the results of this study, the first null hypothesis cannot be rejected. The second null hypothesis for this research question was that there is no significance between American budgetary slack levels and Brazilian budgetary slack levels. Based on the results of this study, the second null hypothesis cannot be rejected. The third null hypothesis for this research question was that there is no difference in self-efficacy levels between Americans and Brazilians serves as a manipulation check. Based on these results, the third null hypothesis that there is no difference in levels of self-efficacy between Americans and Brazilians cannot be rejected.

**Research Question 3.** Finally, the third main research question was to gain insight in to how the cross-cultural differences in ethical ideology affect budgetary slack levels. Ethical ideology consists or two constructs, idealism and relativism. These constructs help explain why individuals with similar backgrounds and characteristics interpret ethical situations differently. The idealism construct captures the degree to which an individual believes a potentially harmful act is always avoidable. Adherence to universal moral rules is the criteria by which an action should be deemed moral or not (Forsyth, 1980). Moral judgement of an action is viewed in terms of consequences of the action or its effect on the welfare of others. When making an ethical judgment, idealistic individuals avoid choosing the lesser of two evils, since the decision would still result in harm to others (Li et al., 2018). In contrast, relativistic individuals believe that the morality of an action depends upon the nature of the situation and the individuals involved (Napal, 2014). Emphasis is placed on circumstances rather than on ethical principles or norms that were violated when making moral judgements (Forsyth, 1992). In order to answer the third research question, two hypotheses were needed.
Hypothesis three examined American and Brazilian budgetary slack levels for low idealistic and high idealistic ideologies. The first null hypothesis for this research question was that there is no significance between high/low idealistic ideology and budgetary slack levels. Based on the results of this study, the first null hypothesis cannot be rejected. The second null hypothesis for this research question was that there is no significance between American budgetary slack levels and Brazilian budgetary slack levels. Based on the results of this study, the second null hypothesis cannot be rejected. The third null hypothesis for this research question was that there is no difference in idealistic ideology levels between Americans and Brazilians. Based on these results, the third null hypothesis that there is no difference in levels of idealistic ideology between Americans and Brazilians can be rejected as Brazilian participants skewed higher on idealism than American participants.

Hypothesis four examined American and Brazilian budgetary slack levels for low relativistic and high relativistic ideologies. The first null hypothesis for this research question was that there is no significance between high/low relativistic ideology and budgetary slack levels. Based on the results of this study, the first null hypothesis cannot be rejected. The second null hypothesis for this research question was that there is no significance between American budgetary slack levels and Brazilian budgetary slack levels. Based on the results of this study, the second null hypothesis cannot be rejected. The third null hypothesis for this research question was that there is no difference in relativistic ideology levels between Americans and Brazilians. Based on these results, the third null hypothesis that there is no difference in levels of idealistic ideology between Americans and Brazilians cannot be rejected, supporting equivalence across cultural participation on this ethical dimension.
Summary of the findings. Eight hundred and three (803) participants were used in this study. American and Brazilian responses were 413 and 390, respectively. One-way ANOVA and $\chi^2$ were the statistical methods used to analyze the data. This paper proposed four hypotheses with respect to the effect cross-cultural differences in perceived horizontal equity, self-efficacy, and ethical ideology of individuals from America and Brazil had on the created levels of budgetary slack to address the three research questions outlined in Section One.

Hypothesis one examined American and Brazilian budgetary slack levels under equity and inequity treatments. To address hypothesis one, two ANOVA tests and one $\chi^2$ test were performed. The first ANOVA test determined if difference in levels of budgetary slack between equity and inequity was statistically significant. Based on the results of the first ANOVA test, the null hypothesis that there is no significant difference in levels of budgetary slack between equity and inequity conditions was rejected. Results were consistent with the literature. The second ANOVA test determined if the difference in levels of budgetary slack between Brazilians and Americans was statistically significant. The null hypothesis that there is no significant difference in levels of budgetary slack between Brazilians and Americans could not be rejected. These results are not consistent with the literature. Collectivist and high uncertainty avoidance cultures will misreport less than individuals from individualistic and low uncertainty cultures, in the absence of face-to-face interaction (Chow et al., 1998). In the case of Americans and Brazilians, this does not appear to be the case. Both cultures created nearly the same amount of budgetary slack. A $\chi^2$ test determined if there were differences in levels of equity between Americans and Brazilians. There was not a significant association between equity and culture. Based on these results, the null hypothesis that there is no difference in levels of equity between Americans and Brazilians could not be rejected, supporting the intended manipulation.
Hypothesis two examined American and Brazilian budgetary slack levels under high and low self-efficacy treatments. To address hypothesis two, two ANOVA tests and one $\chi^2$ test were performed. The first ANOVA test determined if difference in levels of budgetary slack between high self-efficacy and low self-efficacy was statistically significant. Based on the results of the first ANOVA test, the null hypothesis that there is no significant difference between high/low self-efficacy conditions and budgetary slack levels could not be rejected. Although there was no statistically significant difference, results were not consistent with the literature. Research suggests a strong positive connection between self-efficacy and ethical decision making (Welch, 2013). The significant and positive relationship was confirmed again by (Blewitt et al., 2018). However, participants in the high self-efficacy treatment created a mean slack level higher than participants in the low self-efficacy treatment. The second ANOVA test determined if the difference in levels of budgetary slack between Brazilians and Americans was statistically significant. Results were discussed in the summary of hypothesis one. A $\chi^2$ test determined if there were differences in levels of self-efficacy between Americans and Brazilians. There was not a significant association between self-efficacy and culture. Based on these results, the null hypothesis that there is no difference in levels of self-efficacy between Americans and Brazilians was not rejected, again, supporting the intended manipulation.

Hypothesis three examined American and Brazilian budgetary slack levels under high and low idealistic ideology. To address hypothesis three, two ANOVA tests and one $\chi^2$ test were performed. The first ANOVA test determined if difference in levels of budgetary slack between high idealistic and low idealistic ideology was statistically significant. Based on the results of the first ANOVA test, the null hypothesis that there is no significant difference between high/low idealistic ideology and budgetary slack levels could not be rejected. Although there was no
statistically significant difference, results were not consistent with the literature. Idealistic individuals avoid choosing the lesser of two evils, since the decision would still result in harm to others (Li et al., 2018). Highly idealistic individual would be negatively correlated with the creation of budgetary slack (Abdullah & Brink, 2017). However, participants in the high idealistic group created a mean slack level over $5,000 higher than participants in the low idealistic group. The second ANOVA test determined if the difference in levels of budgetary slack between Brazilians and Americans was statistically significant. Results were discussed in the summary of hypothesis one. A $x^2$ test determined whether Americans and Brazilians differ on whether they have high or low idealistic ideology. There was a significant association between idealism and culture. Based on these results, the null hypothesis that there is no difference in levels of idealistic ideology between Americans and Brazilians was rejected.

Hypothesis four examined American and Brazilian budgetary slack levels under high and low relativistic ideology. To address hypothesis four, two ANOVA tests and one $x^2$ test were performed. The first ANOVA test determined if difference in levels of budgetary slack between high relativistic and low relativistic ideology was statistically significant. Based on the results of the first ANOVA test, the null hypothesis that there is no significant difference between high/low relativistic ideology and budgetary slack levels could not be rejected. Although there was no statistically significant difference, results were consistent with the literature. Relativistic individuals believe that the morality of an action depends upon the nature of the situation and the individuals involved (Napal, 2014). A review of the literature suggests that relativism was positively correlated with unethical behavior (Greenfield et al., 2008; Henle et al., 2005; Nasir et al., 2014; Tian, 2008). Participants in the high relativistic group created a mean slack level nearly $8,000 higher than participants in the low relativistic group. The second ANOVA test
determined if the difference in levels of budgetary slack between Brazilians and Americans was statistically significant. Results were discussed in the summary of hypothesis one. A \( \chi^2 \) test determined whether Americans and Brazilians differ on whether they have high or low relativistic ideology. There was not a significant association between relativism and culture. Based on these results, the null hypothesis that there is no difference in levels of relativistic ideology between Americans and Brazilians could not be rejected.

**Applications to Professional Practice**

The findings of this research are applicable to the fields of finance, accounting, and business. The purpose of this study was to examine the effect cross-cultural differences in perceived horizontal equity, self-efficacy, and ethical ideology of individuals have on the created levels of budgetary slack. This research was designed to help organizations, specifically within the United States of America and Brazil, understand how different cultures will react under different situations with regards to creating budgetary slack, and perhaps expand the benefits of this understanding to other populations. This section contains the application of this research study to international business practices and explains how these findings are relevant to culture, equity, self-efficacy, ethical position, and budgetary slack.

The first research question was to gain insight into the effect cross-cultural differences in perceptions of horizontal equity have on the creation of budgetary slack. There was statistical significance between horizontal equity and the creation of budgetary slack. Participants in the low equity treatment created over twice as much slack as participants in the high equity treatment. Thus, due to inequity perceptions, the budgeting practice was used opportunistically to benefit individuals at the expense of the company. The results of the study are relevant to budgetary procedures that may impact an individual’s perceptions of fairness in pay compared to
colleagues or peers with the same responsibility. With participative budgeting and the allocation of finite resources, this research indicates that businesses and managers should focus on creating pay policies and budgetary targets that are perceived as equitable and achievable.

The second research question was to gain insight into the effect cross-cultural differences in perceptions of self-efficacy have on the creation of budgetary slack. There was no statistical significance between self-efficacy and the creation of budgetary slack. Although there was no statistically significant difference between high/low self-efficacy conditions and budgetary slack levels, participants in the high self-efficacy treatment created a mean slack level of nearly $5,000 higher than participants in the low self-efficacy treatment.

It is important to note, years of experience can play a role in an individual’s self-efficacy. For this study, the mean years of professional experience of participants was 14.36. The lower quartile had five or less years of professional experience, while the upper quartile had 20 or more years of professional experience. An ANOVA test was performed to determine if difference in levels of budgetary slack between low experience and high experience was statistically significant. The p-value for the F-statistic was .05, indicating there is a statistically significant difference between low/high years of experience and budgetary slack levels. The low years of experience group created a slack level of nearly $300, whereas the high years of experience group created slack of around $16,500. This research indicates that businesses and managers should focus on creating coaching/training programs for employees. It appears employees with more years of professional experience could benefit from education on how creating slack in their budgetary decisions can negatively impact the company and themselves.

The third research question (broken up into two sub-questions) was to gain insight into the effect cross-cultural differences in ethical ideology (idealism and relativism) have on the
creation of budgetary slack. There was no statistical significance between high/low idealistic or high/low relativistic ideologies and the creation of budgetary slack. However, Pearson \( \chi^2 \) results indicate that Americans and Brazilians are significantly different on whether or not they have high or low idealistic ideology \( (\chi^2 = 34.099, \text{df} = 1, N = 803, p < .001) \). Of the 413 Americans surveyed, nearly 56% were categorized as low idealism. Of the 390 Brazilians surveyed, nearly 65% were categorized as high idealism. Phi, which indicates the strength of the association between the two variables, is .206. There was a significant association between idealism and culture. Participants in the high idealistic group created a mean slack level over $5,000 higher than participants in the low idealistic group.

The results of the study are relevant to budgetary procedures that may impact an individual’s ethical behavior. Types of behaviors supported by social norms can vary among different cultures. This is important to businesses and managers, because a strong personal preference for honesty will result in a conformation to this norm. Similarly, individuals with a weaker preference for honesty can be motivated by social norms to report honestly, which suggests if a company wants honest budgetary reporting, the company must foster and reinforce a business culture of honesty. A code of conduct must be in place and enforced. Economic penalties can be used to influence social norms for honesty. Having a code of conduct without penalties result in higher dishonest reporting when compared to settings with penalties (Brink et al., 2017).

**Biblical Implications**

Biblically, the research supported the scripture as it relates to stewardship and intrinsic motivation. Regardless of what we are called to do, we must “be steadfast, immovable, always excelling in the work of the Lord, because you know that in the Lord your labor is not in vain” (1
Corinthians 15:58, CSB). A good steward works for the betterment of the organization and decisions are made to benefit the organization and its stakeholders (Corbetta & Salvato, 2004). It is important that as human beings, we remember that we steward God’s creation on God’s behalf. “The Lord God took the man and put him in the Garden of Eden to work it and take care of it” (Genesis 2:15, NIV). Therefore, as stewards of God, our work must be meaningful and strive for outcomes that are good and productive. We become more human when our work grows out of relationships and gives back to the community.

As Christians in business, it is vital that we understand God’s intention for business. We must “serve wholeheartedly, as if you were serving the Lord” (Ephesians 6:7, NIV). It is equally vital to remember that God owns all earthly possession, including businesses. The biblical view of stewardship is traditionally defined as using and managing the resources God provides for the glory of God and the betterment of his creation (Botha, 2014). Therefore, as stewards of God, we will need to manage business in accordance to His desires. To do so, work must mirror that of God’s. As Christians, our work must not only be additive, but also restorative (Van Duzer, 2010). Seeking to use resources efficiently not only allows for the organization to flourish, but it also honors God through being good stewards of the resources he has entrusted to the organization. Stewardship enables the possibility of congruent goals (Davis et al., 1997).

Work was meant to be God-centered and meaningful. According to Hardy (1990), today work is still considered a secular matter, with little or no connection to religion (p. 84). Unfortunately, when we are unable to see the meaning in our work, work becomes a simple means to earning a paycheck. Thus, we become less motivated and less engaged in our work. “Attitudes and motivations certainly will play key roles in the moral evaluation of a person engaged at work” (Hardy, 1990, p. 95). When people no longer think of “work as a simple way
of making money, and nothing more” (Hardy, 1990, p. 103). Their job has now become a means to a higher end (Hardy, 1990). People then begin to think “How, with my existing abilities and opportunities, can I be of greatest service to other people?” (Keller & Alsdorf, 2012).

We must put the needs of others before our own, act in the interest of the common good, and provide benefit to others (Gini & Green, 2014). This others-first perspective goes against the Agency Theory model of instrumental and individual motivation and replaces it with the intrinsic motivation that all gifts come from God. As Christians we must not allow worldly possessions, such as money, to dictate our happiness or our perceived value. “No one can serve two masters. Either you will hate the one and love the other, or you will be devoted to the one and despise the other. You cannot serve both God and money” (Matthew 6:24, NIV). The results of this research sheds light on the most important assets of business often cannot be found on its balance sheet. In many cases the wealth of the company, that is, its capacity to generate high returns, will be embedded in the creativity, knowledge, talent, and relationships of its employees (Van Duzer, 2010).

**Recommendations for Action**

The results of this study indicated that horizontal equity has a statistically significant effect on budgetary slack. Although self-efficacy did not have a statistically significant effect on budgetary slack creation, results suggest that the difference in levels of budgetary slack between low experience and high experience was statistically significant. The results of this research could potentially be of value to managers and employees who take part in the budgeting process. Additionally, the findings could potentially be of value to individuals involved in creating company policies regarding pay structures and codes of conduct. Based on the results of this study, two recommendations for action are provided in the following paragraphs.
The first recommendation for action is focused on horizontal equity. The results of the study suggest perceptions of horizontal equity affect budgetary slack levels. Research has shown that pay relative to referents affects individuals’ pay satisfaction more than absolute pay (Williams et al., 2006), pay equity and social comparison play an important role in equity evaluation (Drake et al., 2014). Consistent with the literature (Clor-Proell et al., 2015; Drake et al., 2014; Drury, 2015), the results of this study showed that perceptions of equity in reward systems is positively correlated with budgetary slack. Participants in the low equity treatment created over twice as much slack as participants in the high equity treatment. Although perceived equity in reward systems was the focus of this study, organizations should utilize resources to gain insight into what other areas, when employees perceive equity (inequity), will lead to decreases (increases) in budgetary slack levels. Resources should be applied to those areas with the greatest desired effect on budgetary slack, as this may have the most impact on the organization. In the case of reward systems, managers could design pay structures that are perceived equitable by their employees. In addition, managers would provide the justification behind each pay structure.

The second recommendation for action is focused on years of professional experience. The low years of experience group created a slack level of nearly $300, whereas the high years of experience group created slack of around $16,500. Although years of professional experience was not the focus of this study, the results suggest that years of professional experience affects budgetary slack levels. Organizations should focus on providing experienced employees with coaching opportunities. Coaches can identify and understand the influencers faced by employees of the organization, while helping employees help themselves grow. Also, a coach helps build commitment and heightened awareness (Underhill, McAnally, & Koriath, 2007). Understanding
what motivates an employee and their actions will allow the coach to develop a program that will lead to future desired actions and results (Cocivera & Cronshaw, 2004). When used in a holistic approach, coaching can impact performance and culture (Underhill et al., 2007). The impact can be attributed to a coach fostering greater organizational awareness. In addition to helping employees achieve their objectives, coaching can also enable employees to be faithful in their work. By helping the individual find purpose in their work, a coach has increased the chance of long-term success for the individual and the company they work for.

The information put forth in this research study should be examined by those with managerial or budgetary responsibilities. The recommendations for action are numerous, and many depend on the type of organization. Two suggestions were listed above to help organizations decrease budgetary slack levels based on horizontal equity and years of professional experience, but this list is not all-inclusive.

**Recommendations for Further Study**

This research contributed to the current gap in the literature concerning the effect cultural differences in non-pecuniary motivations have on an individual’s decision to create slack. Furthermore, this research attempted to address the gap in the role of ethical ideology in business by empirically examining the influence of culture on an individual’s ethical ideology and their propensity to create budgetary slack. Several opportunities for future research are available from this study. The following are recommendations for further research.

The first recommendation for further research is to examine the interactions among horizontal equity and self-efficacy, and their effect on budgetary slack. Like Abdullah and Brink (2017), the study manipulated horizontal equity and self-efficacy to examine the affect each independent variable had on the dependent variable, budgetary slack. However, the study did
not examine the interactions among independent variables and their effect on budgetary slack. Again, based on prior research, an efficacy effect may be tied to an equity effect.

The second recommendation for further study is to take a fine grain approach to culture and examine budgetary slack based on cultural dimensions. The study used self-reported data, which allowed participants to self-identify their culture as American or Brazilian. The study did not specifically measure the cultural dimensions of each participant. For example, future research could specifically measure the dimensions of collectivism and uncertainty avoidance and their effect on budgetary slack.

Finally, the third recommendation for further study is to examine the effect time has on the propensity for individuals to create budgetary slack. Results of this study suggest that years of professional experience is positively correlated with budgetary slack levels. This raises the question as to what situational factors might be driving this behavior (organizational culture, employee workplace norms, and/or prolonged experienced inequity). Future research could further examine the effect years of professional experience has on budgetary slack. In addition, this research could examine the effect time exposed to a culture has on the propensity for individuals to behave like their counterparts with regards to creating budgetary slack. For example, individuals who were born, raised, and working in same country compared to individuals who were born and raised in same country, but work in another country.

Reflections

The idea to examine American and Brazilian culture stemmed from a business management course in undergrad at the University of Evansville. The course was designed to examine specific companies located in Brazil and the United States and compare the differences in the way each culture does business. Students took a trip to Brazil and spent time in Sao Paulo.
and Rio de Janeiro, visiting Cummins, Berry Plastics, and Boeing. Fast forward a few years, the author still had a fascination with Brazilian culture. So much so, the author used the DBA courses leading up to his dissertation as an opportunity to continue to study Brazil. After having visited and studying the Brazilian culture, the author did expect Brazilians to behave differently than Americans with regards to budgetary slack. Brazil is known for having some corruption issues. For example, the country is ranked 96th out of 180 countries with regards to corruption, while the United States is ranked 16th. This puts Brazil on the corrupt side of the spectrum. Given this information, the author did expect Brazilians to create more budgetary slack than Americans. Surprisingly, the results of the study showed that Americans and Brazilians created nearly the same levels of slack. This forced the author to consider that it is possible for cultures to be different in many ways but behave similarly in a given situation for different reasons.

Steps were taken to ensure the reliability of the research results and that the researcher could not possibly have unintended effects on the participants. The researcher played a limited role in the data collection process. Surveys were distributed to Americans and Brazilians in business-related fields via Qualtrics. A simple random sample was used to select participants included in the sample. Thus, providing a highly representative sample of the populations being studied. Data were collected in this manner to reduce the opportunity for the researcher to bias data.

Society morally condemns people for deliberately lying, harming or killing an innocent, stealing valuables, turning away from those in dire need, or failing to keep a promise (Abratt et al., 1992). According to Forsyth et al. (2008), cross-cultural consensus is lost when the discussion turns to less clear-cut issues. When the discussion turns to budgetary slack, what is considered moral differs to some extent from one culture to another. Looking at budgetary slack
through a biblical lens, rather than through a societal or cultural one, the issue becomes very clear-cut. We are stewards of God and we steward God’s creation on His behalf. The biblical view of stewardship is traditionally defined as using and managing the resources God provides for the glory of God and the betterment of his creation (Botha, 2014). Therefore, you must “serve wholeheartedly, as if you were serving the Lord” (Ephesians 6:7, NIV). In addition, it is vital to remember that God owns all earthly possession, including businesses. Thus, when we create slack in the budget and steal from the organization, we steal from God.

Summary and Study Conclusions

The purpose of this quantitative study was to examine the effect cross-cultural differences in perceived horizontal equity, self-efficacy, and ethical ideology of individuals from America and Brazil has on the created levels of budgetary slack. Section 1 highlighted the problem to be addressed regarding perceptions of horizontal equity, self-efficacy, and ethical ideology of Americans and Brazilian, affect budgetary slack levels. The presentation of salient literature pertained to factors impacting slack creation. Section 2 identified the instruments, a Case Study and the EPQ, to be utilized in this quantitative research. Survey data were obtained from 829 participants using a third-party data aggregator, Qualtrics. Eight hundred and three (803) participants were used in analysis. American and Brazilian responses were 413 and 390, respectively. One-way ANOVA and $x^2$ were the statistical tests conducted. Section 3 provided a presentation of the research findings, revealing a statistical significance between horizontal equity and budgetary slack.

The research results indicated a statistically significant difference between equity/inequity conditions and budgetary slack levels: p-value for the F-statistic was .027. Participants in the low equity treatment created over twice as much slack as participants in the
high equity treatment. Although there was no statistically significant difference between high/low self-efficacy conditions and budgetary slack levels, there was a statistically significant difference between low/high years of experience and budgetary slack levels: p-value for the F-statistic was .05. The low years of experience group created a slack level of nearly $300, whereas the high years of experience group created slack of around $16,500.

This research contributed to filling the knowledge gap concerning the effect cultural differences in non-pecuniary motivations have on an individual’s decision to create slack and provided statistical results indicating significance between horizontal equity and the creation of budgetary slack. Managers may use the findings of this research to gain awareness of this significance and take steps necessary to create pay policies and budgetary targets that are perceived as equitable. Furthermore, this research addressed the gap in the role of ethical ideology in business by empirically examining the influence of culture on an individual’s ethical ideology and their propensity to create budgetary slack. Study results indicated no statistical difference in slack levels between Americans and Brazilians, which suggests if a company wants honest budgetary reporting, the company must foster and reinforce a business culture of honesty.
References


Church, B. K., Kuang, X. J., & Liu, Y. S. (2018). The effects of measurement basis and slack benefits on honesty in budget reporting. *Accounting, Organizations and Society, 1*-11. doi: 10.1016/j.aos.2018.05.005


### Appendix A: Test of Homogeneity of Variance

**Equity**

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## Appendix B: Tests of Normality

### Tests of Normality

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*a. Lilliefors Significance Correction*

### Tests of Normality

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*a. Lilliefors Significance Correction*

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*a. Lilliefors Significance Correction*
Appendix C: Normal Q-Q Plots

Normal Q-Q Plot of Mean_Slack for Equity 1

Normal Q-Q Plot of Mean_Slack for Equity 2
Normal Q-Q Plot of Mean_Slack for Ideal= 1.00

Normal Q-Q Plot of Mean_Slack for Ideal= 2.00
Normal Q-Q Plot of Mean_Slack
for Rela= 1.00

Normal Q-Q Plot of Mean_Slack
for Rela= 2.00
Appendix D: Histograms

Histogram for Equity 1

Histogram for Equity 2
Histogram for Ideal - 1.00

Mean = 12.15
Std. Dev. = 70.626
N = 569

Histogram for Ideal - 2.00

Mean = 17.33
Std. Dev. = 74.85
N = 434