

**TOWARDS A FRAMEWORK OF THE EMPLOYEE ENGAGEMENT PROCESS
MODEL, EXAMINING THE MODERATION EFFECTS OF THE DECISION MAKING
PROCESS: AN HRD PERSPECTIVE**

A Dissertation

by

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ABSTRACT

The purpose of this study was to examine a new theoretical framework of the Employee Engagement Process Model, by examining the relationship between antecedents and employee engagement, and how that relationship is moderated by the decision making process. Based on a review of literature, many prominent HRD scholars have alluded to the fact that employees experience a cognitive appraisal process before deciding to get involved in an antecedent intervention. This study utilizes a quantitative approach to research and utilized data collected from surveys to examine the relationship between antecedent factors, employee engagement, and the decision making process. Variables of interest included: Antecedent discourse construct (internal/external discourse, leadership discourse, job characteristics discourse, lower level hygiene discourse, and higher order discourse), decision making process construct (contextual [meaningfulness, safety, and psychological availability], emotional, and behavioral), and the construct of employee engagement (cognitive, emotional, and behavioral). The sample utilized for this study consisted of 643 participants (faculty and staff) from a community college district in the state of Texas. A model of the employee engagement process was designed and used as a basis for hypothesized relationships for this study. Research findings provide evidence that antecedent discourses used in this study are associated with employee engagement and may be used as predictors of engagement. Where antecedents may be defined as something that comes before or something else and may have influenced it or caused it and employee engagement may be defined as an employee exhibiting a determined attitude and a motivated state of mind toward their work role effort. Furthermore, findings also provide evidence that the decision making process moderated the relationship between antecedents and employee engagement.

DEDICATION

This dissertation is dedicated first, to my Lord and Savior Jesus Christ, for without him none of this would have been possible. You set me on an almost impossible journey, and you sustained me, even when I had doubts in myself and my own abilities. However, I held fast to your word and pushed on to finish the race that you set before me in victory. Matthew 19:26 “...with God, ALL things are possible”. All honor and glory belong to you.

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NOMENCLATURE

AHRD – Academy of Human Resource Development

CSR - Corporate Social Responsibility

CWAS-11 – Cognitive Work Appraisal Scale

EEPM – Employee Engagement Process Model

FIML – Full Information Maximum Likelihood

GWA – Gallup Workplace Audit

HRD – Human Resource Development

ISA – Intellectual, Social, Affective Engagement Scale

MBI – Maslach Burnout Inventory

OLBI – Oldenburg Burnout Inventory

SEM – Structural Equation Modeling

UWES – Utrecht Work Engagement Scale

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CHAPTER I

INTRODUCTION AND BACKGROUND OF THE STUDY

Industry leaders are increasingly searching for ways to bring about positive organizational change (Jeung, 2011; Kim, Kolb, & Kim, 2012; Shuck & Wollard, 2009). One area they are exploring is the area of employee engagement levels, by looking at antecedents and outcomes of employee engagement. Woocheol, Kolb, and Kim (2012) maintain, “Engagement is an essential element in helping and facilitating employees’ change and then leading to improvement in their performance” (p. 249). Corporations lose billions of dollars every year due to lack of productivity from their employees (Avery, McCay, & Wilson, 2007; Rath & Clifton, 2004), this loss is estimated to total over 86.5 million unproductive or low productive days per year (The Gallup Organization, 2001). Saks (2006) documents that “half of Americans in the U.S. workforce, are not fully engaged, or are disengaged, leading to what has been referred to as an ‘engagement gap’ that is costing U.S. businesses \$300 billion a year in lost productivity” (p. 600). Furthermore, the engagement gap has been a constant for the last 10 years; leading one to believe that more work still needs to be done to change this.

Employee engagement is a fairly new topic being researched in the field of Human Resource Development (HRD) (Shuck, 2013; Valentin, 2014; Wollard and Shuck, 2011). The construct itself is not new but has evolved throughout the years in other fields of research. For example, within the field of psychology, it has been referred to as “work engagement.” Within the field of HRD the use of the term “employee engagement” has been consistent over the last ten years. However, according to Woocheol, Kolb, and Kim (2012) the terms work engagement and employee engagement “are often used interchangeably” (p. 249). Schaufeli and Salanova (2011), as well as, Saks and Gruman (2014) emphasize the difference between employee and work

engagement in an effort to differentiate between the two types of engagement. Work engagement, as described by Bakker, Albrecht, and Leiter (2011) is when employees are feeling excited, enthusiastic, energized, happy and pleased with their work. Employee work engagement falls somewhere along the spectrum of pleasant work engagement and high activation work engagement (Bakker et al., 2011). Employee engagement exhibits characteristics of determination, and motivation of work role effort (Valentin, Valentin, & Nafukho, 2015). Employee engagement also consists of cognitive engagement, emotional engagement, and behavioral engagement (Rich, LePine, & Crawford, 2010). Employee engagement may be defined as, “an active, work-related positive psychological state” (Shuck, Aldeson, & Reio, 2016, p. 2), and “operationalized by the intensity and direction of cognitive, emotional, and behavioral energy” (Shuck, Aldeson, & Reio, 2016, p. 2).

Research in HRD in general, on the topic of employee engagement, has grown in popularity within the last ten years, with a spike in publications starting in 2001 and a peak of publications in 2014 based on the literature reviewed (see chapter 2). The designation of the topic as a standalone phenomenon for research has highlighted the emphasis on the importance of employee engagement and its impact on individual and organizational outcomes.

Employee Engagement in Literature

Employee engagement has been measured in terms of categorical types of employees (Krueger & Killham, 2006) or levels of engagement (Lockwood, 2007). Both of which consist of the following three categories: (1) *engaged*, (2) *not engaged*, and (3) *actively disengaged*. *Engaged* employees, according to Krueger and Killham (2006) may be representative of employees who “work with passion and feel a profound connection to their company... they drive innovation and move the organization forward” (p. 3), the authors take a practitioner's view of

employee engagement. *Not engaged* employees are in essence “checked out” (Lockwood, 2007, p. 3), and *actively disengaged* employees are “just unhappy at work... they are busy acting out their unhappiness, everyday these workers undermine what their engaged coworkers accomplish” (Lockwood, 2007, p. 3), these are employees who expend energies on being disengaged.

In 2014 there were approximately 120 million people in the United States who were employed full time (Statistica, 2015). Of this number, 30% were *engaged*, 52% were *not engaged*, and 18% were *actively disengaged* (Gallup, 2014; State of the American workplace, 2014). That means 70 % of the American workforce (State of the American workplace, 2014) were not driving innovation or moving their respective organizations forward (Lockwood, 2007) in 2014. Those numbers are alarming when factoring in the costs of having a disengaged workforce. According to a report disseminated by the Gallup organization, estimates of costs for a disengaged workforce in U.S. organizations range “between \$450 billion to \$550 billion each year” (State of the American workplace, 2014, p. 12). This same report contends that the stagnation of engagement levels for the U.S. workforce is holding back the U.S. economy. Intuitively, the topic of employee engagement is on the minds of every stakeholder in today’s organizations. Additionally, employee engagement or disengagement may be found in all generational groups, across borders, and possibly in every area of industry. Moreover, when looking at employee engagement from a generational level, non-engagement levels are reported to be stable across each generational group (Trends in Global Employee Engagement, 2014; 2015). Global levels of engagement are static, ranging from region to region with very little difference from percentages reported for 2013 and 2014. Looking at engagement in terms of generational levels, and global levels between regions, leads me to the conclusion that there is a greater problem here and it requires us to pay closer attention on the employee engagement process.

Statement of the Problem

Knowing the percentages and levels of engagement or disengagement is not enough to understand how to change them, but knowing the percentages raises a question as to what can be done or what needs to be done to change them, this is a real problem and a growing issue for HRD practitioners, especially when tasked to introduce programs or interventions to raise levels of employee engagement within an organization, and have little to no understanding of the employee engagement process. Employee engagement is vital to every industry and demands attention, especially when looking at the process in how employees decide to get engaged.

The problem that this research addressed is that currently there is no identifiable process of employee engagement. The absence of an identifiable process of employee engagement is reflective of other issues that are found within the literature on the topic of employee engagement. For example, Shuck (2010) reports that employee engagement literature is predominantly offered by practitioners, he calls this a “bottom up approach”, stating that atheoretical practitioner based research is saturating the internet. The intense levels of employee disengagement reported across industries and countries are reflective of the bottom up approach that Shuck (2010) described. This atheoretical view of employee engagement is reflective of the fact that we currently do not have a model for the process of how employees decide to get engaged. Moreover, the lack of a specified employee engagement process model or an agreed upon engagement process theory is absent from within the field of human resource development as of the time of this study, which may in fact be due to the newness of attention to the phenomenon (Saks & Gruman, 2014) within the field of Human Resource Development or the practitioner atheoretical approach to engagement. Instead, we rely on varied schools of thought or lenses from which to view employee engagement. Bakker, Albrecht and Lieter (2011) support this argument by

emphasizing the fact that engagement is under-theorized and is summoning theoretical development. Sarti (2014) also agrees that there is a need for further discussion to enrich the theoretical underpinnings of employee engagement and I would also add that further discussion is necessary to determine the process in which employees decide to get engaged or not engaged. Shuck, Ghosh, Zigarmi, and Nimon (2012) go further and call for clear theoretical underpinnings that are both distinguishable and measurable. Therefore, the central problem in researching the constructs of employee engagement is that there is a lack of a unifying theoretical approach to support the constructs and processes of employee engagement (Bledow, Schmitt, Frese, & Kuhnel, 2011; Saks & Gruman, 2014).

When taking a holistic (Truss, Alfes, Delbridge, Shantz, & Soane, 2014; Shantz & Soane, 2014) approach to employee engagement (a view of employee engagement that is inclusive of all aspects of the employee engagement constructs), what comes to the surface is that each of the nomological views consists of a distinguishable process of employee engagement. A nomological view takes into consideration the manifestations and interrelationships between and among constructs examined in this study that produce certain principles that are taken as true. Shuck (2012) supports this principle and argues that rather than looking at differing models of employee engagement, one should consider the “principles that create the context for engagement rather than the methods a model might provide evidence towards” (p. 280). When reviewing the differences in approaches to employee engagement, there is a common pattern among all of them. That is, the connection between employee engagement and antecedents and their relation to an outcome. In other words, the pattern results in the use of various antecedent variables that lead to employee engagement and result in either an individual or organizational outcome. However, in the relational process, Kahn (1990) argues that there is an apparent cognitive appraisal process

that is experienced by individual employees before they express themselves or become engaged, this is what I refer to as the employee engagement process. This process consists of an employee's decision making considerations for engagement which takes place or moderates the affects in each of the employee engagement approaches found in literature. This means that the decision making process experienced by an employee will involve taking into account the individual psychological experiences of themselves, their work, and its contexts, in addition to how they express or employ themselves in these contexts (Kahn, 1990), which is what my research aims to explore. Furthermore, employees will then evaluate the meaningfulness, safety, and availability (Kahn, 1990) in their contextual elements and regulate how they will express their actions or behaviors. This common thread is important in looking at the theoretical underpinnings of a relational component of employee engagement, however, according to Khan and Heaphy (2014) this process [the employee engagement process] is often overlooked by most researchers.

Currently, there is limited published research about employee engagement from a Human Capital theory (HCT) perspective or Social Exchange Theory (SET), more investigation is still needed in terms of the employee engagement process and it is my assumption that HCT and SET can both inform us about the theory of the employee engagement process. Based on the aforementioned problems in researching employee engagement in the literature, this study aims to provide empirical data for determining the relationship between employee engagement antecedents and employee engagement. Then to explore the decision making process utilizing a Human Resource Development, HCT, and SET perspectives to capture the depth of knowledge in determining if there are any effects on the relationship between the antecedents and employee engagement.

Purpose of the Study

The purpose of this study was to examine a new theoretical framework of the Employee Engagement Process model by looking at the relationship between employee engagement antecedents and employee engagement and then look at the moderating effects that the decision-making process may have on this relationship (see Figure 1.1). By doing so I intended to have a better understanding of how HRD practitioners facilitate and enhance the engagement process. This study utilized a sample population of faculty and staff. This is a new context for HRD, one that focused on faculty and staff engagement within a college setting, and such, this will be the first study to examine faculty and staff engagement and the engagement process from an HRD perspective.

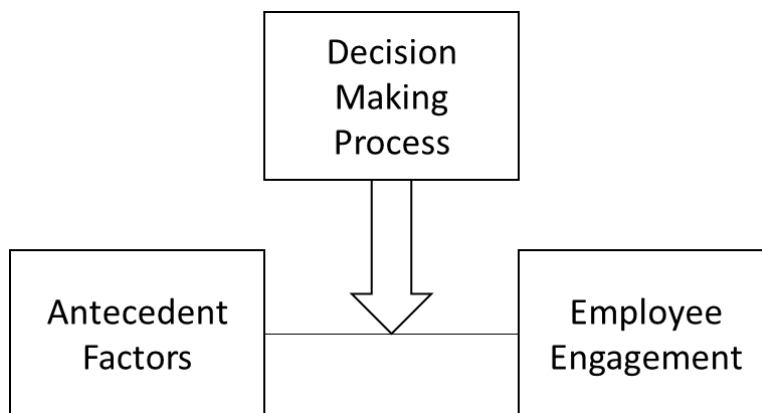
A better understanding of employee engagement contexts in which engagement takes place is necessary in order to improve the degree to which employee engagement research and theory contribute to practice. Mohrman, Gibson, and Mohrman (2001) contend, “today’s world heightens the need for useful research...many organizations grapple with new and poorly understood problems as they adapt to rapidly changing environments” (p. 357). Furthermore, Mohrman, Gibson, and Mohrman (2001) reason that research should be practical, applicable, and useful to today’s volatile organizations. They go further to make a case that research should be useful for creation within the organization rather than just serve to enlighten or rationalize the phenomenon investigated. The goal of this study was to provide practical and applicable contributions to the field of research on the topic of employee engagement.

Research Questions

In order to examine the framework of the Employee Engagement Process model utilizing variables and their relationships from the research questions proposed (see Figure 1.1), we first must examine the relationship between antecedent factors and employee engagement and then the moderating effects of the employee decision making process on this relationship, I established the following research questions to guide this research:

1. What is the relationship between antecedent factors and employee engagement?
2. How does the employee decision making process moderate the relationship between the antecedent factors and employee engagement?

Figure 1.1 Illustration of Variables and their Relationships from the Research Questions Proposed.



Significance of the Study

There has been an ever-increasing interest in understanding employee engagement and ways to improve engagement within an organization. Based on the identified gap in literature, the constructs of employee engagement can be viewed more closely and call for researchers to provide tangible and useful information to guide and advance both research and practice.

HRD professionals are in every aspect of industry, this research will contribute across all fields because of the nature of the topic and may serve to provide a generalizable application to the field of education. Research on employee engagement can be applied to all types of businesses that have employees. Engaged and disengaged employees can be found in all areas of private, for profit, and non-profit sectors [*Accounting*: Remo (2012), *Automotive Industry*: Tomlinson (2010), *Education*: Hakanen, Bakker, Schaufeli (2006), *Financial Industry*: Harter, Schmidt, Hayes (2002); Saks (2012); Viljevac, Cooper-Thomas; Walfald, Mills, Smith & Downey (2012), *Health Industry and Insurance*: Langelaan, Bakker, Van Doornen, Schaufeli (2005), *Manufacturing, Retail, Service, Transportation and Public utilities*: Harter, Schmidt, Hayes (2002), as well as several other industries not cited in this section]. HRD professional's interests should be rooted in the heart of fostering and retaining motivated and engaged employees to achieve organizational goals and ultimately positively affect the bottom line for the organization. Research on the topic of employee engagement is important simply because practitioners need useful and practical research to provide knowledge that can be utilized to bring about effective and efficient, measurable outcomes. Furthermore, academia demands rigor in examining the constructs, theoretical frameworks, and strategies from which to produce defensible intellectual property for real world business problems. This study stands to inform research, theory and practice, as to the antecedents and outcomes that lead to employee

engagement behavior, the employee engagement process that highlights the decision making process, and its moderating effects on the relationship between antecedents and outcomes of employee engagement.

Theoretical Framework for Employee Engagement

For this research I will be utilizing Engagement theory, Human Capital theory, and Social Exchange theory from an HRD perspective to inform and guide this research.

Engagement Theory.

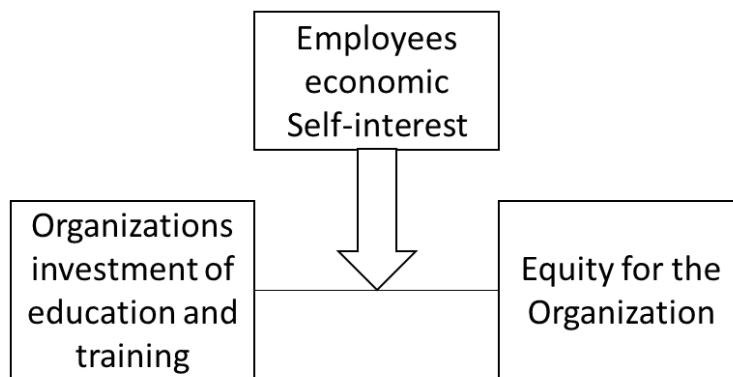
This study was informed by Kahn's (1990) work on engagement. Kahn (1990) stated that engagement can be an expression of a person's "self-in-role" process. Kahn argued that personal engagement is an expression of a person's "preferred self" in his/her work role to make connections with others and their work (p. 700) and that a person connects his/her preferred self or personal presence at three levels (a) physical, (b) cognitive, and (c) emotional. Khan (1990) also argued that a person may "employ and express or withdraw and defend his/her preferred self on the basis of his/her psychological experiences of self-in-role" (Khan, 1990, p. 702). Khan's (1990) work proposed that the psychological experiences were based on three conditions; (1) meaningfulness, (2) safety, (3) and availability, these three conditions are what shaped how people "inhabited their role" (p. 703).

Human Capital Theory.

This study was also informed by Human Capital Theory. "Human Capital theory is the most influential economic theory of Western education..." (Fitzsimons, 1999, p. 1). Human Capital theory is viewed as a key to understanding and driving economic performance and is best described as an organization's investments in education and training for employees will result in equity (Fitzsimons, 1999, p. 2) for the organization (see Figure 1.2). Differing views of employees

about human capital consist of two schools of thought. The original view point was that a human’s capabilities or acquired capacities were viewed as human capital, whereas, a differing school of thought viewed humans themselves as human capital. Both view points make up what is now known as the science of human capital. However, in this day and age, Modern Human Capital theory is viewed as “all human behavior is based on the economic self-interest of individuals operating within freely competitive markets” (Fitzimons, 1999, p. 1). This means that humans freely give of themselves when self-interest is present. Investments in education and training into human capital are the framework of Human Capital theory. These investments are believed to bring about equity for the organization.

Figure 1.2 Human Capital Theory



Human Capital theory helps explain the moderating relationship between the decision-making process and the relationship between antecedents and employee engagement. First, when looking at investments in education and training, they fall under the category of antecedents of employee engagement. Economic self-interest, per Becker (1992) is best described as an

employee being forward looking in their behavior. This basically means that an employee takes into consideration all aspects of a situation in order to “anticipate the uncertain consequences of their actions” (p. 38). This includes, past experiences, attitudes, values, income, time, imperfect memory, capacity, and other limited resources. Similarly, Kahn (1990) explains that the psychological conditions that influence an employee’s behavior constitute experiences in individual, social, and contextual sources which parallels Becker’s (1992) assumptions of self-interest. Lastly, employee engagement is equivalent to equity for the organization simply because engaged employees have been found to create a competitive advantage for the organization. It is my assumption that Human Capital theory provides an in-depth look at the moderating effects that the decision-making process may have on the relationship between antecedent factors and employee engagement.

Social Exchange Theory.

Social Exchange theory proposes that people view social behavior from an “exchange process” (Cherry, 2016). This exchange process consists of maximizing benefits and minimizing costs or as early scholars refer to as, *a rational assessment of self-interest in human social relationships* (Blau, 1964; Homans, 1961; Kelley & Thibaut, 1954). Social Exchange theory holds many assumptions, the first being that individuals are rational in making decisions as to costs or benefits. Another assumption is that individuals who have made the decision to be engaged are involved based on the level of benefits gained or basic needs met from their involvement. Finally, an individual’s decisions that lead to gains of basic needs from relationships will begin to create a pattern of social exchange. Meaning that individual’s will seek out relationships that will provide positive opportunities to meet their own individual needs. Social Exchange theory strongly supports the assumption proposed in Human Capital Theory as

to the individual's forward looking concept and the employee engagement decision making process as proposed in this research study. HCT and SET both set the foundation from which we can explain the employee engagement process. This theoretical foundation serves as a springboard for this study, in that theory mirrors application (see Figure 2.5).

Methodology

In consideration of the research objectives proposed in this study, the best way to answer the research questions was to follow a quantitative approach to this study. Quantitative techniques for research allowed for the researcher "to better understand the phenomena in a specific group being studied and to make inferences about broader groups beyond those being studied" (Swanson & Holton, 1997, p. 66). The population consisted of faculty and staff from within the field of education at a local community college district. This target population was selected because based on an extensive review of literature, employee engagement has not been studied utilizing this population.

The sample population consisted of a convenience sample comprised of organization leaders, education leaders and employees from various levels from within a local community college setting in the state of Texas.

The data collected from this population was used to examine the principles that created the context of engagement and the moderating effects of the decision making process on employee engagement. The target population consisted of 2303 people. Respondents to the survey were N=702, however, after further examination and removal of incomplete survey submissions, the final sample was n=643 at a response rate of 28% ($643/2302=0.279$).

The data collection instrumentation consisted of a survey design that was self-administered utilizing the internet and Qualtrics. The survey consisted of eleven demographic

questions, and 64 items. The variables included in this study were: *discourses*: internal/external discourse, leader/manager discourse, job characteristics discourse, lower level hygiene factors discourse, higher order factors discourse, *decision making process*- individual psychological experiences, social work contexts, contextual -meaningfulness, contextual- safety, and contextual-availability, and *employee engagement*: cognitive engagement, emotional engagement, and behavioral engagement. Survey items were identified based on an exhaustive literature review in addition to a compilation of existing surveys and modified sections to match proposed research questions. Additionally, a pilot study was implemented for validation purposes and consisted of a set number of participants from the target population. The survey instrument was created and tested utilizing the standards of validity and reliability set forth by Clark and Watson (1995). Quantitative analysis software such as SPSS, Winsteps and MPlus were utilized for this study.

Limitations

The study consisted of the following limitations:

1. The sample came from participants within the higher education industry, therefore, the results may not be generalizable to other industries.
2. Many variables outside the control of the researcher could impact the information or data collected for this research. These variables may include, variations between campuses, such as, region, demographics, leadership, resources, and varying campus initiatives.
3. The sample of participants was drawn from a single state; therefore, the results may not be generalizable to other states.
4. Statistical and design problems are inherent with correlation studies and may serve to be a limitation for this study as well (Clark, 2002).

Delimitations

Delimitations utilized by the researcher for this study were determined by the desire to gain a better understanding of the employee engagement process and moderating effects of the employee decision making process of employee engagement. A second delimitation is the inclusion of all the constructs of employee engagement to facilitate a holistic view of the employee engagement process. This will allow for the ability to examine the principles that create the context of employee engagement (Shuck, 2012) which include; antecedents, the employee's decision making process, and employee engagement.

Assumptions

This study included the following assumptions: (a) the sample participants responded to the survey accurately and indicated their perceptions of antecedent discourses (employee internal and external antecedents discourse, leadership/manager antecedent discourse, job characteristics antecedent discourse, lower level hygiene factors antecedent discourse, and higher order factors antecedent discourse), their experiences of the decision making process, and their perceptions of employee engagement (b) the data collected measures the experiences, knowledge, and perceptions used to support the decision making process of employee engagement. And (c) "interpretations of the data accurately reflected the perceptions of the respondents" (Lunenburg & Irby, 2008, p. 135).

Definitions of Terms

Antecedent: a phrase that represents "something that came before something else and may have influenced or caused it" (Merriam-Webster, 2015).

Employee Engagement: "having a determined attitude and motivated state of mind toward an individual's work role effort which results in individual...and organizational...related

positive outcomes” (Valentin, Valentin, & Nafukho, 2015, p. 12). In other words, employee engagement is an employees “active work-related positive psychological state” (Shuck, Adelson, & Reio, 2016, p. 2) at work and “operationalized as intensity and direction of cognitive, emotional, and behavioral energy” (Shuck, Adelson, & Reio, 2016, p. 2).

The Employee Engagement Process: the individual’s decision making process of contemplating psychological factors at the individual, social, and contextual levels by weighing costs, benefits, and equality in the social exchange process when antecedents are introduced in the work place, which may result in physical, emotional, and/or cognitive engagement leading to individual and/or organizational outcomes.

Organization of the Study

This research study is presented in five chapters. Chapter I included the background of the study, a statement of the problem, purpose of the study, the significance of the study, definitions and terms of the study, theoretical framework of the study, research questions, limitations, delimitations, and the assumptions of this study.

Chapter II presents a review of literature which includes all constructs of employee engagement: antecedent discourse, employee engagement process, types of engagement, and outcomes of employee engagement. Chapter III presents the methodology implemented in this research study, the selection of participants, instrumentation, validity, reliability, data collection procedures, data analysis and procedural fidelity.

Chapter IV presents the study’s findings, including demographic information, testing of research questions, and the use of structural equation modeling. Chapter V presents a summary of

the entire study, discussion of the relevant findings, implications for research and practice from the research findings, my recommendations for further research, and the study conclusions.

CHAPTER II

REVIEW OF LITERATURE

The purpose of this chapter is to examine the current state of employee engagement, building upon existing literature on the phenomenon, utilizing literature that consisted of academic peer reviewed scholarly work to examine the employee engagement process. The review of current literature will allow the researcher to build on existing theoretical frameworks of employee engagement. This chapter aims to provide a complete review of the current state of employee engagement and to examine the relationships between employee engagement antecedents and employee engagement, and then to look at moderating effects that the decision making process may have on that relationship which is the purpose of this dissertation study. In addition to provide rationales for the research questions presented in Chapter One: 1.) What is the relationship between antecedent factors and employee engagement, and 2.) How does the employee decision making process moderate the relationship between the antecedent factors and employee engagement? This chapter will unfold as follows: a) gaps in literature, b) employee engagement literature search, c) review of literature findings, d) the employee engagement process, e) summary of the review of literature, and f) a discussion.

An important objective for every organization is to increase productivity, and increase shareholder value. Employee engagement has been found to increase both. Research into the topic of employee engagement has recently been at the forefront of most every industry in America. The topic of employee engagement has been around for over 20 years (Woodruffe, 2006; Macey & Schneider, 2008), only within the last ten years, has it gained increasing popularity (Bledow, Schmitt, Frese, & Kuhnel, 2011). Organizations have taken a greater interest in the phenomenon of employee engagement because engaged employees have been found to be

more loyal to an organization, thereby, lowering the turnover rates for the organization and decreasing the cost of recruitment and retraining (Shuck, 2010). Furthermore, research on the topic has uncovered that engagement is highly correlated with job performance, employee attitudes, and commitment (Harrison, Newman, & Roth, 2006). A review of literature has uncovered that engaged employees create a competitive advantage that cannot be duplicated by other organizations within the same industry (Shuck, 2010).

Some of the more common characteristics of engaged employees consist of having positive attitudes, and high activity levels (Bakker, Albrecht, & Leiter, 2011). Employees may also exhibit signs of being mentally and emotionally vested (Shuck & Wollard, 2009). Furthermore, per Buckingham and Coffman (1999) engaged employees are more likely to exhibit high levels of enthusiasm for their work. Buchanan (2004) found that individual performance improvement for engaged employees is 20 percent higher than those employees who are disengaged or have low levels of engagement. Certainly, it would befit an organization to focus more on developing opportunities to engage their employees.

Several gaps have been identified in employee engagement research. Currently, there are six different approaches to employee engagement. Not to mention a higher order form of employee engagement, which is termed, employee work passion. These differing approaches create confusion and an unsound construct of employee engagement, as posed by Shuck (2010). The differing approaches to employee engagement, create a scaffolding approach of the engagement construct (Shuck, 2010), and agree only to the point that the development of employee engagement has the ability to affect positive outcomes within an organization (Arakawa & Greenberg, 2007; Harter, Schmidt, & Hayes, 2002; Luthans & Peterson, 2002; Maslach, Schaufeli, & Leiter, 2001; Macey & Schneider, 2008; Saks, 2006; Schaufeli, Salanova, Gonzalez-

Roma, & Bakker, 2002). All other aspects of the constructs are very different from each other, thereby creating a confusing and shaky foundation for both researchers and practitioners. Ideally, theoretical and empirical development advances new theoretical concepts, however, even after years of research, this confusion persists in terms of theoretical meaning and understanding of the engagement constructs. Therefore, the first identifiable gap is that there is a lack of a unifying theoretical approach to engagement, which would make the construct more effective for both research and practice (Bledow, Schmitt, Frese, & Kuhnel, 2011).

Secondly, Jones and Harter (2005) conducted a study that focused on the constructs of employee engagement and race, focusing on intent to turnover. They found that when employees work with supervisors from a different race that engagement levels could be negatively influenced. Unfortunately, no other research was available on this topic, thereby creating a gap in the literature in terms of engagement and race.

Thirdly, Badal and Harter (2013) took a critical look at gender diversity and the performance relationship and how employee engagement moderates the relationship between gender diversity and performance. They found that more gender-diverse business units perform at higher levels in comparison to those that are less diverse. Employee engagement and gender diversity combined have an impact on financial performance when they are both present. Furthermore, this was the first study to look at gender and engagement, no further research was available on this very important topic and therefore created a huge gap in literature.

Finally, literature on employee engagement consists of conceptualization of the construct, and there is a lack of empirical evidence (Saks, 2006) to provide a basis from which to create a theoretical foundation. Although research into the constructs of employee engagement is on the rise, few provide empirical evidence. The final gap presented here, is that there was a lack of

observable or experimental evidence to support the constructs of employee engagement at the time of this research, creating urgency for researchers. The reasoning behind this gap is that scholarly research in the academic community has lagged (Macey & Schneider, 2008) behind the practitioner approach, thereby, creating a bottom-up approach (Shuck, 2010). The gaps found in literature have been provided to serve as a guide to inform the review of literature.

Employee Engagement Literature Search

This paper was guided by the six steps to success presented by Machi and McEvoy's (2012) *The Literature Review* textbook. The authors offer a literature review developmental model, where each step leads to the next. These steps included: (1) selection of the topic, (2) search of the literature, (3) develop the argument, (4) survey the literature, (5) critique the literature, and finally (6) write the review.

Employee engagement, although an emerging topic in the field of HRD, has had several authors researching the constructs in the field since its emergence in the past 20 years. Based on the research question and the aims of this literature review, I searched multiple data bases utilizing the key term of employee engagement. The first search consisted of using a popular database Eric (EBSCO) utilizing a general search using the descriptor of: employee engagement. This yielded 54 journal articles. To narrow the search, articles were selected which were peer reviewed and published between the years of 2000 and 2016. However, as these selection criteria were submitted the system automatically defaulted to the years of 2006 to 2017. This search yielded 38 journal articles. Of these 38 articles, the next criteria were applied, which was the inclusion of the descriptor of employee engagement be included in the key words of the articles. It was found that those articles that include the description of employee engagement with the key words consisted of relevant information for the literature review. Then the final criterion was

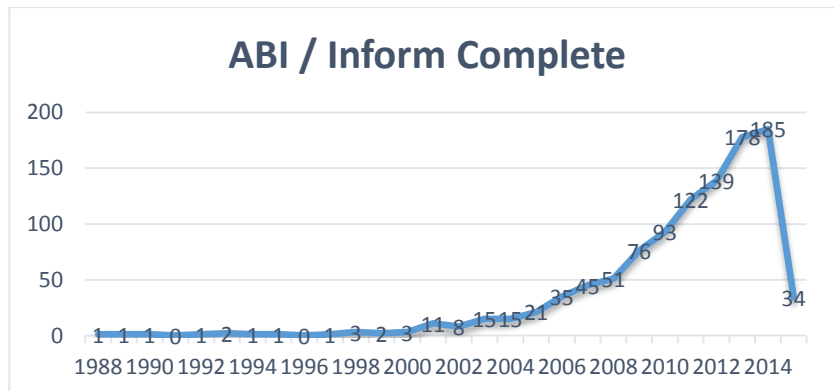
enforced, which was the selection of empirical articles. Articles that fit the criteria were then transferred to Refworks and placed in folders by theme. The total number of articles that were relevant to the research questions was 20.

A second-round literature search was conducted utilizing the database ABI/Inform complete utilizing the descriptor of employee engagement.

ABI/INFORM Complete	1045
ABI/INFORM Global	382
ABI/INFORM Trade & Industry	30

ABI/INFORM complete produced 1045 articles which were published between the years of 1988 and 2015. ABI/INFORM Global produced 382 articles and ABI/INFORM Trade & Industry produced 30 articles. The breakdown of publishing's by year for the past 28 years may be depicted in the following Figure 2.1.

Figure 2.1 Employee Engagement Publication Trend



The criteria of peer reviewed and full text were then enforced and 390 references were selected. The criteria based on years were not included as a search criterion in this search in an effort to capture seminal works on employee engagement.

The articles abstracts were read for relevance and those determined to be of value to the research study were then sorted by topics. The following topics were selected for the literature search: job satisfaction (33), employee attitude (30), motivation (18), behavior (13), retention (11), stress (9), employee morale (6), employee turnover (6), employment (6), perceptions (6), productivity (6), and burnout (5), for a total of 149 results. To further narrow the total number of articles to be reviewed in this research, a final descriptor was enforced. Articles that contributed empirical evidence were selected to be reviewed. Articles were then read to determine if the article was relevant to the research questions. Relevant articles were kept for inclusion in the literature review. The articles that were held for inclusion were saved in Refwork and filed per the subject as mentioned previously. The total number of articles to be reviewed was 21 from this search, I combined these with the previous 20 articles found from the first search, several were found to be duplicates of the first search conducted with Eric (EBSCO) and were therefore removed. Leaving a final number of articles to be reviewed and synthesized to 29. Intuitively, these articles were reviewed, coded by themes, claim statements, warrants, definitions, and explanations of the characteristics presented on employee engagement. Furthermore, careful consideration was taken when coding by theoretical foundation themes.

It has been found that there are several authors that have published on the topic of employee engagement in the past years. These also bear inclusion in the review of literature. Therefore, a general search for the following authors was conducted in an effort to capture the most relevant and seminal works in employee engagement. These authors were: Kahn, W.,

Macey, W., Maslach, C., Saks, A.M., Schaufeli, W.B., Schneider, B., Harter, and Shuck, W.B.

These authors were selected based on the consistency of these authors being cited in recent works on employee engagement, or were authors who were mentioned as providing seminal works, or authors who were most published within the field of HRD, as depicted in Table 2.1.

The search based on authorship has yielded a total of 7 additional resources that demand inclusion in the literature review, thereby bringing the total to 36 journal articles to be reviewed. Duplicates were deleted. These seminal pieces provide for a foundational basis and the theoretical underpinnings of employee engagement.

Table 2.1 Authors and their Contributions to Employee Engagement

Authors	Relevant or Seminal Works	Contributions	Citations
Maslach, Jackson, Leiter (1986)	Maslach burnout inventory	Burnout	6405
Kahn (1990)	Psychological conditions of personal engagement and disengagement at work	Need satisfaction approach to employee engagement	2461
Maslach & Goldberg (1998)	Prevention of burnout: New Perspectives	The Maslach multidimensional model	562
Maslach, Schaufeli, & Leiter (2001)	Job Burnout	Burnout antithesis approach	7104
Harter, Schmidt, & Hayes (2002)	Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: a meta-analysis	Satisfaction approach to employee engagement	2090
Bakker, Nachreiner, & Schaufeli (2001)	The job demands resources model of burnout	Model of job demands/resources	2760
Saks (2006)	Antecedents and consequences of employee engagement	Proposed a multi-dimensional approach to employee engagement	1140
Maslach & Leiter (2008)	Early predictors of job burnout and engagement		1953
Macey & Schneider (2008)	The meaning of employee engagement	Burnout antithesis approach	955
Macey, Schneider, Barbera, and Young (2009)	Tools for analysis, practice, and competitive advantage		174
Schaufeli, Leiter, & Maslach (2009)	Burnout: 35 years of research and practice		368
Shuck & Wollard (2009)	Employee engagement and HRD: A seminal review of the foundations		141
Shuck (2010)	Four emerging perspectives of employee engagement: An integrative literature review	First to recognize the differences in lenses of the seminal works	60
Zigarmi & Nimon (2011)	A cognitive approach to work intention: The study of what employee work passion is?	Work Passion model	4

Review of Literature Findings

In reviewing, empirical studies and existing literature on the constructs of employee engagement and work engagement, the following major themes were discovered. (1) Major disconnects, (2) constructs of employee engagement, (3) theoretical frameworks of employee engagement, (4) antecedents of employee engagement, (5) outcomes / consequences of employee engagement (6) critical employee engagement, (7) types of engagements, (8) employee engagement as a moderator, (9) measurement of employee engagement, and (10) emerging contributions of employee engagement. These themes will serve to provide a format for this review of literature.

Major disconnects in Literature

The first area that stands out from the review of literature are the major disconnects in literature on the topic of employee engagement. Each major disconnect will be addressed in this section. Major disconnects are those issues that have been found in literature that researchers have acknowledged to be a problem in researching the topic of employee engagement. These disconnects are (a) lack of understanding of employee engagement, (b) meaning and measurement, lack uniformity in research, (c) bottom up approach – practice leading research, (d) crossing fields vs HRD perspective, and finally, (e) defining employee engagement. Each major disconnect will be addressed in the subsequent section.

Lack of Understanding of Employee Engagement.

Bledow, Schmitt, Frese, and Kuhnel (2011) argue that the mechanisms of work engagement are not well understood, and further stated that work engagement is a valued phenomenon due to its effect on the individual performance outcomes. Cole, Walter, Bedeian, and O'Boyle (2012) further argue that employee engagement is a confusing phenomenon. "This

confusion relates to the meaning of engagement relative to existing constructs such as job satisfaction, organizational commitment, and job involvement” (Cole et al., 2012, p. 1551). Saks and Gruman (2014) argue that “today there continues to be confusion, disagreement, and a lack of consensus regarding the meaning and distinctiveness of employee engagement” (p. 157) among scholars and practitioners (Bakker, Albrecht, & Leiter, 2011; Cole, Walter, Bedeian, & O’Boyle, 2012). Saks and Gruman (2014) further argue that there is a constant overlap between employee engagement and other constructs (job satisfaction, organizational commitment, and job involvement) due to the fact of researcher’s not fully understanding employee engagement (Cole et al., 2012; Saks, 2006; Shuck, Ghosh, Zigarmi, & Nimon, 2012).

Meaning and Measurement Disconnects.

Shuck (2012) brings to light the fact that researchers and practitioners differ in how they approach employee engagement. Shuck (2012) terms the difference as a disconnected approach. He further explains that this disconnected approach toward examining employee engagement consists of authors defining employee engagement “one way” (Shuck, 2012) and measuring it “another way” (Shuck, 2012; Woolecheol et al., 2012). Creating a lack of uniformity in approach and scale in research and thereby creating a major disconnect of employee engagement. Valentin (2014) also highlights the fact that there are still debates about employee engagement. One of which is grounded in Shuck’s (2012) work in that authors should take great care in how they adopt the construct in reference to defining and measuring employee engagement. Saks (2006) also agrees that the “confusion, disagreement, and the lack of consensus regarding the meaning and distinctiveness of employee engagement among scholars and practitioners” (p. 157) does create a problem. Saks and Gruman (2014) present the fact that there is a multitude of tools that measure employee engagement, however, they question the validity of such tools and how they

measure employee engagement. They also point out that there continues to be meaning and measurement concerns over employee engagement and state that these concerns must be addressed before we can move towards a theory or science of employee engagement (Saks & Gruman, 2014).

Bottom-up Approach – Practice Leading Research.

Shuck, Ghosh, Zigarmi, and Nimon (2012) argue that a scholar-practitioner gap exists within the field of research on employee engagement. Schaufeli and Bakker (2010) searched the internet for the terms of employee engagement and work engagement and a total of 639,000 entries were found. Shuck et al., (2012) argue that although there is much debate as to what employee engagement is, it is still a very active tool being used among practitioners. Ideally, scholarly research leads the field with meaning and measure of a construct. However, that is not the case where employee engagement is involved. In this case, practitioners have led the way in employee engagement literature, thereby creating a bottom up approach (Shuck, 2012) to the construct. Although the literature on employee engagement has increased, it was “nonexistent” (Saks, 2006) ten years ago.

Crossing Fields versus HRD Perspective.

Employee engagement research crosses all fields of discipline, in a research study published by Saks and Gruman (2014) employee engagement has been integrated into various disciplines “HRD, psychology, management, occupation and organization, managerial psychology, career development, human resource management, personal psychology vocational behavior, training and development, industrial and organizational psychology” (p. 168). Although there is an increase in integration of employee engagement and many other disciplines, employee engagement has just recently been viewed from an HRD perspective (Valentin, 2014).

Specifically, the processes and practices that are vital to employee engagement are a highlight of employee engagement and an HRD perspective. Shuck and Wollard (2009) were among the first few to examine employee engagement from an HRD perspective. A major contribution of this study was that Shuck and Wollard (2009) offered a definition of employee engagement from an HRD perspective, however, later revised the definition as presented at the AHRD Conference of the Americas in 2015. Next, I will discuss the definitions found in this review of literature.

Defining Employee Engagement.

Employee engagement is a topic that has not been researched as intensely as it deserves because most information available is practitioner based rather than based on a scholarly or academic approach. Per Shuck (2011) this bottom up approach to employee engagement lacks continuity and has resulted in the inability to have uniformity in research and practice. Furthermore, there are multitudes of definitions that try to explain the constructs of employee engagement. Studies on the topic of employee engagement include several definitions of employee engagement, but fail to inform the readers of the foundational definition they are basing their research upon (see Table 2.2 definitions and characteristics used by authors to explain employee engagement as they conceive it).

For example, Bledow et al., (2011) included the following three definitions in their study: (1) Macey and Schneider (2008) which defined engagement as an affective motivational state characterized by vigor, dedication, and absorption, (2) Kahn (1990) states engagement is a construct that refers to the investment of physical, cognitive, and emotional energy at work, and (3) Schaufeli et al. (2002) redefined work engagement based on the core principles found in Macey and Schneider (2008). Bledow et al., (2011) failed to make it clear as to which definition they were basing their research in and thereby which approach guided their study. Others such as,

Chaudhuri and Ghosh (2012) base their research on engagement founded in Schaufeli, Salanova, Gonzalez-Roma, and Bakker's (2002) definition, "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (p. 74). Woocheol, Kolb, and Kim (2012) base their research on Bakker, Schaufeli, Leiter, and Taris's (2008) definition of engagement, "as a positive, fulfilling, affective-motivational state of work-related well-being" (p. 187). Shuck and Wollard (2009) define employee engagement as, "an individual employee's cognitive, emotional, and behavioral state directed toward desired organizational outcomes" (p. 103). Shuck and Herd (2012), Valentin (2014), and Shuck & Reio (2014) also used the definition presented by Shuck and Wollard (2009). Saks (2006) defined employee engagement as "a distinct and unique construct consisting of cognitive, emotional, and behavioral components... associated with individual role performance" (p. 602). Saks and Gruman (2014) grounded their research on the definition offered by Kahn (1990), "I define personal engagement as the harnessing of organization members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performance" (p. 694).

Intuitively, Saks and Gruman (2014) argue that "there continues to be confusion, disagreement, and a lack of consensus regarding the meaning and distinctiveness of employee engagement among scholars and practitioners" (p. 157). They go further to state that engagement research is grounded in job-burnout and there is some overlap in concepts of job satisfaction, organizational commitment, and job involvement. This confusion has been continuing and in order for there to be a consensus as to the constructs of employee engagement, perhaps the premise of the definitions of employee engagement must be further developed. Per this same publication, Saks and Gruman (2014) argue that there is an urgent need for an agreed-upon

definition that has a strong conceptual framework for employee engagement. A consistent definition based on consensus will minimize confusion about the construct of employee engagement. In an effort to remedy this situation, Parker and Griffin (2011), Shuck, Nimon, and Zigarmi (2016), Shuck et al., (2014), and Winman, Shuck, and Zigarmi (2016) have adapted the use of employee engagement and defined as “an active, work related positive psychological state” (Shuck et al., 2016, p. 2). However, only time will tell if researchers will choose this definition or if the issue will continue, at this point, it is too soon to tell.

On the other hand, others, such as, Shantz, Alfes, Truss, and Soane (2013) do not offer a definition of employee engagement but rather provide the characteristics of employee engagement. Shantz et al., (2013) posits that the characteristics of work engagement are characterized as the “investment of a person’s authentic self into job tasks and has been empirically associated with higher levels of in-role and extra-role performances” (p. 2608) as well as, “engagement is a multidimensional latent motivational construct with three dimensions, namely vigor, dedication, and absorption” (p. 2610). In my opinion, by providing characteristics of employee engagement, the author has at least provided the reader with the underpinnings of employee engagement used in their study.

I credit this definitional conundrum to an influx of conceptual definitions rather than operational definitions (Kerlinger, 1992). Conceptual definitions serve to provide a common language, give a researcher’s perspective, allow for classification of experiences to generalize from them, and they serve as the components of theories to define a theory’s content and attributes. However, authors often fail to navigate these conceptual definitions into an operational level due to the lack of empirically testing and validating the conceptual definitions. Operational

definitions provide concepts with empirical referents by bridging the conceptual-theoretical and empirical-observational level (Frankfort-Nachmias & Nachmias, 1996).

For the purpose of this review of literature, the chosen definition that will inform this research is that obtained from Valentin, Valentin, and Nafukho (2015) who offered an operational definition of employee engagement which is “having a determined attitude and motivated state of mind toward an individuals work role effort which results in individual (internal) and organizational (external) related positive outcomes” (p. 12). Provided is a Table (Table 2.2) of authors, key characteristics or definitions, and their classification.

Table 2.2. Definitions and Characteristics of Employee Engagement

Author, Year	Engagement Key Characteristics/Definition	Classification	
		Conceptual	Operational
Valentin, Valentin, Nafukho (2015)	Having a determined attitude and motivated state of mind toward an individual’s work role effort which results in individual and organizational related positive outcomes		Operational
Shuck et al., 2014	An active, work-related positive psychological state		Operational
Bakker, Albrecht, and Leiter (2011)	Positive attitude and high activity levels, enthusiasm and high association with their job	Conceptual	
Albrecht (2010)	A positive, energized work related motivational state and genuine willingness to contribute to work role and organizational success	Conceptual	
Shuck & Wollard (2009)	An individual’s cognitive, emotional, and behavioral state	Conceptual	
Macey et al. (2009)	An individual sense of purpose and focuses energy.	Conceptual	
Zigarmi, Nimon, Houson, Witt, & Diehl (2009)	Employee work passion is an individual’s persistent, emotionally positive, meaning-based, state of well-being stemming from reoccurring cognitive and affective appraisals of various job and organizational situations that results in consistent, constructive work intentions and behaviors.		Operational
Bakker, Schaufeli, Leiter, and Tarris (2008)	Positive, fulfilling, affective-motivational state of work-related wellbeing.		Operational
Saks (2006)	A distinct and unique construct consisting of cognitive, emotional, and behavioral components.		Operational
Schaufeli et al. (2002)	Positive fulfilling, work related state of mind. Characterized by a) vigor, b) dedication, c) absorption.		Operational
Maslach, Schaufeli, and Leiter (2001)	High levels of activation and pleasure		Operational
Kahn (1990)	Expression of a person’s "preferred self" in task behaviors		Operational

Constructs of Employee Engagement

When researching the constructs of employee engagement, two areas were found from this review of literature. The first was the debate as to the conceptual framework of employee engagement and what employee engagement is conceptually, the second was the debate of employee engagement being its own construct. Both will be discussed in the subsequent section.

Conceptual Framework of Employee Engagement.

Following in the lines of using an HRD perspective, under the umbrella of employee engagement research, is the area of the constructs of employee engagement. Shuck and Reio (2011) proposed a conceptual framework of employee engagement from an HRD perspective, that focus on the constructs of cognitive engagement, emotional engagement, and behavioral engagement. Their conceptual framework was grounded in Kahn's (1990) approach to employee engagement. They are among the few that offer an HRD perspective on employee engagement. Another author that necessitates inclusion is Clair Valentin (2014), she also provides research from an HRD perspective, however, C. Valentin's research looks at employee engagement from a critical viewpoint. This will be discussed further in this chapter.

Employee Engagement - its own Construct.

One area that has been uncovered from this review of literature is the debate that employee engagement is its own construct or does it fall under work engagement or some other construct. This reminds me of the dilemma that we find in HRD literature that asks the question, is HRD its own construct or "new wine in old wine skins". As HRD practitioners, this is not a new concept. However, research into the constructs of employee engagement constitute that employee engagement is very distinct from areas of research concerning; job attitude, job satisfaction, organizational commitment, job involvement, job affect, and any other organizational construct (Shuck, 2011, 2012; Shuck et al., 2012, Shuck and Herd, 2012; Shuck et al., 2016).

Shuck (2011) argues that although there is some overlap or “construct entanglement”, employee engagement is different than those areas of research aforementioned (Shuck et al., 2016).

Theoretical Frameworks of Employee Engagement

This review of literature has afforded the ability to distinguish between the varying schools of thought. For the purpose of this research these schools of thought will be referred to as nomological approaches to employee engagement. There were three major areas that were found when researching theoretical frameworks of employee engagement, they were (a) Nomological approaches to employee engagement, (b) critical engagement, and finally, (c) lack of a unifying theoretical framework of employee engagement. Each will be discussed in the following section.

Nomological Approaches to Employee Engagement.

This review of literature on employee engagement has revealed that there are currently several aspects from which to view employee engagement that are used to try to explain what the constructs of employee engagement are. Shuck (2011) presented findings of four perspectives or approaches from which the phenomenon may be explained. These perspectives or approaches may be referred to as nomological frameworks and may be defined as basic rules of reasoning (A nomological view takes into consideration the manifestations of constructs taken into consideration for the study that produce certain principals that are taken as true). The first nomological approach was derived from Kahn (1990) who presents employee engagement through a *needs satisfaction approach*. Second, Maslach, Schaufeli, and Leiter (2001) who argue the *burnout-antithesis approach*, next is Harter, Schmidt, and Hayes (2002) who studied engagement using the *satisfaction engagement approach*, and lastly, Saks (2006) who argues that engagement has a *multidimensional approach*. Additionally, this review of the literature has found that there are currently other lenses to view employee engagement. For example, Zigarmi,

Nimon, Houson, Witt, and Diehl (2009) present their work from a *work passion approach*. Another example, or approach from which to view employee engagement is the *Job Demands-Resources Model* (JD-R) presented by Bakker & Demerouti (2007), however, this work is based on burnout literature. Vallerand et al., (2003) presented a *dualistic approach* to employee engagement and Shuck, Twyford, Reio, and Shuck (2014) presented the *employee focused experience* approach. Therefore, these nomological frameworks of employee engagement (Table 2.3), are important and help to explain the phenomenon from different perspectives. The following section will address each nomological approach in detail.

Table 2.3 Nomological Frameworks of Employee Engagement

Employee Engagement Nomological frameworks			
Theoretical lens	Author	Meaning	Unit of Measurement
Need-Satisfaction Approach	Kahn (1990, 1992); Rich et al., (2010); Christian, Garza, Slaughter (2011); May et al., (2004); Soane et al., (2012)	Kahn (1990) proposed that the "conditions of meaningfulness, safety, and availability were important to fully understand why a person would become engaged in his or her work" (Shuck, 2010).	(1) Psychological Engagement (May et al., 2004) (2) The Job Engagement Scale (Saks, 2006), (3) The Intellectual, Social, Affective Engagement Scale (Soane et al, 2012), (4) The Employee Engagement Scale (Shuck, Adelson, & Reio, 2015)
Anti-thesis of Burnout Approach (Burnout Antithesis)	Maslach et al., (1986); Demerouti et al. (2006); Shirom (2004); Maslach, Schaufeli, and Leiter (2001); Maslach and Leiter (2008); Gonzalez-Roma, Schaufeli, Bakker, and Lloret (2006); Schaufeli, Salanova, Gonzalez-Roma and Bakker (2002); Bakker and Demerouti (2007); Saks and Gruman (2014)	Opposite or positive antithesis of burnout (Saks & Gruman, 2014), which is theorized by Maslach, et al., (2001) as the "erosion of engagement".	Utrecht Work Engagement Scale - UWES (Schaufeli et al, 2006)
Satisfaction engagement Approach / job satisfaction approach	Harter et al. (2002, 2013); Robinson et al., (2004)	Employee job satisfaction and engagement are indicators of a business-unit performance-related culture.	Q12 Gallup Engagement Survey (Harter et al, 2002)
Multi-Dimensional Approach	Saks and Gruman (2014); Saks (2006); Allen and Meyer (1990); MacLeod and Clark (2009); Robinson, Perryman, and Hayday (2004); Macey and Schneider (2008)	"Multidimensional motivational constructs that involves the simultaneous investment of an individual's complete and full self into the performance of a role" (Saks & Gruman, 2014, p. 158)	(1) Job Engagement - (Rich et al, 2010), (2) Psychological Engagement (May et al., 2004), (3) Job and Organizational Engagement (Saks, 2006)
Employee work passion approach	Zigarmi, Nimon, Houson, Witt, and Diehl (2009); Attridge (2009)	Highly engaged employees "work with passion and feel a profound connection to their company" (Attridge, 2009, p. 387)	Passion Scale (Vallerand, Blanchard, Mageau, Koestner, Ratelle, Leonard, & Gange, 2003)
Job Demands Resources	Demerouti, Bakker, Nachreiner, and Schaufeli (2001); Schaufeli and Bakker (2010); Bakker, Albrecht, and Leiter (2011), Bakker and Demerouti (2008); Xanthopoulou, Bakker, Demerouti, and Schaufeli (2009)	Job demands are necessary and require high demands on employees. Demands may become negative and may lead to employee depression, anxiety, and burnout. Job resources are the "physical, social, or organizational aspects of the job that either/ or (1) reduce job demands and the associated psychosociological and psychological contexts; (2) are functional in achieving work goals; (3) stimulate personal growth, learning and development" (Schaufeli & Bakker, 2010, p. 296). "Job resources such as social support from colleagues and supervisors, performance feedback, skill variety, and autonomy, start a motivational process that leads to work engagement, and higher performance...Job resources become more salient and gain their motivational potential when employees are confronted with high job demands (e.g. workload, emotional demands, and mental demands)" (Bakker & Demerouti, 2008).	Job Demands Resources were measured utilizing the following scales: (1) Job demands is measured by Burnout measured using the Maslach Burnout Inventory (Maslach & Jackson, 1986), (2) Engagement measured by the Utrecht Work Engagement Scale (UWES; Schaufeli et al., 2002), (3) Job demands and Job resources were measured by Job Content Scale (Karasek's, 1985), (4) Emotional demands and Social support were measured by a scale presented by Van Veldhoven and Meijman (1994), (5) Supervisory coaching measured using the 12-item Leader-Member exchange scale (Le Blanc, 1994), (6) health problems was measured using a 13-item scale for psychosomatic health complaints (Dirken, 1969), (7) Turnover was assessed utilizing the three-item scale introduced by Van Veldhoven et al., (2002).
Dualistic approach	Vallerand et al., (2003)	Employees experience both obsessive and harmonious passion with the employee's perceptions of job task as valued and as part of one's identity. (Vallerand et al., 2003, p. 181).	Passion Scale (Vallerand et al., 2003)
Employee focused experience approach	Shuck and Reio (2011); Shuck, Twyford, Reio, Shuck (2014)	Shuck and Reio (2011) identified three facets of employee engagement that "work in harmony to generate the experience of employee engagement" (Shuck et al., 2016, p. 244). The three facets include: cognitive engagement, emotional engagement, and behavioral engagement.	The Employee Engagement Scale (Shuck, Adelson, and Reio (2016)

The Need- Satisfaction Approach.

The first perspective on employee engagement was derived from Kahn (1990), who argued that there existed only three psychological conditions associated with engagement or disengagement in the workplace. They were characterized as meaningfulness, safety, and availability, which were as Kahn (1990) argues, the antecedent conditions for engagement to emerge. Kahn (1990) also argued that people vary in the degrees of their “social selves between physical, cognitive, and emotions in the roles they perform” (p, 692). His study was mainly focused on task performance and combined perspectives based on Gofman’s (1961) view of people acting out attachment and detachment in role performances and research based on job design that explained the relationships between employees and their work tasks. He also combined “perspectives using interpersonal, intergroup, and organizational context that enhance or undermine people’s motivation and sense of meaning at work” (Kahn, 1990, p, 694). Furthermore, Kahn (1990) described “personal engagement and disengagement and posits that they were ends of a continuum” (p. 700). He went on to argue that physical, cognitive, and emotional labors could be referred to as effort exhibiting characteristics of involvement, flow, mindfulness, and intrinsic motivation. He further suggested that to “express these preferred dimensions, is to display real identity, thoughts, and feelings” (Kahn, 1990, p. 700).

The Burn-out Antithesis Approach.

Maslach et al.’s (2001) research postulates that engagement is the complete opposite of the three dimensions of burnout or a positive antithesis of burnout. These dimensions include; “an overwhelming exhaustion, feelings of cynicism and detachment from the job, and a sense of ineffectiveness and lack of accomplishment” (Maslach, Schaufeli, & Leiter, 2001, p. 399). Furthermore, they suggest that engagement involves a more in depth perspective of a person's

relationship with their work and characterize engagement as having high levels of both, activation and pleasure, whereas, burnout is having low levels of both. They also argue that engagement is rooted in organizational psychology based on the constructs of organizational commitment, job satisfaction, and/or job involvement. Furthermore, they argue that “if engagement is indeed the opposite of burnout, then a profile of engagement scores on the Maslach Burnout Inventory (MBI) should be associated with a profile of better matches in the six areas of job-person fit. Such a ‘matched’ profile would include a sustainable workload, feelings of choice and control, appropriate recognition and reward, a supportive work community, fairness and justice, and meaningful and valued work” (Maslach, Schaufeli, & Leiter, 2001, p. 417).

The Satisfaction-Engagement Approach.

Harter, Schmidt, and Hayes (2002) used a meta-analysis to examine employee satisfaction-engagement at the business unit level and its relation to business unit outcomes. More specifically, customer satisfaction, productivity, profit, employee turnover, and accidents. Harter et al.’s., (2002) reference to employee engagement included “the individual’s involvement and satisfaction with, as well as, enthusiasm for work” (p. 269). This study used The Gallup Workplace Audit (GWA) which was developed from studies of work satisfaction, work motivation, supervisory practices, and work-group effectiveness and measured items that were actionable. Harter et al., (2002) argued that the constructs of job involvement, organizational commitment, or intrinsic motivation presented by Kahn (1990), although added value to the understanding of employee perceptions, were too general to be applied to practice.

Furthermore, the overarching goal of Harter et al.’s., (2002) study was to “present a meta-analysis of studies conducted by The Gallup Organization to calibrate the instrument’s relatedness to business-unit outcomes, generalizability across organizations, and usefulness in

differentiating more effective work groups from less effective ones in relation to a variety of desirable business outcomes” (p. 269). The meta-analysis consisted of 42 studies conducted in 36 independent companies. Dependent variables consisted of customer satisfaction-loyalty, profitability, productivity, turnover, safety, and composite performance. Through the analysis they found that “satisfaction and employee engagement can both be generalizable across companies in correlation with customer satisfaction-loyalty, profitability, productivity, employee turnover, and safety outcomes” (Harter et al., 2002, p. 273). Furthermore, they found that each of the antecedents measured in the GWA are generalizable in relationship to one or more of the outcomes, and employee satisfaction and engagement are also generalizable outcomes that may cross business units.

The Multi-Dimensional Approach.

The next model of engagement as presented by Saks (2006) was derived from Maslach, Schaufeli, and Leiter’s (2001) work which described job engagement as the antithesis of burnout, and identified six areas of work-life that lead to job burnout. They consist of workload, control, rewards and recognition, community and social support, perceived fairness, and values. Furthermore, Maslach et al., (2001) views engagement as a “mediating variable for the relationship between the six working conditions and work various outcomes” (Saks, 2006, p. 607). Saks (2006) argued that there exist two types of engagement: job engagement and organizational engagement. When explaining, what engagement was, Saks (2006) research crossed dimensions of the constructs of employee engagement with previous research approaches of employee engagement. Furthermore, Saks (2006) argued that the “models [Kahn (1990) and Maslach et al.’s (2001)] indicate the psychological conditions or antecedents that are necessary

for engagement; they do not fully explain why individuals will respond to these conditions with varying degrees of engagement” (p. 603).

The purpose of Saks’s (2006) study was to test a model of antecedents and engagements (job, organizational) based on a multidimensional approach of existing models and Social exchange theory, Saks (2006) was the first to look at engagement from these perspectives. This study found that job and organizational engagement can be predicted by the antecedents of job characteristics, and procedural justice. Furthermore, the contributions of this study include the discovery that employee’s attitudes, intentions, and behaviors are linked to both forms of engagement (job engagement and organizational engagement) and can be increased when employees are engaged.

The Work Passion Approach.

The next approach from which to view employee engagement is employee work passion. The work passion approach is considered a higher order form of employee engagement. Zigarmi, Nimon, Houson, Witt, and Diehl (2009) take a multidimensional view of the construct of engagement utilizing social cognitive theory. Zigarmi et al. (2009), introduce the work passion model, their contribution included an operational definition for employee work passion derived from employee engagement to deter recent controversy within the two views of employee engagement; commercial consulting firms (practitioners) and academic community (researchers). Nimon and Zigarmi (2011) later tested the use of the operational definition for employee work passion by assessing a multinational organization (N = 5,529) and found that the model was effective in diagnosing and improving organization life within an organization.

The Job Demands-Resource Model Approach.

In an overview of the Job Demands-Resources (JD-R) model, Bakker and Demerouti (2007) provide a synopsis of studies that have been conducted utilizing the JD-R model. Within this model, job stress is categorized into two subcategories (job demands and job resources). “Job demands refer to those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs” (Bakker & Demerouti, 2007, p. 312). Job resources “refers to those physical, psychological, social, or organizational aspects of the job that are either/or; functional in achieving work goals, reduce job demands and the associated physiological and psychological costs, and stimulate personal growth, learning, and development” (Bakker & Demerouti, 2007, p. 312). Bakker and Demerouti (2007) contend that levels of job demands and levels of job resources, increase activation or subjective effort and lead to either strain or motivation which will be positively or negatively associated with organizational outcomes. They argue that the JD-R model provides a two step approach (job resources and job demands) that will highlight both the strong points and help in identifying the weak points at all levels (individual, workgroups, and organization) found within an organization.

The Dualistic Approach.

Vallerand et al., (2003) argue that when people are engaged in an activity they will exert one of two types of passion: Obsessive passion or harmonious passion. Furthermore, “the two types of passion are associated differently with affective and behavioral outcomes” (Vallerand et al., 2003, p. 765). Obsessive passion and harmonious passion were found to influence persistence “when activity engagement leads to some positive benefits” (Vallerand et al., 2003, p. 796). However, in this study, Vallerand et al., (2003) concluded that if an individual persisted in an

activity, over time, harmonious passion would lead to disengagement, whereas, obsessive passion would lead to continued engagement. Primarily because obsessive passion consists of the internalization of the activity by the individual.

The Employee Focused Experience Approach.

Shuck and Reio's (2011) employee engagement framework consists of building upon Kahn's (1990) work on engagement. According to Shuck et al., (2016) the employee engagement framework was modified to reflect the "more employee-focused experience of employee engagement" (p. 2). This framework consists of three unique facets of engagement "that worked in harmony to generate the experience of employee engagement" (Shuck, Twyford, & Reio (2014, p. 245). The facets being cognitive engagement, emotional engagement, and behavioral engagement. These facets will be discussed in detail in the "types of engagement section" of this review of literature.

Recap of Nomological Frameworks

These very different nomological frameworks to employee engagement, create a scaffolding approach of the engagement construct (Shuck, 2011). They agree only to the point that the development of employee engagement has the ability to affect positive outcomes within an organization (Arakawa & Greenberg, 2007; Harter et al., 2002; Luthans & Peterson, 2002; Macey & Schneider, 2008; Maslach et al., 2001; Saks, 2006; Schaufeli et al., 2002). All other aspects of the constructs are very different from each other, thereby creating a confusing and perplexing foundation for both researchers and practitioners.

Ideally, theoretical and empirical development advances new theoretical concepts, however, even after ten years of research, this confusion persists in terms of construct meaning, and understanding of employee engagement. However, until now researchers have only begun to

scratch the surface by only making small mentions of the possibility of the existence of a psychological appraisal (Harter, Schmit & Hayes, 2012; Khan, 1990; Maslach et al., 2010; Saks, 2006; Shuck, Twyford, Reio, & Shuck, 2014) in their research. From my review of literature, I have found that all the nomological frameworks mentioned in this section consist of some sort of employee engagement process. The employee engagement process serves to unify these very differing approaches to employee engagement. This idea of an employee engagement process demands further research, especially in light of the fact that there still is no unifying theoretical framework for employee engagement. Whereas, the existence of such a framework would simplify and allow for a generally accepted theory of employee engagement (Saks & Gruman, 2014). A unifying theory of employee engagement would serve to bring a greater focus and direction to employee engagement research. Such a theory would serve to provide a link between antecedents and organizational/individual outcomes of employee engagement.

Antecedents of Employee Engagement

This review of literature has uncovered a large number of antecedents of employee engagement. Just within the past few years the number of antecedents has expanded. One problem is that some authors use antecedents as outcomes, and outcomes as antecedents (Saks, 2006), thereby creating greater confusion in understanding the employee engagement constructs. Furthermore, in some literature, antecedents are not termed as such, instead they are termed as triggers and barriers to employee engagement (Valentin, 2014). This section will highlight research findings as to the (a) antecedents of employee engagement and will further try to simplify this area by providing for (b) antecedent discourses.

There has been much research conducted in determining the antecedents and outcome variables of employee engagement. Antecedents may be defined as, a specific condition or factor

that influences or predicted a behavior that will emerge in practice (Saks, 2006; Shuck, 2010).

Whereas, outcomes may be defined as, the resulting effect of a specific activity or condition (Saks, 2006; Shuck, 2010). The following Table illustrates the nomological frameworks in terms of their respective antecedents and outcome variables associated with each of the dimensions of employee engagement.

Table 2.4. Nomological Dimensions of Employee Engagement and their Antecedents and Outcomes.

Nomological Dimension of Employee Engagement	Antecedents	Outcome variables
Need-Satisfaction approach (Kahn W. , 1990)	Value congruence, perceived organizational support, core self-evaluations	Task / work role performance
Burnout antithesis approach (Maslach, Schaufeli, & Leiter, 2001)	Workload, autonomy (feelings of choice and control), Recognition and reward, Support, fairness and justice, valued work	Burnout, engagement
Satisfaction-engagement approach (Harter, Schmidt, & Hayes, 2002)	Employee satisfaction-engagement	<i>Business-unit outcomes</i> Customer satisfaction-loyalty, profitability, productivity, turnover, safety, and composite performance
Multidimensional approach (Saks, 2006)	Job characteristics, perceived organizational support, perceived supervisory support, rewards and recognition, procedural justice, disruptive justice	Job satisfaction, organizational commitment, intent to quit, organizational citizenship behavior
Employee work passion approach (Zigarmi, Nimon, Houson, Witt, & Diehl, 2009)	Organizational characteristics, job characteristics, and personal characteristics (cognition, affect, and intent)	Improved organizational role behaviors, and job role behaviors
Job Demands-Resource Model (Bakker & Demerouti, 2007)	Task Level: Support, autonomy, feedback, and task significance	Motivation towards organizational outcomes
Dualistic Approach (Vallarand et al., 2003)	Obsessive passion and harmonious passion while engaged, intrinsic and extrinsic motivation, positive and negative affect, and behavioral intentions	Flow, challenge, absence of self-consciousness, control, positive emotions, concentration, shame and anxiety
Employee Focused Experience Approach (Shuck & Reio, 2011)	Cognitive engagement, Emotional engagement, and Behavioral engagement	None empirically tested in their study

Saks (2006) “was credited for conducting the first academic research into antecedents and consequences of employee engagement and identified three distinct drivers, cognitive, emotional, and behavioral” (Shuck & Wollard, 2009, p. 98). Shuck, Reio, and Rocco (2011) presented a study (N = 283) that examined: job fit, affective commitment and psychological climate and employee engagement as antecedent variables or influencers of the development of employee engagement and predictors of discretionary effort or intent to turn over (outcomes of employee engagement). Furthermore, Shuck et al., (2011) found that supportive management, contribution, and challenge were predictors of discretionary effort. The study also found that affective commitment, meaningfulness and availability were predictors of intent to turnover.

Wollard and Shuck (2011) in a review of the literature found that there were over 42 antecedents to employee engagement. They were categorized and separated into two groups; individual antecedents to employee engagement and organizational antecedents to employee engagement. It was further reported that eleven of the twenty-one individual antecedents were supported by empirical evidence, whereas, thirteen of the twenty-one organizational antecedents were supported.

Table 2.5 Antecedents of Employee Engagement – Individual and Organizational derived from Wollard and Shuck (2011).

Individual Antecedents	Organizational Antecedents
<i>Absorption</i>	<i>Authentic Corporate Culture</i>
Available to Engage	<i>Clear Expectations</i>
Coping Style	<i>Corporate Social Responsibility</i>
Curiosity	Encouragement
<i>Dedication</i>	Feedback
Emotional Fit	Hygiene Factors
Employee Motivation	<i>Job Characteristics</i>
Employee/Work/Family Status	Job Control
Feelings of Choice and Control	<i>Job Fit</i>
<i>Higher Levels of Corporate Citizenship</i>	Leadership
<i>Involvement in Meaningful Work</i>	<i>Level of Task Challenge</i>
<i>Link Individual and Organizational Goals</i>	<i>Manager Expectations</i>
Optimism	<i>Manager Self-Efficacy</i>
<i>Perceived Organizational Support</i>	Mission and Vision
Self-Esteem, Self-Efficacy	Opportunities for Learning
<i>Vigor</i>	<i>Perception of Workplace Safety</i>
Willingness to Direct Personal Energies	<i>Positive Workplace Climate</i>
<i>Work/Life Balance</i>	Rewards
<i>Core Self-Evaluation</i>	<i>Supportive Organizational Culture</i>
<i>Value Congruence</i>	Talent Management
	<i>Use of Strengths</i>

**Italics antecedents are supported by empirical evidence.*

Table 2.6 Emerging Antecedents of Employee Engagement

Author	Antecedents of Employee Engagement	Individual or Organizational
Sarti (2014)	Performance feedback	Organizational
Sarti (2014)	Co-worker support	Organizational
Bakker and Demerouti (2007)	Job demands	Individual
Bakker and Demerouti (2007)	Job resources	Organizational
Sarti (2014)	Decision authority	Individual
Sarti (2014)	Financial Rewards	Individual
Saks, (2006)	Perceived Supervisor Support	Individual
MacLeod and Clark (2009)	Manager support	Individual
Saks, (2006)	Distributive Justice	Individual
Shuck and Herd (2012), Bakker, Albrecht, and Leiter (2011), Macey and Schneider (2008), Alimo-Metcalfe, Alban- Metcalfe, Bradley, Mariathanasan, and Samele (2008), Christian, Garza, and Slaughter (2011)	Transformational leadership, empowering leadership, leader-member exchange (LMX)	Organizational
Chaudhuri and Ghosh (2012)	Reverse Mentoring	Individual
Bakker and Demerouti (2008), Christian, Garza, and Slaughter (2011)	Autonomy	Individual
Saks (2006)	Recognition	Individual
MacLeod and Clarke (2009)		
Saks (2006)	Procedural Justice	Individual
Stawitz and Lust (2014)	Supportive Environment	Individual

To build upon existing literature, the following fifteen antecedents found in Table 2.6 may be added to the list found in Wollard and Shuck's (2011) publication. The Table above (Table 2.6) highlights authors and antecedents to employee engagement, as well as, if they are individual or organizational antecedents. From this review of literature, the total number of employee engagement antecedents is now 57 at the time of this research. This serves to provide more confusion for practitioners in determining the antecedental conditions to create an environment conducive to engaging employees.

Antecedent Discourses.

Due to the fact that there are an overwhelming number of antecedents (57) for employee engagement found in literature. To make meaning of the antecedents of employee engagement, a qualitative technique was utilized to extract themes or discourses. Constant comparison method (Glazer & Strauss, 1967) or compare and contrast approach as it is called was utilized. Each of the fifty seven antecedent factors were written on an index card with their respective definitions, and based on the idea that themes represent the ways in which text are similar or different from each other, I conducted a rudimentary analysis. Cards were first sorted by topic or the overarching constructs, after this was done, cards were then organized by themes and sub-themes (see Table 2.7) or discourse. A discourse, according to Webster's dictionary is defined as "the use of words to exchange thoughts or ideas". A discourse sets the tone for adding order to a thought or expression of a subject. A discourse is also a mode of organizing thoughts on a subject. Therefore, each theme will be referred to as a discourse. My findings are that there are five major discourses in terms of antecedents of employee engagement. The discourses are as follows (a) internal/external discourse, (b) leadership/manager discourse, (c) job characteristics discourse, (d)

lower level hygiene factors discourse, and (e) higher order factors discourse. Each discourse will be explained in the subsequent section.

Internal/External Discourse.

The discourse of internal/external can be defined as those antecedents that have cognitive effects on an employees self. These cognitive effects consist of feelings of emotional fit within an organization (Rich et al., 2010), an employee's level of optimism (Bakker & Demerouth, 2008), an employees self-esteem or self-efficacy (Xanthapoulou, Bakker, Demerouti, & Schaufeli, 2007; Macey & Schneider, 2008), an employee's level of dedication, vigor, and absorption in their work roles (Maslach & Leiter, 2008; Maslach & Schaufeli, 2001), the employees' willingness to direct personal energies into their work roles or work tasks. It also includes an employee coping styles (Rothmann & Storm, 2003; Xanthapoulou, Bakker, Demerouti, & Schaufeli, 2007) within their work environment and their availability to engage (Brown & Leigh, 1996). This discourse also covers how employees evaluate their core selves and their curiosity within their work context. Furthermore, this discourse looks at the external factors for the individual employee, which are, the employee themselves and their work, as well as, the individual employee family status. An employee's work life balance is included in the external factors for the individual employee.

Leader/Manager Discourse.

This discourse may be defined as leadership styles (Bakker, Albrecht, & Leiter, 2011; Macey & Schneider, 2008; Saks & Gruman, 2014) and foundational management principals (Arakawa & Greenberg, 2007; Bezuijen, Berg, Dam, & Thierry, 2009; Shuck, Rocco, & Albornoz, 2011) that affect an employees level of engagement. This discourse consists of looking at leadership and all of the various types of leadership styles such as, transformational leadership (Christian, Garza, & Slaughter, 2011; Macey & Schneider, 2008; Shuck & Herd, 2011) and

reverse mentoring (Chaudhuri & Gosh, 2012). Furthermore, this area of antecedents also covers leaders and how they as individuals are impacting employee engagement. This area consists of manager self-efficacy (Arakawa & Greenberg, 2007), manager expectations (Bezuijen, Berg, Dam, & Thierry, 2009), the ability to provide clear expectations for their employees (Bezuijen, Berg, Dam, & Thierry, 2009), how well they provide feedback (MacLeod & Clark, 2009; Christian, Garza, & Slaughter, 2011) and how well they provide encouragement. Are they engaging leaders (Alimo-Metcalfe, Alban-Metcalfe, Bradley, Mariathasan, & Samele, 2008)? Do they provide opportunities and support for corporate social responsibility (Davies & Crane, 2010; Glavis & Piderit, 2009; Lindorff & Peck, 2010) efforts for employees. Finally, are their personal leadership styles and actions in line with the organizations mission and vision (Fleming & Asplund, 2007).

Job Characteristics Discourse.

The job characteristic discourse consists of job role expectations and task expectations (Brown & Leigh, 1996; Harter et al., 2002) for employees and their effect on employee engagement. This discourse is specific to those job characteristics (Christian, Garza, & Slaughter, 2011; Saks, 2003) and an employee's perception of job fit (Crawford, LePine, & Rick, 2010; May, Gilsob, & Harter, 2004), levels of task challenge (Macey & Schneider, 2008), and job demands (Saks & Gruman, 2014). Additionally, this discourse addresses linking of an individual's goals with organizational goals to enhance employee engagement.

Lower Level Hygiene Factors Discourse.

This discourse consists of those factors that are associated with the lower level hygiene factors presented by Herzberg, Mathapo, Wiener, and Wiesen (1974), in that hygiene factors are associated with those factors derived from Motivation Hygiene theory that consist of 1) pain

avoidance, and 2) growth. Sachau (2007) argues that “Herzberg’s model helps identify happiness and unhappiness” for employees and “helps to build a foundation that unhappiness and negative affectivity are closer related to hygiene factors than motivation factors” (p. 389). Building upon this premise, this discourse may be defined as factors that affect working conditions (or lower order hygiene factors) and are foundational to employee engagement. This discourse consists of an employee's perception of workplace safety. Workplace safety may be in terms of a physical safety or an emotional work place safety, where an employee is allowed to make mistakes to grow. Both of which are basic forms of hygiene factors. Additionally, a positive workplace climate falls within the basic foundational needs of an employee and may affect an employee's level of employee engagement. The organizational culture is included in this discourse because the levels of authentic corporate culture and the perceived supportive organizational culture may be a trigger or a barrier to employee engagement. Along the lines of basic foundational lower level hygiene factors necessary to enhance employee engagement consist of an employees peace of mind when fairness is concerned, more specifically, distributive justice and procedural justice. Distributive justice consists of an employee's perception of fairness of decision outcomes, whereas, procedural justice concerns the employees' perceptions of the process and the means by which resources are allocated (Saks, 2006). Finally, job resources are included in this discourse because the ability for an employee to perform their job roles and duties with the resources that they have is a major determinant of employee engagement levels.

Higher Order Factors Discourse.

This discourse consists of the factors that deal with an employee's perception of intrinsic and extrinsic motivation. Again, the foundation of this discourse consists of Herzberg, Mathapo, Wiener, and Wiesen (1974) principals of Motivation Hygiene theory which consists of an

employees feeling of security and growth, these are associated with what I refer to as higher order hygiene factors. Security and growth lead to intrinsic factors of motivations and may be defined as “the drive for engagement and interest” (Valentin et al., 2015, p. 190). Antecedents that fall under this category consist of an employees use of strengths, an employee's motivation level and their feelings of choice and control. These intrinsic factors may be enhanced if an employee feels that they are involved in meaningful work, or that they are adding value (value congruence). Intrinsic motivation antecedents of employee engagement consist of autonomy and job control. Furthermore, this discourse also embraces extrinsic factors which are defined as “rational of influential resources” (Valentin, et al., 2015, p. 190) such as; rewards, talent management, opportunities for learning, and recognition. All of these variables are associated with higher order, hygiene factors or factors that are associated with perceptions of security and growth (Herzberg et al., 1974).

Outcomes and Consequences of Employee Engagement

Outcomes of employee engagement may benefit the individual employee or benefit the organization and can be categorized as such (see Table 2.8). There are several outcomes or consequences to employee engagement. For example, Saks (2006) and Hakanen, Bakker, and Schaufeli (2006) both researched outcomes of job attitudes which were, job satisfaction and organizational commitment. Whereas, Bakker and Bal (2010), Rich, Lepine, and Crawford (2010), and Saks (2006) studied the outcome of job performance and organizational citizenship behaviors. Other outcomes researched include: health and wellness outcomes (Cole, Walter, Bedeian, & O'Boyle, 2012; Crawford, LePine, & Rich, 2010), commitment, health, performance and lower turnover intentions (Halbesleben, 2010). Some outcomes related to organizational outcomes (Harter, Schmidt, & Hayes, 2002) include business unit outcomes (customer

satisfaction, productivity, and profitability), turnover (Saks, 2006; Schaufeli & Bakker, 2010) as well as, profitability and increased shareholder value (Macey, Schneider, Barbera, & Young, 2009). Christian, Garza, and Slaughter (2011) examined outcomes of task performance and contextual performance. Intuitively, outcomes or consequences of employee engagement may

Table 2.7 Employee Engagement Antecedent Discourses

Employee/Individual Internal/external discourse	Leadership/Manager discourse	Job Characteristics discourse	Lower Level Hygiene factors discourse	Higher Order Hygiene factors discourse
<p>Defined: cognitive effects of an employee's self</p> <p>Cognitive Emotional fit – indiv Optimism – indiv Self-esteem, self-efficacy – indiv Dedication – indiv Vigor – indiv Absorption – indiv Willingness to direct personal energies – indiv Coping styles – indiv Curiosity – indiv Available to engage – indiv Core self evaluation – indiv</p> <p>External - Employee / work / family status – indiv Work / life balance – indiv</p>	<p>Defined: leadership styles and foundational management principles</p> <p>Leadership – org Transformational leadership – org Reverse mentoring – org Manager self-efficacy – org Manager expectations – org Clear expectations – org Feedback – org Encouragement – org Corporate social responsibility – org Mission and vision – org.</p> <p>Perceived supervisor support – org Engaging leaders - org</p>	<p>Defined: consists of job role expectations and task expectations</p> <p>Job characteristics – org Job fit – org Level of task challenge – org Link individual and organizational goals – org</p> <p>Job demands - org</p>	<p>Defined: Discourse that consists of lower level hygiene factors. These factors are foundational to employee engagement.</p> <p>Hygiene Factors - org Perceptions of workplace safety -org Perceived organizational support – Indiv</p> <p>Positive workplace climate -org Authentic corporate culture - org Supportive organizational culture – org</p> <p>Distributive justice – org Procedural justice – org Job resources - org</p>	<p>Defined: factors that deal with employees higher order perceptions of intrinsic and extrinsic motivation</p> <p>Intrinsic factors Use of strengths - indiv Employee motivation -indiv Feelings of choice and control –indiv Involvement in meaningful work – indiv</p> <p>Value congruence – indiv Autonomy – indiv Job control – indiv</p> <p>Extrinsic factors Rewards – org Talent management – org Opportunities for learning – org Recognition – org Higher levels of corporate citizenship - indiv</p>

have some negative effects as well. For example, Halbesleben, Harvey, and Bolino (2009) investigated the negative consequences of work interest with family.

Table 2.8 Outcomes of Employee Engagement

Outcomes of Employee Engagement	Benefits -Individual or Organizational	Authors
Organizational Commitment	Organizational	Saks (2006), Hakanen, Bakker, and Schaufeli (2006)
Job Performance	Organizational	Saks (2006), Bakker and Bal (2010), Rich, LePine, and Crawford (2010)
Health and Wellness: Depression, stress, and anxiety	Individual and Organizational	Crawford, LePine, and Rich (2010), Halbesleben (2010), Cole, Walter, Bedeian, and O'Boyle (2012)
Organizational Citizenship	Individual and Organizational	Saks (2006), Bakker and Bal (2010), Rich, LePine, and Crawford (2010)
Job Satisfaction	Individual and Organizational	Saks (2006), Hakanen, Bakker and Schaufeli (2006)
Return on Investment	Organizational	Macey et al., (2009)
Increased Shareholder Value	Organizational	Macey et al., (2009)
Profitability	Organizational	Harter et al., (2002)
Productivity	Organizational	Harter et al., (2002)
Commitment	Individual and Organizational	Halbesleben (2010)
Performance Improvement	Individual and Organizational	Halbesleben (2010)
Lower Turnover Rates/intent to quit	Organizational	Harter et al., (2002), Saks (2006), Halbesleben (2010), Schaufeli and Bakker (2004)
Task and contextual performance	Individual and Organizational	Christian, Garza, and Slaughter (2011)
Customer Satisfaction	Organizational	Harter et al., (2002)

Critical Employee Engagement

Employee engagement has grown in popularity recently and now it is being viewed from a critical perspective or point of view. C. Valentin (2014) uncovered two perspectives of employee engagement that sheds light on employee engagement research. C. Valentin (2014) takes an HRD approach when looking at employee engagement and makes a valid point that employee engagement has been viewed from a burgeoning interest rather than that from the perspective of the individual. She further postulates that researchers should be careful not to use excessive focus on the benefits of employee engagement. Building on the work of Shuck and Rose (2013), C. Valentin (2014) emphasizes an increasing neglect of the employee experience and an overemphasis on the benefits of performance outcomes based on an organizational perspective. The use of critical HRD is new to employee engagement research and reveals yet another research gap uncovered by this review of literature.

Types of Engagement

When reviewing literature and the types of employee engagement, there are two key areas that stand out. The first being the debate of (a) engagement as being as state versus a behavior, and (b) engagement in terms of categories of (i) individual engagement, (ii) group engagement, and (iii) organizational engagement. This section of the review of literature will address the various types of employee engagement.

State or Behavioral Engagement Debate.

When reviewing literature on employee engagement, there are two distinct ways in which researchers explain employee engagement (Saks 2006; Rich et al., 2010; Shuck et al., 2012; Saks and Gruman, 2014). These distinctions include whether engagement is a state of being (investment of an employee's hand, head, and heart (Rich et al., 2010) a more complex

representation of the employee self within the work role or task) or as a state of doing. Shuck and Herd (2012) argue that there is a distinction in state work engagement (state of being) and general work engagement (state of doing). This argument continues to push researchers in distinguishing from the two in their research. For example, Shuck et al., (2016) used the following definition of employee engagement in their research study, “as an activated, work related, positive psychological state” (p. 2), their stand on employee engagement, from an HRD perspective, is that employee engagement is a ‘state of being’ rather than a state of doing.

Individual, Group, and Organizational Engagement.

This review of literature has exposed that there is a very large array of types of engagement relating to employee engagement (see Table 2.9). Each consists of its own definitions and constructs. In taking a closer look at each type of engagement, which have been categorized into one of the following categories; individual, group, and organizational engagement.

Saks and Gruman (2014) “revealed that researchers can’t seem to agree on a name for the construct” (p. 156), as can be visible with the various names and categories of engagement. Shuck et al., (2016) refers to all of these types of engagement as “engagement-like constructs” (work engagement, job engagement, organizational engagement, intellectual/social engagement). He further argues that employee engagement is different “in both focus and definition to allow for differentiation in between the engagement like constructs and employee engagement” (p. 4). In this next section, each of the types of engagement (Table 2.9) will be discussed in detail.

Table 2.9 Types of Employee Engagement

Category of Employee Engagement	Type of Employee Engagement
Individual Engagement	Cognitive engagement Task engagement / work engagement Emotional engagement Intellectual engagement Job engagement State / work engagement General engagement Behavioral engagement Affective engagement Felt engagement
Group Engagement	Group / team engagement Social engagement
Organizational Engagement	Organizational engagement Collective organizational engagement

Individual.

Within the individual engagement category, you will find, cognitive engagement, task engagement, work engagement, intellectual engagement, job engagement, state work and general engagement, behavioral engagement, affective engagement, and finally employee work passion. These all exhibit engagement that is associated with the social cognitive aspects of organizational behavior and self-regulation (Bandura, 1991).

Cognitive Engagement.

Cognitive engagement, per Shuck and Herd (2012) is the first step in the engagement process. It is a cognitive appraisal process that determines if there are adequate resources to complete the task at hand (Kahn, 1990). Shuck and Reio (2014) define cognitive engagement as an employee’s appraisal of workplace climate.

Task Engagement / Work Engagement.

Saks and Gruman (2014) and Schaufeli and Salanova (2011) define “task/ work engagement as the relationship between and employee and his or her work” (p. 172). Work engagement, according to Bakker, Albrecht, and Leiter (2011) consists of characteristics of excitement, enthusiasm, energy, feeling happy and pleased, and falls within the spectrum of pleasant and high activation work engagement.

Emotional Engagement.

Emotional engagement is central to an employee’s feelings of involvement with their work. Shuck and Herd (2012) explain emotional engagement as revolving “around the investment and the willingness of an employee to involve personal resources. This stems from the emotional bond created when employees, on a very personal level, have made the decision to cognitively engage and are willing to give of themselves and thus identify emotionally with a task at that moment” (Shuck & Herd, 2012, p. 163). Shuck and Reio (2014) expand the notion of emotional engagement as “the broadening and the investment of the emotional resources employees have within their influence...such as pride, trust, and knowledge” (Shuck & Reio, 2014, p. 47).

Intellectual Engagement.

Soane et al., (2012) presented the argument that intellectual engagement should be part of a cognitive dimension of engagement. In their research, they included intellectual engagement within the measurement of employee engagement. Intellectual engagement, per Soane et al., (2012) is defined as “the extent to which one is intellectually absorbed in work” (p. 532) and is more than the mere fulfillment of duties.

Job Engagement.

Saks (2006) contends that job engagement consists of an employee's psychological presence in their job. Rich, Lepine, and Crawford (2010) contend that from the perspective of Kahn (1990), "job engagement is best described as a multidimensional motivational concept reflecting the simultaneous investment of an individual's physical, cognitive, and emotional energy in active, full work performance. In even more direct terms, engagement is a multidimensional motivational construct of the latent form with dimensions, serving as indicators of the higher-order engagement concept" (p. 619).

State/work and General/ work Engagement.

State work and general work engagement are included in this review of literature and both fall under the work engagement category. However, according to Xanthopoulou, Bakker, Heuven, Demerouti, & Schaufeli (2008), state work engagement as an individual's feelings "at one specific point of time" (Kim, Kolb, & Kim, 2012, p. 252). State/work engagement consists of momentary ebbs and flows and is highly volatile depending on the environment. Bakker et al., (2008) defined [state] work engagement as a "positive, fulfilling, affective-motivational state of work-related well being" (p. 187). On the other hand, you have general work engagement that is more constant. "General work engagement is more stable and refers to how an individual consistently feels over a period of time" (Kim, Kolb, & Kim, 2012, p. 252).

Behavioral Engagement.

"Behavioral engagement is the broadening of an employee's available resources displayed overtly. From this context, employee effort in the context of engagement is linked to increased individual effort—engagement occurs one employee at a time and is experienced uniquely through the lens of each employee" (Shuck & Reio, 2014, p. 47). "Behavioral engagement is the

overt natural reaction to a positive cognitive appraisal (i.e., cognitive engagement) and a willingness to invest personal resources. Understood as the physical manifestation of cognitive and emotional engagement, behavioral engagement can be understood as what we actually *see* employees do” (Shuck & Herd, 2012, p.163).

Affective Engagement.

Affective engagement may be defined as “the extent to which one experiences a state of positive affect relating to one’s work role” (Soane, et al., 2012, p. 532). Soane et al., (2012) agree that “the role of affect in engagement is theoretically and empirically clear” (p. 532) and in line with previous research (Bakker & Schaufeli, 2008; Kahn, 1990; May, Gilson, & Harter, 2004; Rich LePine & Crawford, 2010; Schaufeli & Bakker 2004; Schaufeli et al., 2002; Truss et al., 2006).

Felt Engagement.

Felt engagement may be defined as the “felt” dimension of engagement that display engagement and the feeling that is obtained by “motivation of employees, derived from a sense that their work is challenging and meaningful, that it gives them freedom of choice for independent action, that it provides an opportunity for recognition and personal development, and that it can lead to progress and breakthrough” (Stumpf et al., 2013, p. 256).

Group.

Within the group level of engagement types, you will find group/team engagement and social engagement. Engagement types within the group level deal with individuals that are “connected to one another by social relationships” (Forsyth, 2006, p. 3).

Group/Team Engagement.

Saks and Gruman (2014) state that group/team engagement is associated with the engagement of his/her self as a member associated with a group or team. Saks and Gruman (2014) made the argument that when one speaks of engagement, we should be clear as to what type of engagement are we speaking of. For example, group/team engagement consists of the work associated in a group or team.

Social Engagement.

Soane et al., (2012) defined social engagement as “the extent to which one is socially connected with the working environment and shares common values with colleagues” (p. 531). Soane et al.’s, (2012) definition of social engagement was built on Kahn’s (1990) work that proposed that engagement had a social component dealing with an employee’s feelings of connectedness with people at work. Kahn (1990) went further to add that this connectedness was the premise of a person experience of “self-in role”.

Organizational.

Types of engagement that fall within the organizational level are organizational engagement and collective organizational engagement, these type of engagement deals with the organization structure and dynamics. In other words, engagement levels that fall within the organizational complex environments and mechanics within the organizations themselves.

Organizational Engagement.

Saks (2006) contends that job engagement consists of an employee’s psychological presence in their organization. Saks and Gruman (2014) argue that organizational engagement are those activities that an employee is associated with within their “role as a member of the organization” (p. 174).

Collective Organizational Engagement.

Collective organization engagement, as presented by Barrick, Thurgood, Smith and Courtright (2015), is a “function of the organizational level analysis...may be manifested as a shared perception among organizational members that is distinct from aggregate individual-level engagement” (p. 113). Barrick et al., (2015) based their notion of collective organizational engagement on Kahn’s (1990) engagement theory and on Simon et al., (2007) resource management model. Engagement was measured using Rich et al., (2010) assessment of engagement and takes a multidimensional approach to employee engagement.

Employee Engagement as a Moderator and Mediator Variable

Research on employee engagement has exposed the use of employee engagement as a moderating variable between an array of antecedents and outcomes. There have been several authors who have looked into using employee engagement as a moderator. Saks (2006) looked at job and organizational engagement as a moderator in researching the antecedents of job characteristics and work outcomes of organizational citizenship behavior. Christian et al., (2011) found that engagement moderated the role of job characteristics and job performance (antecedents) and the outcomes of job performance.

Schaufeli and Bakker (2010) looked at the antecedent of job resources and outcomes of intent to turnover and found that employee engagement mediated the relationship. Rich et al., (2010) explored value congruence, perceived organizational support, and core self-evaluations (antecedents) in terms of outcomes of task performance, organizational citizenship behaviors and found that engagement mediated those relationships as well.

Measurement of Employee Engagement

Several measurement tools of employee engagement have been found and will unfold in this section of measurement scale and their critiques. Cronbach's alpha reliability coefficient for validity of each scale will be reported in Table 2.10.

Employee Engagement Measurement Scales.

A review of literature as to the measurement tools available has been conducted. The following tools have been found to be used often within the field of Human Resource Development (HRD) to measure employee engagement and are presented in order of their introduction. Table 2.10 has been included in this section. This Table depicts all of the measurement scales of employee engagement from the review of literature for this study. The first is the Maslach Burnout Inventory (MBI) introduced by Maslach and Jackson (1981) which measured three components of burnout, emotional exhaustion, depersonalization, and reduced personal accomplishment. This scale consisted of 22 items assessing an employee's feeling or attitudes. Currently, there are three versions of this inventory: MBI-HSS, which is used by professionals in the human services, MBI-ES that is used by educators, and MBI-GS, used to measure workers in other occupations. However, each measures the same three dimensions of burnout.

The Gallup organization introduced a Q12 Gallup Engagement Survey (Harter, Schmidt, & Hayes, 2002) which consists of 12 items that "measure two sets of items: attitudinal outcomes and antecedents to those attitudes that are within the managers control" (Little & Little, 2006 p. 117). However, this survey has been known by several names, 12 questions (Buckingham & Coffman, 1999), Gallup workplace audit (Harter et al, 2002), Gallup Engagement Index (Lucey, Bateman & Hines, 2005) and Crabtree (2005) call it the Employee Engagement Index. Harter et

al., (2002) postulated that the Gallup workplace audit measures, “employee’s perceptions of work characteristics...but not a measurement of engagement itself.” (Crawford, LePine, & Rich, 2010, p. 838).

Next, Vallerand, Blanchard, Mageau, Koestner, Ratelle, Leonard, and Gange (2003) introduced the Passion Scale – 34 items, which is very much in line with Self-Determination theory (Deci & Ryan, 1985; 2000) and measures two types of passion; harmonious passion and obsessive passion towards activities. The obsessive passion items “emphasize a passive perspective where the person feels compelled to engage in the activity, the activity takes a lot of space in the person’s self, and conflict is experienced [whereas] the harmonious passion items emphasize an active perspective where the person has control over the activity, and the person’s volition allows him or her to fully engage” (Vallerand et al., 2003, p. 758). Next, the Oldenburg Burnout Inventory (OLBI) (Demerouti, Bakker, Vardakou & Kantas, 2003) was created to address problems with the Maslach Burnout Inventory (MBI, Maslach & Jackson, 1981) and consisted of two scales, that of exhaustion, and disengagement. This inventory measures cognitive and physical components of exhaustion. The OLBI has not been widely used because the English translation, per Halbesleben and Demerouti (2005), had yet to be adequately tested.

May, Gilson, and Harter (2004) introduced the Psychological Engagement scale building upon Kahn’s (1990) report that the psychological conditions of meaningfulness, safety, and availability mediated relationships of antecedents and engagement. The Scale consists of 14 items: cognitive (4 items), emotional (5 items), and physical (5 items). Next is the Utrecht Work Engagement Scale UWES – 17 items (Schaufeli & Bakker, 2010). This scale measures three constituting aspects of work engagement and consist of an employee’s level of vigor (6 items), dedication (5 items), and absorption (6 items). Schaufeli, Bakker, and Salanova (2006) later

introduced the UWES short version, which contained nine scale items that served as a better fit for their data derived from 10 countries. Again, this scale measured vigor, dedication, and absorption; however, both versions are similar to the Maslach Burnout Inventory (Maslach & Jackson, 1981). This scale has been widely used to measure engagement (Saks & Gruman, 2014) however; it has not been without criticism.

In 2006, the Job and Organizational Engagement scale were introduced by Saks (2006), which measured job engagement (5 items) and organizational engagement (6 items), and antecedents (job characteristics, rewards and recognition, distributive justice, procedural justice, perceived organizational support, perceived supervisor support,) and consequences of engagement (job satisfaction, organizational commitment, intent to quit, organizational citizenship behavior). Next, the Job Engagement Scale (Rich, Lepine, & Crawford, 2010) consists of measurements of physical engagement (6 items), emotional engagement (6 items), and cognitive engagement (6 items). Rich et al., (2010) draws from Kahn's (1990) work on engagement. Their aim was to create a theoretical framework that "positions engagement as a key mechanism explaining relationships among a variety of individual characteristics and organizational factors, and job performance" (Rich et al., 2010, p. 617).

The Intellectual, Social, Affective Engagement Scale -ISA Engagement Scale (Soane, et al., 2012) consists of three forms of engagement: intellectual engagement, social engagement, and affective engagement. This scale was developed to test the facets of engagement that meet the three conditions of the engaged state: focus, activation, and positive affect (Kahn, 1990). Whereas, the 2-Dimensional Measure of Engagement (Stumpf, Tymon, & Van Dam, 2013) measures felt engagement, and behavioral engagement. This scale of measure was created to examine the relationship of engagement to five workgroup outcomes, innovation, performance,

satisfaction, career success, and intent to stay. Stumpf et al., (2013) found that this scale was reliable in measuring the distinct constructs of felt engagement and behavioral engagement. They expand the work presented by Macey and Schneider (2008) who argue that engagement may be a culmination of “feelings of energy and enthusiasm”.

The Employee Engagement Scale (EES) (Shuck, Adelson, & Reio, 2015) contains three sub factors: (1) cognitive, (2) emotional, and (3) behavioral, as well as a higher order factor of employee engagement. Shuck, Aldeson, and Reio (2016) maintain that no previously used scale “describes the full experience of employee engagement” (p. 7). They further reason that the phenomena are presented as a “broader, more full experience influenced by environmental conditions, experiences, and interpretations of in-the-moment occurrences that capture the complete work experience” (p. 20). The EES is the first scale to take an HRD perspective to employee engagement. Furthermore, it explores employee engagement as a higher order factor associated with three sub factors. This scale, according to Shuck, Aldeson, and Reio (2016) is the first to capture “the full experience of employee engagement” (p. 20). Additionally, Shuck, Aldeson, and Reio (2015; 2016) introduced the cognitive work engagement scale (CWAS 11), which is grounded in the antecedent conditions (perceived meaning in work, perceptions of self, adequate resources, and supportive co-workers) of employee engagement which are, per Shuck et al., (2016) predictive of employee engagement. However, based on findings from this review of literature, these conditions do not consider the antecedent discourses that captures a more holistic view of the antecedent constructs of employee engagement. Shuck et al., (2016) further maintain that the CWAS 11, “is not an exhaustive comprehensive tool, but rather an easily deployable measure of antecedental conditions” (p. 12).

Emerging Contributions of Employee Engagement

There are several emerging contributions to the employee engagement literature that have demanded inclusion in this review of literature. The first is the concept that (a) employee engagement may be viewed as a continuum, and (b) the existence of an employee engagement process. This section will address both.

Employee Engagement as a Continuum.

The Employee Engagement Continuum Model presented by Valentin, Valentin, and Nafukho (2015) argues that employee engagement researchers should adapt a continuum approach rather than a state of being approach to employee engagement. This is founded on the basis of research presented by Squirrell (2012). The continuum approach, according to Squirrell (2012) opens the premise of choice of engagement type. According to Valentin, Valentin, and Nafukho (2015) this approach coupled with utilizing corporate social responsibility, an antecedent of employee engagement, will provide a stimulus for employees that will elicit some sort of reaction and finally internal and external outcomes. They further argue that utilizing CSR and the engagement continuum approach will result in several degrees of participation by employees resulting in a sustained level of employee engagement. The model, although conceptual, opens the doors for further research into the areas of the employee engagement continuum approach.

Table 2.10 Measurement Scales for Employee Engagement

Scale	Author / Year	Number of items	Measurements	Cronbach's Alpha
Maslach Burnout Inventory	Maslach and Jackson (1986)	Three formats: (1) 22-item Human Services Survey, (2) 22-item Educators Survey, (3) MBI-General Survey 16 items	(1) exhaustion, (2) detachment, and (3) lack of effectiveness with respect to one's job and/or one's interactions with other people on the job.	Frequency $\alpha = 0.83$ Intensity $\alpha = 0.84$
Q12 Gallup Engagement Survey Also called: 12 questions, Gallup Workplace Audity, Gallup Engagement Index, Employee Engagement Index	Harter, Schmidt and Hayes (2002)	12 items	(1) Attitudinal outcomes and (2) antecedents within managers control	$\alpha = 0.91$
Passion Scale	Vallerand, Blanchard, Mageau, Koestner, Ratelle, Leonard, and Gange (2003)	34 items	(1) Harmonious passion (hp) and (2) obsessive passion (op)	HP $\alpha = 0.79$ OP $\alpha = 0.89$
Oldenburg Burnout Inventory (OLBI)	Demerouti, Bakker, Vardakou, and Kantas (2003); Demeroti and Bakker (2006)		(1) Disengagement (2) Cognitive and physical components of exhaustion	$\alpha = 0.85$
Psychological Engagement Scale	May, Gilson, and Harter (2004)	13 items	(1) Cognitive (2) emotional (3) physical	$\alpha = 0.77$
Utrecht Work Engagement Scale (UWES) and UWES Short Scale	Schaufeli and Bakker (2003) Schaufeli, Bakker, and Salanova (2006)	17 items 9 items	(1) Vigor, (2) dedication, (3) absorption	$\alpha > 0.70$
Job and Organizational Engagement Scale	Saks (2006)	11 items	(1) job engagement and (2) organizational engagement and (3) antecedents of job characteristics, rewards and recognition, distributive justice, procedural justice, perceived organizational support, perceived supervisor support and (4) consequences of job satisfaction, organizational commitment, intent to quit, and organizational citizenship behavior.	Job Eng. $\alpha = 0.82$ Org. Eng. $\alpha = 0.90$
The Job engagement Scale	Rich, Lepine and Crawford (2010)	18 items	(1) physical engagement, (2) emotional engagement, and (3) cognitive engagement.	$\alpha = 0.95$
The Intellectual, Social, Affective Engagement Scale - ISA Engagement Scale	Soane, Truss, Alfes, Shantz, Rees, and Gatenby (2012)		(1) intellectual engagement, (2) social engagement, and (3) affective engagement. Tests the three conditions of engagement set by Kahn (1990) (A) focus, (B) activation, and (C) positive affect	$\alpha = 0.88$
2 Dimensional Measure of Engagement	Stumpf, Tymon, and Van Dam (2013)		(1) felt engagement, (2) behavioral engagement, and (3) work outcomes of innovation, performance, satisfaction, career success, and intent to stay.	Felt $\alpha = 0.89$ behavioral $\alpha = 0.92$
The Employee Engagement Scale includes the Cognitive work appraisal scale - CWAS-11 used parallel to The Job Engagement Scale (Rich et al., 2010).	Shuck, Adelson, and Reio (2015)	11-items CWAS and 15-items for the Job Engagement Scale	(1) Cognitive (2) emotional (3) behavioral, and (4) higher order factors of employee engagement	Emotional $\alpha = 0.91$ behavioral $\alpha = 0.92$ cognitive $\alpha = 0.93$

The Employee Engagement Process.

Bledow et al., (2011) conducted a study in which external affective events and internal mood states were examined to determine a linkage. The authors proposed a study (N = 55) founded on the basis of self-regulation theories and the assumptions that both “positive and negative affect have important functions for work engagement” (p. 1246) and went on to present a model that proposed a shift from negative affect to positive affect that resulted in high work engagement (Bledow et al., 2011). This central idea presented by Bledow et al. (2011) was the foundation for their contributions to the field of study. The premise that included an affective shift that results in a positive motivational effect for employees, which means that, people who are high in affectivity can more easily adjust to a positive mood even after experiencing negativity (Bledow et al., 2011, p. 1254).

Journal articles on the topic of employee engagement have been found to always be associated with an antecedent or outcome of employee engagement. However, very few have delved into the processes of employee engagement. That is, the process that an employee experiences when antecedents or interventions are put in motion. Kahn (1990) provided seminal works on the topic of engagement. His work provides a psychological based perspective of engagement that raised a few interesting points about people and how they “bring themselves into or remove themselves from particular tasks” (p. 693). What Kahn (1990) was speaking of concerns the fact that people experience, as he terms it, “momentary ebbs and flows” in how employees respond to psychological conditions (individual, social, and contextual) within the workplace. What this means is that people will bring themselves in and out of engagement and this movement is very dependent on the conditions of their work environment.

Kahn (1990) further explains that many times these ebbs and flows are used as a behavioral way to express themselves or at times defend themselves because of situational factors in the workplace. Kahn (1990) further argues that these “pushes and pulls are people’s calibrations of self-in-role, enabling them to cope with both internal ambivalences (continued fluctuations; uncertainty as to which approach to follow; simultaneous and contradictory attitudes or feelings) and external conditions” (p. 694). Shuck (2012), argued that cognitive engagement revolved around, as he terms it, “an appraisal judgment process”. This appraisal judgment process is dependent on an employee’s decision based on the internalization of the contextual sources experienced by the employee. In this same publication, Shuck (2012) calls for a focus on the principles that create the context for engagement. Additionally, Shuck and Herd (2012) argue, “engagement is a state freely offered by the employee based on their interpretation of the work context” (p. 175). Shuck, Gosh, Zigarmi, and Nimon (2012) argue that employee engagement should be interpreted as a process. Where positive emotions (Fredrickson & Joiner, 2002) have implications of an employee’s broadening or limiting their contributions of engagement (Shuck & Reio, 2014). Schaufeli (2012) argues that employees interpret situational circumstances, and these interpretations, then influence decisions regarding the levels of intensity of engagement. O’Neil and Arendt (2008) argue that employee’s decisions about the levels of engagement are made based on interpretations of workplace climate. The fact that employee engagement should be viewed as a process has been alluded to by these aforementioned authors, however, has not been fully examined until now. No further literature is available as to the process itself. This area of research is fresh and emerging and within itself should be looked at closely in order to provide a process map for HRD professionals who are tasked with providing training or interventions within the workplace in order to increase employee engagement.

Furthermore, from this review of literature, I would go as far as to define the employee engagement process taking a holistic approach to employee engagement and is inclusionary of all the constructs of employee engagement. Therefore, the employee engagement process may be defined as, the process an employee experiences when antecedents are introduced into the work context, this process includes a decision making process that includes the individual weighing how they see themselves at work, the context of their work, and how they see themselves in the work role (individual). It also takes into consideration the individual's perceptions of the meaningfulness, safety, and availability (contextual), and the decisions of how to express themselves, employ themselves, or even defend themselves (social) within their work context which results in the decision about the levels of intensity of engagement they will be willing to exert.

Summary of Review of Literature

The review of literature has exposed several changes and challenges as to the current state of engagement. Gaps in the literature were first presented to allow the reader a bird's eye view of the areas that were left unaddressed in literature. These gaps served to direct the review of literature, however, this review of the literature has found that many of the gaps are still apparent and have not been addressed. For example, the scaffolding approach to employee engagement, is still very apparent. With the additions of the new nomological frameworks presented, there is a great confusion as to the approaches being referred to in literature. Secondly, I presented the gap, addressing employee engagement and race. This gap has not been addressed in the literature and is still existent. The third gap identified at the beginning of this review of literature consisted of gender diversity and employee engagement. I was able to find one article on the topic; it was presented by Badal and Harter (2013) and was the only one. No further research was found in

reference to gender and employee engagement. The final gap presented addressed the issue of a lack of empirical evidence to provide a basis for employee engagement. Although this review of literature was based on empirical evidence only, the scarcity in empirical evidence is still evident even with the increased publication levels of the past few years.

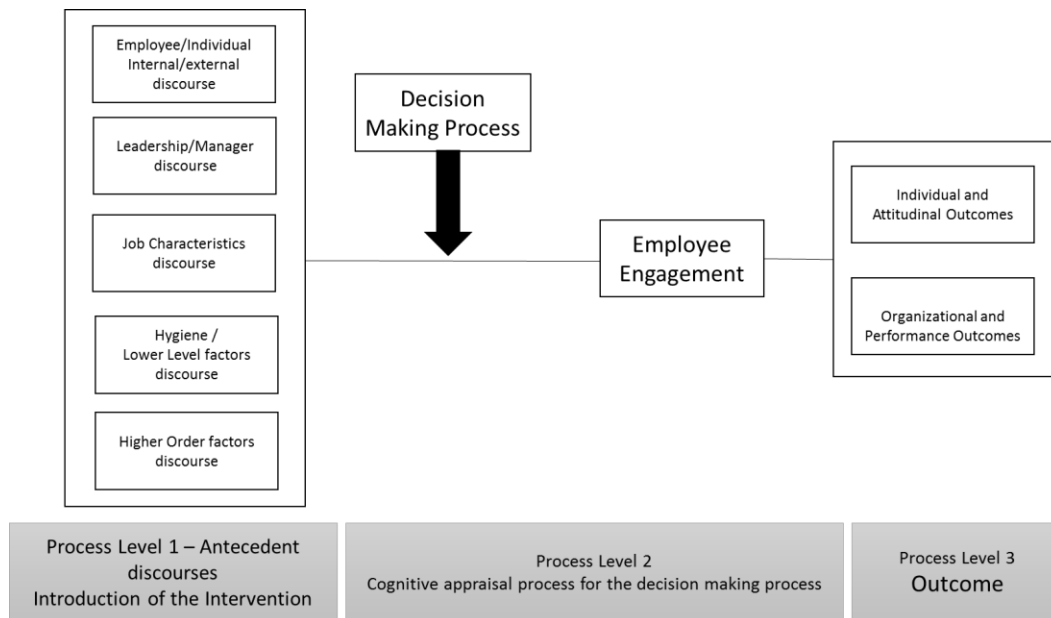
Furthermore, I presented a Table of authors and the relevant or seminal works highlighting their contributions to the construct of employee engagement which provided a mapping by the author contributions as well as the number of citations found in literature. Furthermore, the review of literature allowed for major themes to emerge from the literature. The lack of understanding of employee engagement is still prevalent and can be supported by the lack of continuity in axioms used in literature. Authors continue to overlap nomological frameworks of employee engagement by way of definitions thereby further, creating confusion in the research on employee engagement. This leads to the lack of uniformity of employee engagement definitions. I used a Table to help explain the differences in definitions based on their conceptual or operational use. New and emerging scholarly perspectives of employee engagement have been identified along with the emerging axiom of “employee work passion”. Furthermore, contributions to the study of employee engagement have emerged in various ways. Researchers are looking at the construct from different lenses and how it is applicable in relation to various other phenomena. Such as; self-determination, leadership, corporate social responsibility, etc. which only serve to provide for a greater array of antecedents and outcomes of employee engagement. To navigate through the multitude of employee engagement antecedents, five discourses were created to better manage the constructs of employee engagement. Furthermore, emerging contributions such as the idea of employee engagement being a continuum and viewing employee engagement as a process are fresh and up to date with taking research on employee

engagement further than it has ever gone before. Unfortunately, with all the advances that have been made in researching employee engagement and all its constructs, there is still no existing unifying theoretical framework for employee engagement.

Hypothesized Holistic Model of the Employee Engagement Process.

In a publication written by Shuck and Reio (2014), they operationalize employee engagement as having three distinct domains: cognitive, emotional, and behavioral. They further argue that cognitive engagement alludes to a type of appraisal process, this is in line with what Shuck (2012) expressed about cognitive engagement in that it, “results in a value based decision around three interrelated themes... meaningfulness of the context or object, physical, emotional and social safety of the context or object, and the availability and disposal of personal resources toward the context or object” (Shuck, 2012, p. 279). Shuck and Wollard (2009) define employee engagement as a process of positively motivating employees cognitively, emotionally, and behaviorally. Furthermore, Shuck and Herd (2012) argue that the first step in the engagement process consists of cognitive engagement and employee’s interpretations of the world around them. The employees individual interpretations answer the question presented by Kahn (2010) of meaningfulness. Shuck and Rocco (2011) also refer to the engagement process as a kind of cognitive appraisal intention. Saks and Gruman (2014) further argue that there is an existence of a number of processes to influence engagement. Findings from this review of literature have revealed that perhaps the following Figure (Figure 2.2) may be an effective way of viewing employee engagement as a process. The proposed conceptual model is holistic in nature because it includes all aspects of the constructs of employee engagement.

Figure 2.2 The Conceptual Expanded Holistic Model of the Employee Engagement Process

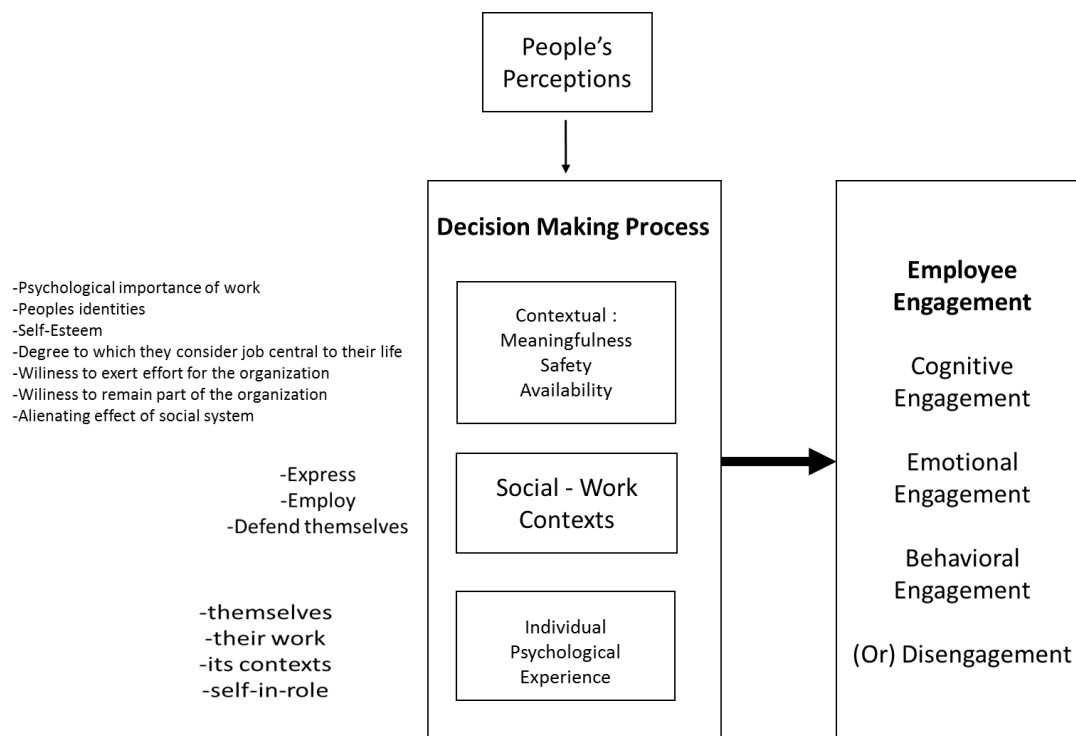


The conceptual Holistic Model of the Employee Engagement Process (Figure 2.2) consists of the introduction of an antecedent as an intervention (process level 1) which leads to an employee making a decision (process level 2: cognitive appraisal process for decision making). This decision begins with employees asking themselves, “Does this really matter?” (Kahn, 2010). “Does my participation in this event, project, etc. really matter?” “What happens if I do get involved?” “What if I don’t get involved?” This is what Shuck and Rocco (2011) refer to as a “cognitive appraisal process”. The cognitive appraisal process will then lead to the decision (1) to be disengaged or (2) to engage and if engaged, at what level of investment will the individual exert if they decide to get involved. The decision process, then leads to an outcome (process level 3: outcome) which may serve to benefit the individual or the organization or both in some instances.

Decision Making Process.

The conceptual Holistic model of the Employee Engagement Process highlights the decision-making process that employees experience in deciding whether to invest time, effort, and energy to be engaged or disengaged. It is assumed that employees may be engaged at one point or with one task and disengaged with another. The levels of engagement or disengagement are associated with the varying effects of the psychological conditions that influence behavior, such as individual, social and contextual sources (Kahn, 1990) as depicted in the following Figure 2.3.

Figure 2.3 Decision Making Process: psychological conditions that influence behavior derived from Kahn (1990).



Individual.

The first condition that Kahn (1990) highlights is the individual or the person's individual psychological experiences. This consists of the way a person sees themselves, how they see their work, how they view the context of their work, and how they see themselves within their work role. Bandura (1991) calls this an evaluation of a person's internal standards and how they measure up to their perceptions of the person within the work context. Lee (2012) explains it as a person's core self-evaluations.

Social.

The second psychological condition that influences behavior mentioned by Kahn (1990) consist of social contexts or work contexts. More specifically, it consists of the employee's perceptions of the psychological climate within the social or work context (Lee, 2012). Shuck and Herd (2012) explain this as an employee's interpretation of the world around them, whereas, Bandura (1991) terms it the employee's external sources of influence.

Contextual.

Finally, the last psychological condition proposed by Kahn (1990) consists of contextual sources. Contextual sources consist of an employee's perception of meaningfulness, safety and availability. Meaningfulness consists of an employee's perception of the importance of their work (Nimon, et al., 2011), safety consists of the employee's perceptions of workplace safety for learning and growing (May et al., 2004). Availability, consist of an employee's perception of their individual psychological availability to get involved with their work (May et al., 2004).

Shuck and Reio (2011) describe this contextual source as a cognitive appraisal process based on Kahn's (1990; 2010) work. This condition consists of the employee's psychological perceptions of the importance of the work, the degree to which they consider their job as central

to their lives, their willingness to exert effort, and their willingness to remain part of the organization. It also consists of an employee's evaluative self-regulation of their behavior or action and whether to get involved. One final important part of this process consists of the alienating effect of the social system on the employee's perceptions. The evaluative aspects of these sources will lead to an employee's behavioral expression of employee engagement (Cognitive, emotional, or behavioral engagement) or disengagement which then affects the outcome (Individual or organizational).

Employee Engagement, Human Capital Theory, and Social Exchange Theory

Human Capital theory and Social Exchange theory may be used to explain the phenomenon of the employee engagement process. This section will unfold by taking a closer look at Human Capital theory and how it has evolved in time, we then will address how HCT can help to explain the moderating relationship of the decision process on the relationship of antecedents and employee engagement which is the primary purpose of this research. Finally, we will take a deeper look at Social Exchange theory and the concept that people are forward looking in the decision-making process and how it moderates the employee engagement process.

HCT has been found to be one of the most prominent theories in education. Human Capital science was first formulated by Adam Smith in 1776, and first publicized in his book entitled, *The Wealth of Nations*. From this notion there arose two schools of thought concerning human capital. The first was that human capital consisted of acquired capacities and the second considered human beings themselves as capital. Furthermore, modern HCT maintains that an organization's investment in education and training leads to equity for an organization and that "all human behavior is based on the economics of self-interest of individuals operating within a freely competitive market" (Fitzsimons, 1999, p. 1). Economists further argued that people do

not only operate from an arena of self-interest alone, and they argue that people can and are irrational in their decision making. Becker (1992) looking at HCT from a method of analysis perspective argues that HCT “does not assume that individuals are motivated solely by selfishness or gain” (p. 38) rather human behavior is driven by a set of values and preferences. Becker’s (1992) analysis “assumes that individuals maximize welfare as they conceive it, whether they be selfish-altruistic, loyal, spiteful, or masochistic” (p. 38). Furthermore, he contends that an individual’s behavior is forward looking and is consistent, in an effort for an individual to anticipate uncertain consequences based on attitudes and values.

TW Schultz began to explore implications HCT had on economic growth. The fundamental assumption driving this exploration was that “individuals decide on their education, training, medical care, and other additions to knowledge and health by weighing the benefits and costs” (Becker, 1992, p. 43). Benefits as explained by Becker (1992) consisted of cultural and other non-monetary gains, whereas, costs consisted of a forgone value of those investments. Based on these assumptions economists eventually began to accept HCT as a respected tool for explaining economic and social issues (p. 43). Becker (1992) contends that HCT is valuable in explaining “regularities in labor markets and the economy at large” (p. 43). As is the case of employee engagement, HCT mirrors the employee engagement process.

Social Exchange theory (SET) supports the premise that people are forward looking as presented in HCT. Social Exchange theory began in the late twentieth century, it was not until the 60’s that researchers began to take a closer look at SET when authors like Bleu (1964), Homans (1961), and Thibaut and Kelley (1959) began to explore the rational assessment of self-interest people utilize when considering social relationships. The premise of the assessment process is based on the fact that people with more to gain have less power than those who have less to gain

from a social relationship. This perspective sets the stage that “human behavior may be viewed as motivated by desire to seek rewards and avoid potential costs in social situations” (Chibucos, 2004, p. 138). Chibucos (2004) argues that at the heart of SET are “the concepts of equity and reciprocity” (p. 138). This notion of equity and reciprocity are the foundation that people are happier or more satisfied when they feel like they are getting in return what they are putting into a relationship or social situation leading to equality. Furthermore, SET sets the foundation that “individuals are motivated to gain rewards in social exchanges and in the absence of apparent rewards, individuals in social exchanges may primarily try to avoid costs in those exchanges” (Chibucos, 2004). SET supports the forward-looking notion of people and the decision-making process of the employee engagement process presented in this research.

Discussion

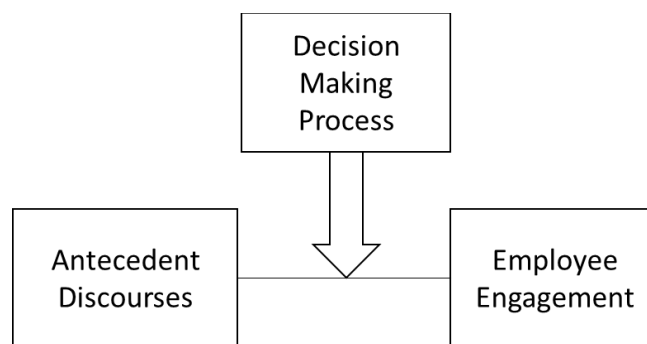
This research has shed more light on the current disconnects in employee engagement research and the pitfalls that researchers may encounter. For example, the misalignment between defining employee engagement and the lens from which to view employee engagement, as well as, the misalignment of instruments to collect data. The call is for a uniformity of approach and scale (Shuck, 2012) to minimize and eventually overcome this major disconnect in literature.

This review of literature allows for a better understanding of the theoretical underpinnings of employee engagement and what employee engagement is conceptually. It also allows for a better understanding of antecedents or major discourses which help influence employee engagement. Knowledge of organizational and individual outcomes that are a result of these major discourses will allow for HRD professionals to align expected organizational outcomes and interventions for enhanced results. A good understanding of the different kinds of employee

engagement and the differences between employee and organizational perspectives serve to be crucial for avoiding any disconnects in aligning employee and organizational expectations.

Emerging contributions to the field of knowledge consist of the Holistic model of the Employee Engagement process presented in this study, which serves to unify existing frameworks of employee engagement (need-satisfaction, burn-out antithesis, satisfaction-engagement, job-demands resource model, multi-dimensional approach, higher order form of employee engagement – work passion approach, and the employee focused experience approach). All these approaches require a process of employee engagement. The conceptual Holistic model of the Employee Engagement process serves to highlight the decision-making process that consists of a cognitive appraisal that employee’s experience as outlined in the review of the literature findings section.

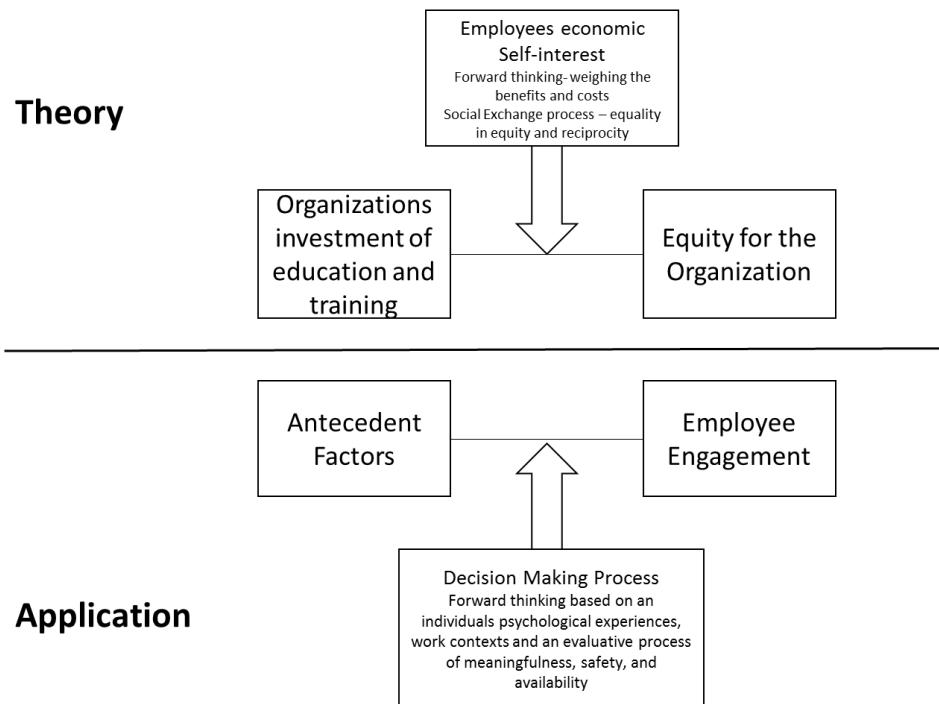
Figure 2.4 Proposed Study Model



More importantly, this research highlights the moderating affects that an employee’s decision making process has on the relationship of the antecedent’s discourse and employee engagement (Figure 2.4). Further research into this moderating relationship would serve to support the holistic model of the employee engagement process.

Figure 2.5 depicts Human Capital theory, Social Exchange theory, and how they mirror the employee engagement process (application). The HCT and SET approach to employee engagement considers how the productivity of people is changed by investment of education, skills, and knowledge (antecedents) coupled with the employee engagement process approach where employees interpret psychological experiences, social exchange experiences and work contexts, and contextual meaningfulness (Khan, 1990) through the lens of utility maximization and forward looking behavior (Becker, 1999) to determine their behavioral expression.

Figure 2.5 The Employee Engagement Process from Theory to Application



Utilizing this theoretical approach to the employee engagement process will shed light on explaining how employee engagement moderates the relationship between antecedents and employee engagement. This framework may very well be a spring board for this research on the employee engagement process.

Summary

This review of literature has revealed several important points that researchers should consider when looking further into the phenomenon of employee engagement. First, at the time of this review of literature, there was a lack of a unifying theoretical approach to employee engagement, leading to major disconnects in literature such as, a lack of understanding of employee engagement in both meaning and measurement, and a lack of uniformity between research and practice. From this review of literature several differing nomological frameworks of employee engagement were revealed which explain the phenomenon from very different perspective and only agree to the fact that there is an existence of cognitive appraisal process, which I call, the decision making process. These deficiencies now force researchers to be more intentional in how they are defining employee engagement, as well as explicitly define the lens they are using in their research. Additionally, five antecedent discourses were created out of fifty two (52) antecedents identified through this review of literature, to streamline themes for ease of use for HRD practitioners and inclusion in the hypothesized holistic model of the employee engagement process (EPPM).

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

This chapter will discuss the methods used to address the purpose of this study, which is to examine the framework of the Employee Engagement Process Model by first examining relationships between employee antecedents and employee engagement, and then looking at the moderating effects that the decision making process may have on their relationship. The research design and methodology were selected to accommodate the studies research questions presented in chapter one. The intent of this study was to explore employee engagement in a manner that will take into consideration all the constructs found through the review of literature and to provide for a holistic view of employee engagement and its processes. To achieve these goals and purpose the following research questions were presented to guide this research:

1. How do antecedent factors influence employee engagement?
2. How does the employee decision making process moderate the relationship between the antecedent factors and employee engagement?

Summary of Theoretical Framework

This study was informed by Human Capital Theory (HCT)(Fitzsimons, 1999) and Social Exchange Theory (SET) (Chibucos, 2004). HCT is centered on the notion that all human capital performance is based on the economic self-interest of the individual in an open and free market. SET is founded on the fact that an individual will decide based on the notion of equity and reciprocity. Individuals will weigh out their experiences in terms of equality in giving and receiving in a social setting and then decide as to continue making deposits into a social setting or relationship, or deter from further investments. Both HCT and SET support the notion that employee engagement is moderated by the decision-making process of an individual as to

whether to invest time and energy into their work roles and their organization. Furthermore, HCT and SET strengthen and support the argument that the employee's decision making process, which deals with individual (psychological experience), social (work contexts), and contextual (meaningfulness, safety, and availability), moderates the relationship between employee engagement antecedents and employee engagement which encompass the employee's self-interest of advancement or preservation. Furthermore, the decision-making process is a form of an evaluative function of the employees, assessing their self-interest and how they will choose to proceed when antecedents are introduced into the context and will ultimately lead to a behavioral expression. The use of this theoretical framework provides a foundation from which we can move from theory to application (see Figure 2.5) in exploring the employee engagement process.

Population

The description of respondents consists of a population comprised of all faculty and staff from a local college district in the State of Texas. Colleges within the district offer associate degrees, transfer degrees, certificates, and licensures in operational programs. Strategic goals consist of three major goals for the district. The first, 1) Student success – “provide academic and student support and align labor market-based partnerships with a focus on achieving the dream to achieve student completion”. 2) Principle-centered leadership – “provide opportunities for college students and employees to develop as principle-centered leaders”. Finally, 3) Performance excellence – “Continuously improve our employee, financial, technological, physical and other capacities with focus on effectiveness, efficiency, and agility”.

Student enrollment for fall of 2015 consisted of 48,618 students (see Table 3.1). The demographic breakdown for students consists of approximately 13,507 White, 29,180 Hispanic,

3,825 African American, 1,388 Asian / Pacific Island, 249 International, and 1,739 Other / Unknown.

Table 3.1 Fall 2015 Student Enrollment for the Colleges

College District	Student Enrollment
College 1	14,395
College 2	7,327
College 3	14,359
College 4	8,731
College 5	3,806
Total Student Enrollment	48,618

The 2015 fiscal year report presented by the district consisted of a breakdown of faculty, non-instructional faculty, administrators, professionals, and classified personnel for all of the College District (see Table 3.2).

Table 3.2 Breakdown of Personnel for all Colleges derived from the Fiscal Year Report for 2015-16 from the District.

Title	College 1	College 2	College 3	College 4	College 5	District and District Support	Total for the Colleges
Faculty	288	171	104	144	63		770
Non-Instructional Faculty	21	10	5	4	3		43
Administrators	9.63	11.37	9	7	9	20	66
Professionals	88	70	57	92	44	296.90	647.90
Classified	132.63	87.37	51	59	34	412.48	776.48
Total	539.26	349.74	226	306	153	729.38	2,303.38

Sample Study

The sample used for this study came from a convenience sample from within the population. Target participants in this survey were organizational leaders, education leaders, and employees from various levels within the Colleges in the state of Texas. The main study, consisted of the survey being sent to all faculty, staff, and administrators of the College District within the State of Texas.

The target population for this study include all faculty and staff, both male and female. The breakdown of the target population is as follows: 770 faculty, 43 Non-Instructional, 66 faculty administrators, 647 professionals, and 776 classified. This would make the total target population of 2303 members. Per Krejcie and Morgan (1970), with a population of 2303, a sample size of 331 is recommended to be representative of a proportional sample of the faculty and staff personnel for the College District to (a) determine relationships between antecedent factors and employee engagement, and to (b) examine the moderating factors of the decision making process on the relationship of antecedents and employee engagement.

Measurement Framework

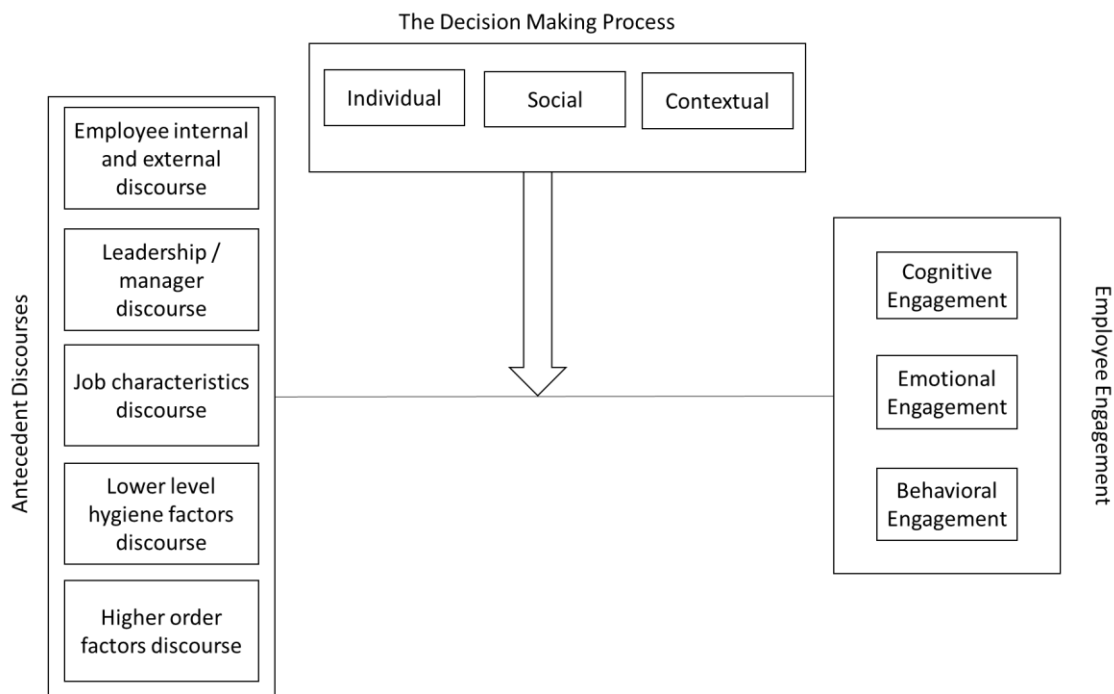
The principal measurement framework for this study was the employee engagement process. The engagement process is a culmination of the theoretical underpinnings of employee engagement and takes into consideration all the constructs of the employee engagement process; antecedents, nomological frameworks, employee engagement types and their levels. The phases of the employee engagement process include process level one, which consists of the introduction of an antecedent, this introduction, then leads to process level two, which consists of a cognitive appraisal process for decision making which moderates the relationship between employee engagement antecedents and employee engagement (see Figure 2.2). After a decision has been made as to the level of employee engagement, process level three then comes into play and certain outcomes arise, individual or organizational. Thus, these phases compose the employee engagement process.

Based on an extensive review of literature and the conceptual framework provided in Figure 2.2 the conceptual expanded holistic model of the employee engagement process, a study model (Figure 3.1) was created to be the focus of this study. Furthermore, the principal framework for this study consists of the antecedent discourse as outlined in chapter two of this same study. These discourses include (1) employee/individual internal and external discourse, (2) leadership/manager discourse, (3) job characteristics discourse, (4) hygiene-lower level factors discourse, (5) higher order factors discourse. The proposed study model depicts these antecedents and their relationship to employee engagement. I am taking an HRD perspective in viewing employee engagement, and based on the review of literature, leading authors within our field characterize employee engagement as having three distinctive levels (Shuck & Wollard, 2010; Shuck et al., 2016). They are cognitive engagement, emotional engagement, and behavioral

engagement. Based on the findings of the review of literature, all the varying nomological frameworks of employee engagement consist of some sort of antecedent variables and employee engagement. In addition to the antecedents identified and employee engagement levels identified, the final variables that will be included in this study are those that consist of the employee's decision making process (individual, social, and contextual) to determine the moderating effects of the decision-making process on the relationship between employee engagement antecedent discourses and employee engagement (cognitive, emotional, and behavioral).

The study model presented here (Figure 3.1 Triad study model expanded) takes into consideration all the constructs of employee engagement and takes a holistic approach to employee engagement. Key variables measured in this study and guided this research are, internal and external discourse, leadership / manager discourse, job characteristics discourse, higher order factor discourse, the decision-making process (individual, social, and contextual: meaningfulness, safety, and psychological availability), and employee engagement (cognitive, emotional, and behavioral).

Figure 3.1 Triad Study Model – Expanded



Survey Instrument Development

The instrument used for this research is consistent with the theoretical model and structural model being tested. This research highlighted current and available measurement tools used in the field of HRD to examine if, they may be used to shed light on the employee engagement process. There were twelve measurement tools identified from the literature: Maslach Burnout Inventory (MBI), Q12, the Passion Scale, Oldenburg Burnout Inventory (OLBI), Psychological Engagement, Utrecht Work Engagement Scale (UWES), Job and Organizational Engagement Scale, Job Engagement Scale, the Intellectual, Social, Affective Engagement scale, the 2-Dimensional Measure of Engagement, and finally, the Employee Engagement Scale. All of which measures some engagement. However, when looking at these

measurement tools currently available, none measure all the process levels as outlined in the proposed Holistic model of the Employee Engagement process, which informed this research. Each scale measured different antecedents and outcomes of employee engagement, however, they did not line up with the triad model (process levels 1, 2, and 3) that guided this research.

The survey instrument was created in a three-phase method, the first phase consisted of creating the purpose of the test and defining the employee engagement process, phase II: development and refinement of the survey instrument, and phase III: the pilot test, reliability, construct validity and the use of self-report questionnaire.

Phase I.

In this phase, great care was taken to state the purpose of the test and why it was created. A definition of the employee engagement process was created for this study. Variables from the employee engagement process were researched through a review of literature. The survey tool, was developed based on existing measurement tools that provide a more concise measurement of the constructs being researched in this study. This survey measured relationships between process level one, the introduction of an intervention, process level two, the cognitive appraisal process for a decision point and its level of holistic investment, and finally, process level three which consists of an individual or organizational outcome. The decision point variable found in process level two, measures the interactions of the psychological conditions (individual, social, and contextual) and the interactions with an employee's psychological experience, work context, people's perceptions, self-regulation cognitive appraisal, and the behavioral expression, which results in a holistic investment, that lead to either individual level or organizational level outcomes.

Phase II Item Selection for Survey Instrument.

From an extensive review of literature, a pool of existing items was created which were helpful in developing the survey instrument. Items were selected for the instrument tool keeping in mind the following criteria: (1) the instrument met reasonable validity and reliability standards, (2) the instrument met the requirements of the construct being tested (i.e. definition of the construct, and items selected were grounded in the essence of its respective discourse), and (3) the instrument was short and practical to administer in terms of amount of time required to complete. The online survey was designed in accordance with Dillman, Smyth, and Christian's (2009) guiding principles for mail and internet surveys. Please note, that items that include 0 items represents that no scales or items were found for the respective antecedents. However, this would only pose a problem if measuring each antecedent in a discourse, which is not the case here. Antecedents were used to create the following themes or discourses, then discourses were defined, and items were selected based on the respective discourse definition. Although a survey pool was created from all antecedents within the respective discourse, individual antecedents were not measured for this study. Instead, the pool of survey items were used to create new scales in line with the respective discourse. Therefore, the scale was tested for validity and reliability and results may be found in chapter four in the findings section.

Measuring Antecedent Discourses.

Internal/External Discourse.

The employee's individual internal and external discourse can be defined as the cognitive effects of an employees' self. This discourse consists of two categories, cognitive and external factors. The first category, cognitive, consists of the following antecedents emotional fit (16 items), optimism (0 items), self-esteem, self-efficacy (3 items), dedication (3 items), vigor (3

items), absorption (3 items), willingness to direct personal energies (0 items), coping styles (0 items), curiosity (0 items), available to engage (5 items), core self-evaluations (0 items). The second category – external –change, consist of the following antecedents: work/family status (15 items), work-life balance (0 items), and higher levels of corporate citizenship (5 items). This discourse survey pool of items consists of 53 items from which to choose from for the final survey instrument.

Utilizing the three item criteria for item selection and inclusion, items for measuring the employee internal and external discourse are as follows. Items selected include one question created to measure emotional fit, “I have a good understanding of the emotions of the people around me”. One item was selected to measure the employee’s self-consciousness of the individual from May et al., (2004). For example, “I worry about how people perceive me at work”. One item was selected from Schaufeli, Bakker, and Salanova (2006) that measure an employee’s perceptions of self-esteem or self-efficacy. One item was selected that measure employee connectedness from Nimon et al., (2011) work cognition inventory. One item was created to measure perceptions of an employee’s optimism, “I am optimistic about my future”, and one that measures an employee’s perceptions of their core self-evaluations, “I am confident in who I am as a person”.

Leaders/Manager Discourse.

The leadership/manager discourse may be defined as the leadership styles and foundational management principles experienced by employees in the work context. This discourse consists of 12 antecedents. Leadership (0 items), transformational leadership (0 items), reverse mentoring (0 items), manager self-efficacy (0 items), manager expectations (0 items), clear expectations (0 items), feedback (5 items), encouragement (0 items), corporate social

responsibility (0 items), mission and vision (0 items), perceived supervisor support (14 items), and engaging leaders (5 items). This discourse consists of 24 items in the survey pool.

Utilizing the criteria for item selection, the leadership/manager discourse consists of one item derived from Nimon et al.'s, (2011) work cognition inventory, that measure the importance of managerial feedback. Items measuring manager expectations “My manager/supervisor sets realistic expectations for me”, clear expectations “My manager/supervisor’s expectations are clear to me”, supervisor encouragement “My manager/supervisor encourages me to do my best” and alignment of mission and vision “My manager/supervisor has aligned my goals with the vision and mission of the organization” were created for this research. One item that measures perceived supervisor support was derived from May et. al., (2004) was included. One item from Nimon et al., (2011) was included that measured engaging leaders.

Job Characteristics Discourse.

The job characteristics discourse consists of job role expectations and task expectations. This discourse contains 5 antecedents. They are, job characteristics (6 items), job fit (4 items), level of task challenge (0 items), linking of individual and organizational goals (0 items), job demands (0 items). This discourse currently consists of 10 items included in the survey pool of items for this research study.

Utilizing the criteria for selection the following items were included in the survey instrument for this study. One item was selected to measure job characteristics (Saks, 2006), ex. “how much variety is there in your job? That is, to what extent does the job require you to do many different things at work, using a variety of your skills and talents.” One item that measures job fit was included and derived from May et al., (2004). Items were created to measure level of task challenge “My job challenges me”, linking individual and organizational goals “My job

allows me to link my individual goals to the organizational goals”, and job demands “My organization provides me the resources I need to meet the demands in my job”.

Lower Level Hygiene Factors Discourse.

The lower level hygiene factors discourse consists of hygiene factors that are foundational to employee engagement. This discourse consists of 9 antecedents: hygiene factors (0 items), perceptions of workplace safety (3 items), perceived organizational support (13 items), positive workplace climate (0 items), authentic corporate culture (0 items), supportive organizational culture (0 items), distributive justice (9 items), procedural justice (7 items), and job resources (8 items). This discourse consists of 40 items included in the pool of survey items.

Items selected for inclusion in this research study were derived utilizing specified criteria and are as follows. Three items measuring perceptions of work place safety derived from May et al., (2004) were included. From these three items two were reverse coded, “I am afraid to express my opinions at work” (r), and, “there is a threatening environment at work” (r), items that required reverse coding were restructured to avoid the necessity of reverse coding. This was done to fit the design of the survey being constructed. Four items selected for inclusion measuring perceived organizational support were derived from Saks (2006). One item was created to measure a supportive organizational culture, “My organization is very supportive”. I utilized two items from Nimon et al.’s, (2011) work cognition inventory to measure distributive justice/fairness. One item was selected from May et al, (2004) to measure job resources, “I feel emotionally healthy at the end of my workday”.

Higher Order Factors Discourse.

The Higher order factor discourse consists of antecedents that fall under one of two categories: intrinsic and extrinsic factors. These factors deal with employee's higher order perceptions of intrinsic and extrinsic motivation. Intrinsic motivation consists of an employee's use of strength (7 items), motivation (0 items), feelings of choice and control (15 items), their feelings of involvement in meaningful work (11 items), value congruence (0 items), autonomy (5 items), and job control (0 items). Extrinsic factors include rewards (5 items), talent management (0 items), opportunities for learning (5 items) and recognition (five items). This variable consists of a pool of 53 items that may be included in the survey instrument. The format for these items consists of utilizing the Likert type model of survey development.

Items selected for this discourse were selected based on the criteria and are as follows, one item was selected that measures use of strength came from Els, Mostert, Van Woerkom, Rothmann, and Bakker (In Press). One item from May et al., (2004) which measured involvement in meaningful work, "my job activities are significant to me" was included in this discourse. One item from Nimon et al.'s, (2011) work cognition inventory was utilized to measure meaningful work. Finally, one item to measure rewards and recognition was selected from Saks (2006), "A reward or a token of appreciation (e.g. lunch) is very important to me".

Measurement of Decision Process.

Process level two consists of a cognitive appraisal process for the decision making process and the level of employee engagement. When looking at decision-making in the work place, an internet search can produce upwards of 91,400,000 results for the decision-making process but none are specific to employee engagement. From the review of literature for this study, the decision-making process for employee engagement consists of social (work context, 13 items),

contextual (meaningfulness [5 items], safety [3 items], and 5 items for availability) and finally individual (psychological [12 items] experience). Measurement of the decision making process consist of 38 items included in the pool of survey questions for consideration.

Items for measurement of the decision-making process were selected utilizing criteria set for item selection and are as follows. The decision making process is comprised of three sections; individual, social, and contextual. Six items were selected to measure the “individual” variable which were derived from Lee (2012). An example of these items is, “I am confident I get the success I deserve in life”, and “Overall, I am satisfied with myself”. These items measure the employee’s core self-evaluations of the individual person. The “contextual” variable consists of items that measure, meaningfulness, safety, and availability. Four items derived from Nimon et al., (2011) measure an employee’s perception of meaningful work based on the work cognition inventory. Three items that measure safety were derived from May et al.’s, (2004) work on psychological safety in the workplace. Finally, four items were selected to measure psychological availability derived from May et al., (2004). An example of these items includes, “I am confident in my ability to handle competing demands for work”. Five items were selected to measure social-work contexts (psychological climate) and were derived from Lee (2012). An example includes, “Top management in my organization commits resources to maintain and improve the quality of our work” and “People in my work unit/team/department are adequately trained to handle the introduction of new products and services”. A Table of the description of discourse, definition, dimensions, items and source has been included in Appendix 6.

Measurement of Employee Engagement.

The level of holistic investment consists of the various types of employee engagement: cognitive engagement (15 items), emotional engagement (16 items), and behavioral engagement

(14 items), all of which conceptualize what employee engagement is and lead to the higher order factor of employee engagement (Shuck, Adelson, & Reio, 2016). The following items selected to measure employee engagement were derived utilizing the selection criteria set forth for this research study. Five items measuring cognitive engagement were derived from Shuck, Adelson, and Reio (2016), an example is, “I am really focused on my job when I am working”. Five items to measure emotional engagement were also derived from Shuck, Adelson, and Reio (2016), an example is, “I feel a strong sense of belonging to my job”. Finally, five items were selected from Shuck, Adelson, and Reio (2016) to measure behavioral engagement, an example is, “I do more than is expected of me”.

Currently, the survey instrument for this study consist of seventy-one items (75) presented in twenty (24) questions, and broken into ten sections, which were utilized for the pilot study. Please see appendix 6 for the descriptions of measurement of constructs for the study and reporting of validity utilizing Cronbach’s alpha for each section.

Table 3.3 Origins of Survey Items

Construct	Survey tool	Number of items
Consent and demographics		11
Internal / External discourse	May et al., (2004); Shaufeli, Bakker, and Salanova (2006); Nimon et al., (2011) and items created for this study	6
Leader / Manager discourse	Nimon et al., (2011); May et al., (2004) and items created for this study	7
Job Characteristics discourse	Saks (2006); May et al., (2004), and items created for this study	5
Lower Level hygiene factors discourse	May et al., (2004); Saks (2006); Nimon et al., (2011) and items created for this study	5
Higher Order factors discourse	Els, Mostert, Van Woerkom, Tothmann, and Bakker (In Press); May et al., (2004); Nimon et al., (2011); Saks (2006)	4
The Decision Making Process: Social work Contexts	Lee (2012)	5
Contextual: Meaningfulness	Nimon et al., (2011)	4
Contextual: Safety	May et al., (2004)	3
Contextual: Availability	May et al., (2004)	4
Individual psychological experiences	Lee (2012)	6
Employee Engagement: Cognitive Engagement	Shuck, Adelson, and Reio (2016)	5
Emotional Engagement	Shuck, Adelson, and Reio (2016)	5
Behavioral Engagement	Shuck, Adelson, and Reio (2016)	5
Total items		75

Phase III.

Pilot Test.

A pilot test was conducted to refine the research instrument and to provide face and content validity of the instrument. The pilot test was administered to N=50 random participants from within the colleges to test the appropriateness of the items, scales and instructions. A total of n=19 surveys were returned and reduced using list-wise deletion from SPSS due to missing data resulted in n=17. An email was sent to the validation group for feedback. Respondents from the validity group reported a) all questions were clear, b) the survey was not too long and only took 38 minutes to complete, especially considering the importance of the depth of the topic being

studied, c) questions were appropriate, and d) that the survey was clear and easily navigated. One participant stated, “I felt I could easily reply to all of the questions”. Changes were made per suggestions (i.e. larger font size and adding a completion bar) and the survey was prepared for final data collection for this study.

Estimates of Reliability.

Reliability of the study instrument used for data collection was reported utilizing Cronbach’s alpha estimate of internal consistency and reliability of the instrument scores. Estimates were compared to see how they relate to other instrument items scores and to the total instrument score and its subscales. Values of $\alpha = 0.80$ or above (Clark & Watson, 1995), were used as a base of acceptability for this research study and to establish the consistency of the measurement over time or the precision of measurement.

Validity.

The following procedures were adhered to for this study. Data collected was analyzed utilizing Messick’s (1995) six components of validity for which validity evidence can be accumulated within the Rasch (rating scale) model. These components consist of content, substantive, structural, generalizability, external, and consequential. Messick’s (1995) considered two validity categories: external (convergent, discriminant, and criterion relevance) and consequential (value implications of score interpretation, and potential consequences of the test use: bias, fairness, and distributive justice).

The following components as outlined by Messick’s (1995) were utilized: content, substantive, structural, generalizability, external, and consequential (see Table 3.4). Content consists of evidence of content relevance, and representativeness. Techniques utilized in this study to provide evidence of content validity include: a pilot test and confirmatory factor analysis.

Rating scale analysis (a structural technique) was utilized to provide structural validity. Table 3.4 outlines measurement tools that may be utilized for each of Messick’s (1995) six components of validity.

Table 3.4 Data Analysis Procedures, derived from Messick (1995).

	Messick’s (1995)	Measurement
Validity	Content Substantive	Pilot testing Confirmatory Factor Analysis
	Structural	Rating scale analysis
	Generalizability	Differential Item Functioning Reliability of internal consistency – Cronbach’s Alpha
	External	Confirmatory Factor Analysis

*All items listed were utilized for this research study

Generalizability aspects of validity, “address the degree to which measures maintain their meaning across measurement contexts” (Wolfe & Smith, 2007, p. 215), techniques utilized in this study consist of: differential item functioning (DIF) to evaluate the generalizability aspect of validity and the invariance of calibrations across measurement contexts such as, groups or time. Cronbachs Alpha was used to provide reliability of internal consistency. External validity is closest to what is construct validity and “concerns the degree to which measures are related to external measures of the same construct, similar constructs, and other constructs” (Wolfe & Smith, 2007, p. 220). For this research study, confirmatory factor analysis was used as a technique to provide evidence of external validity.

Threats to Validity.

Identifiable potential threats to validity have been taken into consideration and have been included in this research proposal, they are as follows:

- Threats to internal validity include the threat of selection, where participants may have certain characteristics that predispose them automatically to favorable outcomes (e.g. they are top producers). To respond to this threat, the researcher can implement randomization whenever possible. Randomization was not utilized for this study, instead data was gathered using non-probability sampling from five individual colleges within the college district.
- Threats to external validity include interaction or selection in which generalization may be difficult. To respond to this threat, the researcher can include different groups with different characteristics. For this study, I utilized two categorical groups (faculty, staff, and administrators; male, and female).
- Another threat to external validity consists of interaction of setting; this is derived from certain characteristics of the setting of the participants that make it difficult to generalize in other settings. Additionally, sites for data collection in new settings allowed for the researcher to see if the same results occur as the original setting. To address this issue, I included five sites (five community college sites) from which to collect data for this research.

Use of Self-Report Questionnaire.

Although it is established that the use of self-report questionnaires may cause difficulties, such as socially desirable response bias, which may lead to inflations in correlations, this type of questionnaire is the only way that we can measure a person's disposition about certain topics.

With the understanding that people will tend to over or under estimate answers to sensitive areas within the survey instrument. I have taken great care to emphasize confidentiality and anonymity for respondents.

Ethical Considerations.

Bell and Bryman (2007) recommended guidelines for data collection procedures. These guidelines were used to collect data for this study.

1. Voluntary participation of respondents. Participants provided informed consent before proceeding with the survey questionnaire in accordance with the APA and Institutional review board guidelines.
2. Avoidance of the use of offensive and discriminatory language in the formation of the survey instrument.
3. Confidentiality and anonymity are strictly adhered to.
4. The use of acknowledgement of authors' work is cited according to APA guidelines.
5. Objectivity in analysis and discussions were adhered to.

These ethical guidelines were carefully adhered to for this research study.

Data Collection

Data collection procedures included administering an online survey with closed-ended questions. Convenience sampling methods were used for this study. I worked closely with the office of the Chancellor for the community colleges to obtain a sample of my target population. Sample selection was discussed with my dissertation committee and a plan of execution was developed in how we should go about initiating the convenience sampling methods. Once the sample of participants was identified, a list serve was created by the Community College IT department which was utilized in sending the survey to the target population. I created a

solicitation email and attached all pertinent attachments (IRB approval – TAMU, IRB approval – College district, and the information sheet) and sent the solicitation email to the target population (see appendix 4 invitation email to participants).

The time frame to collect data and allow participants to participate was approximately one month. A solicitation email was sent utilizing the organization’s list serve. A reminder email was sent two weeks after the original invitation was sent, and a final reminder email was sent at the third week mark instructing participants of the importance of their participation in the study and the date of when the survey was set to close.

The initial solicitation email along with all reminder emails detailed confidentiality of the study and the anonymity of the participants’ responses. Furthermore, emails detailed the importance of the participants’ inclusion in the study and informed them of the value of their contribution to the study, along with information detailing the adequate levels of confidentiality of the research data being collected (Appendix 3) and any identifying information, such as participant emails.

Participants were encouraged to participate because I received a \$1,000. research scholarship from my department to be used to incentivize the completion of the survey. Nineteen (19) fifty-dollar (\$50.) gift cards were included in a “survey completion drawing”. Participants who completed the survey in its entirety and submitted their email addresses were entered for a chance to win.

Final Study Sample

Seven hundred and two (N=702) respondents completed the online survey. The percentage of excluded cases was 8.4% (59/702) that were inadmissible due to unanswered questions. The response rate was 28% (643/2302= 0.279) and the incomplete response rate was

11.3% (73/643) with no more than five items missing, therefore, the final study sample was six hundred and forty-three cases (n=643). Normally a small amount of missing data (<10%) is acceptable per Cohen & Cohen, (1983). However, when the percentage is higher a problem may occur when it is not missing completely at random, which is not the case in this study, since missing data was confirmed to be missing completely at random (MCAR = 9.48% [61 cases/643]) and is therefore, ignorable (Little and Rubin, 1987; Scheffer, 2002). Additionally, “as a rule, variables containing missing data (MCAR) on 5% or fewer of the cases can be ignored” (Meyers, Gamst, & Guarino, 2013, pg. 48; Tabachnick & Fidell, 2007), for this study the highest percent of missing data per variable was .08%. Therefore, the final sample size of six hundred and forty-three was used to represent a population of 2303 total faculty, staff, and administrators for The Colleges was utilized which far exceeds the suggested sample size of (n=331) by Krejcie and Morgan (1970) to appropriately represent the population.

A specific pattern of missing data was not detected. However, an analysis of missing data per person was conducted and resulted in 59 cases (9.48% of 643 cases) had missing data of no more than five variables. An analysis of missing data per measured variable was also conducted and resulted in items missing at random. Items had between one to five responses missing and only one item had a total of five missing responses. A total of five items had four missing responses, and a total of nine variables had three responses missing.

Demographic Characteristics.

Descriptive statistics were utilized to examine demographic characteristics and professional characteristics of the six hundred and forty-three respondent cases. IBM SPSS 23 statistical software was used in this analysis. Demographic characteristics of respondent cases are presented in Table 3.5.

Table 3.5 Demographic Characteristics

Characteristics		N	Percent	Valid Percent
Gender	Male	226	35.1	35.3
	Female	414	64.4	64.7
	Missing	3	0.05	
	Total	643	100	
Age	18-34	102	15.8	15.8
	35-44	136	21.2	21.2
	45-54	170	26.4	26.5
	55-64	176	27.4	27.4
	65-75 years or older	58	9	9
	Missing	1	0.2	
	Total	643	100	
	Ethnicity	White	275	42.8
Hispanic or Latino		295	45.9	46.2
African American		38	5.9	5.9
Other		31	4.8	4.8
Missing		4	0.6	
Total		643	100	
Highest Education Level	No college degree	40	6.2	6.2
	2 year degree	62	9.6	9.7
	4 year degree	122	19	19
	Master's degree	336	52.3	52.4
	Doctorate	81	12.6	12.6
	Missing	2	0.3	
	Total	643	100	

Based on the demographics in Table 3.5 female respondents (n=414, 64%) outnumbered male (n=226, 35%) respondents. The sample represents a diversity of age groups ranging from 18 through 75 years or older. The largest population age group was between the ages of 55 and 64 (n=176, 27%), followed by those ranging in age of 45-54 (n=170, 26%). The smallest group was those respondents between the ages of 18-24 (n=8, 1%). The majority of respondent's ethnicity

was either Hispanic/Latino (n=295, 46%) and Caucasian (n=275, 43%), although there were other ethnic groups. More than half of respondents held a Master's degree (n=336, 52%).

Professional Characteristics.

Based on the professional characteristics provided in Table 3.6, most respondents were full time employees (n=541, 84%), whereas, only 16% (n=100) were part time employees. 47% of respondents selected staff/professional (n=301) as their job level, and faculty – full time came in next at 26% (n=167). The highest level of job tenure was those employees that were in their positions from 5 years to less than 10 (n=130, 20%) and closely after were those that fell within the category of 1 year to less than 3 years (n=128, 20%). Organization tenure had those within 10 years to less than 15 years with the organization (n=136, 21%) to be the largest respondent group closely followed by those respondents that had been with their organization 5 years to less than 10 years (n=114, 18%). The largest respondent group to participate in the study consisted of participants from within College 1 (n=187, 29%) closely followed by those from College 2 (n=115, 18%).

Table 3.6 Professional Characteristics

Characteristics		N	Percent	Valid Percent
Employment Type	Employed full time	541	84.1	84.4
	Employed part time	100	15.6	15.6
	Missing	2	0.3	
	Total	643	100	
Job Level	Faculty - Adjunct	121	18.8	18.8
	Faculty - Full time	167	26	26
	Staff/Professional	301	46.8	46.8
	Administrative/ Classified	51	7.9	7.9
	Other	3	0.5	0.5
	Missing	0	0	
	Total	643	100	
	Job Tenure	Less than one year	81	12.6
1 year to less than 3		128	19.9	20
3 years to less than 5		95	14.8	14.8
5 years to less than 10		130	20.2	20.3
10 years to less than 15		95	14.8	14.8
15 years or more		111	17.3	17.3
Missing		3	0.5	
Total		643	100	
Organizational tenure	Less than one year	56	9.2	9.2
	1 year to less than 3	103	16	16.1
	3 years to less than 5	61	9.5	9.5
	5 years to less than 10	114	17.7	17.8
	10 years to less than 15	136	21.2	21.3
	15 years to less than 20	77	12	12
	20 years or more	90	14.1	14.1
	Missing	3	0.5	
Total	643	100		
Institutional affiliation	College 1	187	29.1	29.1
	College 2	115	17.9	17.9
	College 3	81	12.6	12.6
	College 4	42	6.5	6.5
	College 5	104	16.2	16.2
	District office	113	17.6	17.6
	Missing	1	0.2	
Total	643	100		

Online Questionnaire.

The survey instrument was loaded into Qualtrics for distribution and a link was provided in the solicitation email for the distribution of the survey to participants online. Two additional emails were sent in as reminders of survey closing date.

Data Preparation, Recoding, and Missing Data.

After the survey site deadline expired, all the data was downloaded into an excel spreadsheet for evaluation of item responses and recoding or reverse coding of data as necessary. Missing data was addressed as necessary.

Data Preparation.

Data preparation and screening were conducted. This process included checking the data for accuracy, entering data into the computer, transforming data, developing and documenting a data file (Research Methods Knowledge Base, 2015) for analysis purposes.

Recoding Data.

There were no items reverse coded for this study.

Missing Data.

Missing data were addressed utilizing modern methods of structural equation modeling, which produces optimal results. Full Information Maximum Likelihood (FIML), a default procedure in MPlus, allowed for values to be “borrowed” based on the associations among variables. Missing data was recoded as -99 in SPSS and handled in MPlus using the FIML default.

Data screening.

Kline (2005) discusses the fact that before a raw data file is created for use in structural equation modeling (SEM: an advanced statistical modeling technique utilizing factor analysis and

regression analysis), the original data should be screened for problems dealing with multivariate normality and univariate normality both of which will be discussed next.

Multivariate Normality Assumptions.

Multivariate normality assumptions part of the underlying procedures for SEM “consist of (1) all the univariate distributions are normal, (2) the joint distribution of any pair of the variables is bivariate normal, and (3) all bivariate scatterplots are linear and homoscedastic” (Kline, 2005, p. 48-49). Per Kline (2005) detection of multivariate normality may be somewhat difficult to assess, however, Kline (2005) reiterates the fact that multivariate normality may be identified through the inspection of the univariate distributions. Univariate distributions were examined as outlined in the next section.

Univariate Normality.

Univariate normality may be determined in the skew and kurtosis of the distribution (Kline, 2005). “Skew implies that the shape of a unimodal distribution is asymmetrical about its means, a positive skew indicates that most scores are below the mean, and a negative skew indicates the opposite” (Kline, 2005, p. 49). Kurtosis indicates the peaks and tails of the distribution. A positive kurtosis indicates heavier peaks and tails per Kline (2005) whereas, a negative kurtosis is represented by lower peaks and thin, long tails. Additionally, the sign of the standardized skew index indicates the direction of the skew and a value equal to 3.0 indicates a normal distribution. A value over 3.0 indicates positive kurtosis, and less than 3.0 indicates a negative kurtosis (Kline, 2005). An analysis was conducted based on skewness and kurtosis and found that no significant skew and kurtosis was detected. The skew index for 61 items ranged from -1.5 to 0.575. The kurtosis index for the same 61 items ranged from -0.331 and 3.311. Next, I utilized Shapiro-Wilk test of normality and found that again, data was not normally

distributed. However, since the data set is larger than necessary to provide a good representation of the sample population, I am adhering to the assumption that the data is normally distributed.

Outliers.

Outliers are cases with scores that are very different and sometimes an extreme of the rest of the cases in a study. These outliers are considered a violation of the normality assumption and can alter the results in the data analysis of your research. A univariate outlier is one that has an extreme score on a single variable (usually three standard deviations from the rest of the scores) and can be detected by examining the frequency distribution of the z scores. A multivariate outlier is one that has extreme scores on two or more variables. These outliers may be detected utilizing box plots, trimmed means, or another method suggested by Kline (2005) consist of using Mahalanobis distance (D) statistic “which indicates the distance in standard deviation units between a set of scores (vector) for an individual case and the sample means for all variables (centroids)” (p. 51).

First, the box plots of 61 variables was utilized (see appendix 6) were examined with the intention of detecting any univariate outliers from within the data. Fifty-eight items were found to consist of outliers (appendix 7, univariate outliers). Five variables (Int_Ext1, DMP_PSY1, DMP_PSY4, DMP_CON_M2, and ORG_COM2) were found to have 7 cases of outliers. Seventeen variables were found to have 6 cases of outliers, and fourteen variables had 5 cases of outliers. Four cases of outliers were found in 16 variables, three outlier cases were found in 1 variable, two outlier cases were found in 3 variables, and one outlier case was found in 2 variables. The maximum percentage of outlier cases within a variable was 1.09% (7/643) and indicated that a small number of outliers existed within the study sample.

Mahalanobis distance (D) statistic was utilized to check for multivariate outliers (see Appendix 8). “Each case was evaluated using the chi-square distribution with a stringent alpha level of .001, cases that reach this significant threshold can be considered multivariate outliers” (Meyers, Gamst, Guarino, 2013, pg. 63). Eighteen multivariate outliers were observed utilizing a p-value of .001 ($p < .001$, Meyers, Gamst, Guarino, 2013). The percentage of multivariate outliers was found to be 2.79% (18/643) and implies that the data consists of a small number of multivariate outliers. Therefore, I utilized robust Maximum Likelihood estimation when running my hypothesized model in MPlus.

Linearity.

Multivariate normality includes the assumption that the relationships among the variables are linear. Meaning that an increase in X creates an increase in Y. According to Kline (2005) an inspection of the bivariate scatterplots can help identify any nonlinear relationships. Kim (2010) argues that this may be a difficult way in assessing linearity and suggests the use of Tabachnic and Fidell (1996) directives, which suggest a random spot check on a few plots. A random spot check was conducted on ten variables scatter plots and resulted in the linearity assumption being met. I also conducted a bivariate correlation analysis, significant correlations indicate linearity. Therefore, the linearity assumption has been met in this study sample.

Multicollinearity and Singularity.

Multicollinearity and singularity occurs when inter-correlations among some variables are so high that it makes it difficult to conduct mathematical operations (Kline, 2005).

Multicollinearity consists of inter-correlations that are extremely highly correlated (greater than .90) and singularity occurs when what appears to be two separate variables are in fact measuring the same thing or are redundant. According to Kline (2005) variables should be either (1)

eliminated or (2) combined if redundant, into one composite variable. Based on an inspection of the correlation matrix, there were no correlations greater than .90 and none that were 1.0 indicating that there was neither multicollinearity nor singularity found in the study sample. To double check the data, I ran a collinearity diagnosis in SPSS utilizing regression. I enforced the variance inflation factor (VIF) threshold of above 3. Based on my analysis of the study sample, there may be some multicollinearity in the study sample, however, it is not enough to be overly concerned about (Martz, 2013).

Data Analysis

The data analysis for this research study consists of descriptive statistics, principal component analysis, and reliability analysis, Rasch rating scale for validity analysis, correlation analysis, and structural equation modeling procedures.

Descriptive Statistics.

Descriptive statistics include the number of participants, the measures of central tendencies (mean) for demographic data collected from participants, and the range scores, means and standard deviations for all the items in the survey instrumentation utilized in this study.

Structural Equation Modeling.

I have selected to use a structural equation model (SEM) for this research because, SEM offers a comprehensive approach to answering the proposed research questions and consists of advanced techniques that can handle multiple independent variables and multiple dependent variables in a research study. One requirement for SEM is to have a model *a priori*, a model was developed from the review of literature and SEM allowed for the comparison of the model implied variance/co-variance matrix to the data variance/co-variance matrix. Furthermore, the inclusion of latent variables (unobserved) in the path model, then we are representing a structural

equation model. SEM was utilized to answer the research question concerning the relationship between antecedent factors and employee engagement, standard SEM techniques allows for an analysis of a model's predictive paths that easily provides evidence for research question 1. Next, SEM techniques can easily provide evidence for the second research question, which concerns the moderating effects of the decision making process on the relationship between antecedent discourses and employee engagement. More importantly, because SEM is a confirmatory technique, SEM was selected for the purpose of validating the holistic model of the Employee Engagement Process. SEM allowed for the comparison of the implied covariance matrix of the proposed model with the data-based covariance matrix from data collected for the purpose of determining consistency between both matrices. There by generating a plausible explanation for relationships specified *a priori* in the proposed theoretical model. Table 3.7 has been included that lists specific tests that were used. This entire process was completed utilizing Mplus programing. Results from the above mentioned tests were reported in chapter four of this dissertation. Although there are multiples of alternative statistical tests that may be used to conduct research (i.e., ANOVA, MANOVA), I have found that Structural equation modeling is a good fit for this research because "it is a comprehensive statistical model that can be used to evaluate the relations among variables that are free of measurement error" (Hoyle, 1995, p. 3).

Procedural Fidelity

This study provided for an extensive review of literature that has established the need for a unifying holistic model of the employee engagement process. Additionally, this study allows for a random sample selected that will allow for the generalizability of findings from this study. This study also allowed for a large sample with equal numbers of males and females from within the college district. Furthermore, about procedural fidelity, "measurement and analysis of

quantitative data is standardized and numerical and gives greater objectivity to results” (Lunenburg & Irby, 2008, p. 203). Data was analyzed utilizing MPlus, Win-steps, and SPSS quantitative software for greater objectivity and provided statistics utilized in this study to make inferences from the findings (Lunenburg & Irby, 2008). Statistical tests utilizing structural equation modeling procedures were utilized to provide for value-free and objective results (Lunenburg & Irby, 2008).

Design Limitations

Several design limitations have been identified in this study that are beyond the control of the researcher (Simon, 2011). The first is that there is an inability to control the environment where the data was collected especially since data was collected from multiple locations. It is difficult to determine the internal and external environments at each location. The second limitation may come from the use of quantitative research methods, since respondents have limited options of responses selected by the researcher, there may be areas that were not measured within this study. Data analysis may serve to be a design limitation, since statistical procedures are complex in nature, there is always room for human error. More importantly, quantitative research methods are inflexible once data has been collected, as there is no room for modification once the study begins.

Summary

This chapter provided an overview of the purpose of this study and presented the research questions that guided this study. Participants for this study were selected utilizing convenience sampling procedures, and a description of the respondents was provided. The target population was discussed, which consisted of 2303 members, however, according to Krejcie and Morgan (1970) a random sample of N=327 was initiated. The measurement framework for the study was

discussed and key variables were identified in this study. Additionally, the development and refinement of the survey instrument, validity, threats to validity, and reliability were discussed. Finally, data collection measures, and data analysis procedures were discussed. Importantly, included in this chapter was procedural fidelity, which allows for generalizability of findings. The results of the data analysis are discussed in the subsequent chapter.

Table 3.7 Structural Equation Modeling procedures derived from Kline (2005) and Hoyle (1995).

	Purpose	Test
Model Specification	Specify the hypothesized model that expresses relationships among variables. Within the model specification, model identification is important. This is when a researcher is looking for a unique solution to the model. There are rules when considering model identification that should be considered.	<p>a. t-rule, this is a necessary condition for identification. $t \leq (p) / (p+1) / 2$ $t = \text{degrees of freedom}$ This rule states that the degrees of freedom should be greater than or equal to zero.</p> <p>b. Null B rule, this is a sufficient condition for identification. If there are no direct paths among endogenous (or dependent) variables, the path model is identified.</p> <p>c. Recursive rule, this is a sufficient condition for identification. If (1) there are no loops and no reciprocal causes among endogenous variables and, (2) there are no correlated errors, then the model is identified. A model that fulfills (1) and (2) is recursive.</p>
Estimation	Estimation consists of obtaining parameter estimates for all parameters that are not fixed in value.	<p>a. Following model specification, we estimate the model parameters using the available data. The estimates are chosen such that the observed covariance matrix is as close as possible to its counterpart of the model implied covariance matrix. This is done by Maximum Likelihood Estimation, under the assumption of multivariate normality for the measured variables.</p> <p>a. Chi-square with degrees of freedom, the goal is to obtain a small chi-square value which indicates small discrepancy between data and the proposed model.</p> <p>i. Under identified model: an under identified model consists of a model with a negative degree of freedom, this model cannot be run.</p> <p>ii. Over identified model: happens when the t-rule is met, this means that the degrees of freedom are greater than zero and is good.</p> <p>iii. Saturated model (Identified Model); is a result of the degrees of freedom equaling zero. This considers all possible relationships.</p> <p>b. Formal fit evaluation, this is conducted by modeling the relations among observed variables to determine if the model reproduces the relationships among the measured variables found in our data. $H_0: \Sigma = \Sigma_0$ (perfect fit) $H_1: \Sigma \neq \Sigma_0$ (lack of perfect fit)</p>
Fit evaluation	Used to decide if the model provides an adequate representation of the data. This process helps to answer the question, how well does the model reproduce the relations found in the data? Kaplan (2000), Fit statistics utilizing “global fit indices” will be reported to decide if the model fits. Global fit indices will include the following.	<p>The fit of the model is evaluated by how well the model is able to reproduce the covariance structure in the data. Once all parameters are estimated, the model can generate a fitted model implied covariance matrix. The closeness of this fitted matrix to the sample covariance matrix determines fit (compare fitted matrix to sample covariance matrix to determine fit).</p> <p>c. Chi-square test of fit, is used to test the null hypothesis. If the main assumptions that multivariate normality holds for the variables, we can test the null. If the chi-square exceeds its critical value at the chosen alpha level, we reject the null and conclude that the model does not fit. The chi-square test of fit should always be reported. Multiple fit indices are usually reported in addition to the chi-square test of fit.</p> <p>d. RMSEA – (Root mean square error of approximation) is an estimate of the average size of misfit at the population level with adjustment for the degree of freedom. RMSEA $\leq .05$ indicates a good fit Values between .05 and .08 indicate fair fit. High degrees of freedom will result in lower RMSEA. $H_0: \text{RMSEA} \leq .05$ (test of close fit) $H_1: \text{RMSEA} > .05$</p> <p>e. RMSR – (Root mean square residual) The RMSR gives the average absolute size of the discrepancy between the sample and fitted covariance matrix. Standardized version of (SRMR) the index is preferred, which puts the index on a correlation matrix. Values of SRMR below .05 are considered good. Mplus reports the SRMR standardized version.</p> <p>f. CFI – (Comparative fit index) This index ranges between 0 and 1, with values near 1 indicating better fit. The values of the CFI that are above .95 are considered to be indicative of good fit.</p> <p>g. Local fit indices: sample residuals or (EPC) Lagrange multipliers – expected parameter change. This takes the differences element by element, then takes the average.</p>
Re-specification	This is an optional step, when the fit of the original proposed model is poor or does not fit the data, a model re-specification guided by theoretical considerations is used to explore possible relations between variables not looked at before.	<p>a. Modification Index (MI): Mplus provides the MI report that exhibits the amount by which the chi-square value will drop if a parameter constraint was dropped in the model. High values for the modification index tell you that the parameter constraint is creating a significant lack of fit and can give some guidelines on areas of the model that are poorly fitted.</p> <p>i. MI only reflects the impact of relaxation of the single constraint, relaxation of multiple constraints may lead to different results.</p> <p>ii. MI is sensitive to large samples.</p> <p>b. Expected Parameter change (EPC) estimates the change to be expected in a parameter estimate when the constraint on the parameter is relaxed. EPC reflects impact of realization of the single constraint. Relaxation of multiple constraints may lead to different results.</p> <p>c. The researcher should follow the general rules for re-specification.</p> <p>i. Specify the number of latent variables, if any, to be modeled.</p> <p>ii. Specify relations between observed and latent variables – measurement models</p> <p>iii. Specify relations among the latent variables or specify, among the observed variables if no latent variables – path model</p> <p>iv. Consider constraints needed to identify the model.</p>

CHAPTER IV

RESULTS AND FINDINGS

In this chapter, study results and findings are presented. The purpose of this study was to examine the framework of the Employee Engagement Process model by first examining the relationship between employee engagement antecedents and employee engagement and then look at the moderating effects that the decision making process may have on their relationship. The following research questions guided this research, 1.) What is the relationship between antecedent factors and employee engagement? And 2.) How does the employee decision making process moderate the relationship between the antecedent factors and employee engagement?

This chapter will unfold as follows: 1) descriptive statistics, 2) confirmatory factor analysis, 3) item-responder ratio, 4) estimates of reliability and validity, 5) correlation analysis, and 6) structural equation modeling are reported.

Descriptive Statistics

SPSS 24 was utilized to compute descriptive statistics for the 62 items and are included in Table 4.1. As illustrated in the Table, this study sample included 643 cases. The means (M) and standard deviation (σ) for each dimension are as follows: *internal/external discourse* ($M = 4.09$, $\sigma = .59$), *leader/manager discourse* ($M = 3.73$, $\sigma = 1.06$), *job characteristics discourse* ($M = 3.88$, $\sigma = .80$), *lower level hygiene factor discourse* ($M = 3.6$, $\sigma = .95$), *higher order factors discourse* ($M = 4.02$, $\sigma = .72$), *decision making process – individual psychological experiences* ($M = 4.19$, $\sigma = .58$), *decision making process – social work contexts* ($M = 2.61$, $\sigma = .95$), *decision making process – contextual: meaningfulness* ($M = 4.35$, $\sigma = .65$), *decision making process – contextual: safety* ($M = 3.88$, $\sigma = .90$), *decision making process – contextual: psychological availability* ($M = 4.34$, $\sigma = .58$), *employee engagement – cognitive engagement* ($M = 4.43$, $\sigma = .58$), *employee engagement*

– emotional engagement ($M=4.23, \sigma=.71$), and employee engagement – behavioral engagement ($M=4.38, \sigma=.64$).

Table 4.1 Descriptive Statistics

Items	Mean	S.D.	N
Int_Ext1 I have a good understanding of the emotions of people	4.01	0.766	642
Int_Ext2 I do not have to worry about how people perceive me at work	4.41	0.782	643
Int_Ext3 I am enthusiastic about my work	4.08	0.963	642
Int_Ext4 My colleagues make an effort to build rapport with me	3.75	0.992	641
Int_Ext5 I am optimistic about my future	4.24	0.839	643
LM_1 I receive enough feedback on my job performance to know how well I am doing	3.54	1.064	641
LM_2 My immediate supervisor sets realistic expectations for me	3.93	1.175	642
LM_3 My immediate supervisor's expectations are clear to me	3.72	1.174	642
LM_4 My immediate supervisor encourages me to do my best	3.74	1.149	643
LM_5 My immediate supervisor has aligned my goals with the vision and mission of the organization	3.69	1.207	643
LM_6 My immediate supervisor is committed to protecting my interests	3.68	1.257	640
LM_7 My immediate supervisor makes an effort to build rapport with me	3.58	1.235	640
JC_1 To what extent does the job require you to do many different things at work, using a variety of your skills and talents	3.96	0.984	642
JC_2 My job "fits" how I see myself	4.11	0.981	642
JC_3 My job challenges me	3.72	1.131	642
JC_4 My job allows me to link my individual goals to the organizational goals	3.61	1.117	643
JC_5 My organization provides me the resources I need to meet the demands of my job	4.02	1.005	641
LLH_1 I'm not afraid to be myself at work	4.08	1.031	643
LLH_2 My organization really cares about my well-being	3.48	1.23	642
LLH_3 My organization is very supportive	3.26	1.257	642
LLH_4 Decisions, policies, and procedures are fairly and consistently applied to all employees	3.52	1.202	642
LLH_5 I feel emotionally healthy at the end of my workday	3.73	1.08	643
HOF_1 This organization ensures that my strengths are aligned with my job tasks	3.49	1.053	640
HOF_2 My job activities are significant to me	4.38	0.804	638
HOF_3 I think this organization does meaningful work	4.23	0.806	641
DMP_PSY1 I am confident I get the success I deserve in life	4.02	0.811	643
DMP_PSY2 Overall, I am satisfied with myself	4.26	0.699	642
DMP_PSY3 I have no doubts about my competence	4.3	0.769	639
DMP_PSY4 I determine what will happen in my life	4.19	0.81	639
DMP_PSY5 I feel in control of my success in my career	4.03	0.89	643

Table 4.1 Descriptive Statistics - Continued

DMP_PSY6 I am capable of coping with most of my problems	4.36	0.657	642
DMP_SWC1 Top management in my organization commit resources to maintain and improve the quality of our work	2.72	1.092	642
DMP_SWC2 Top management in my organization have a plan to improve the quality of our work and service	2.74	1.125	642
DMP_SWC3 Managers in my organization recognize and appreciate high quality work and service	2.62	1.152	642
DMP_SWC4 People in my work department are adequately trained to handle the introduction of new products and services	2.58	1.075	642
DMP_SWC5 I understand the management vision of our organization	2.4	1.117	643
DMP_CON_M1 I believe that I am working on projects that matter	4.24	0.852	643
DMP_CON_M2 I understand how my work serves the organizations purpose	4.34	0.764	643
DMP_CON_M3 I think the organization does meaningful work	4.36	0.791	643
DMP_CON_M4 I think my work creates positive results	4.46	0.67	642
DMP_CON_S1 I am not afraid to be myself at work	4.08	0.925	643
DMP_CON_S2 I am not afraid to express my opinions at work	3.83	1.031	642
DMP_CON_S3 I do not have to worry about a threatening environment at work	3.75	1.235	643
DMP_CON_PA1 I am confident in my ability to handle competing demands for work	4.32	0.674	642
DMP_CON_PA2 I am confident in my ability to deal with problems that come up at work	4.36	0.657	643
DMP_CON_PA3 I am confident in my ability to think clearly at work	4.43	0.626	643
DMP_CON_PA4 I am confident in my ability to display the appropriate emotions at work	4.28	0.723	643
EE_COG1 I am really focused on my job when I am working	4.44	0.628	641
EE_COG2 I concentrate on my job when I am at work	4.43	0.654	641
EE_COG3 When working, I think a lot about how I can give my best	4.34	0.742	639
EE_COG4 At work, I am focused on my job	4.43	0.632	640
EE_COG5 When I am at work, I give my job a lot of attention	4.51	0.603	638
EE_EM1 Working at my current organization has a great deal of personal meaning	4.24	0.817	642
EE_EM2 I feel a strong sense of belonging to my organization	3.86	1.071	642
EE_EM3 I am proud to tell others that I work for my organization	4.38	0.793	640
EE_EM4 I believe in the mission and purpose of my organization	4.5	0.678	641
EE_EM5 I care about the future of my organization	4.22	0.888	642
EE_BE1 I do more than is expected of me	4.4	0.701	643
EE_BE2 I really push myself to work beyond what is expected of me	4.27	0.789	643
EE_BE3 I am willing to put in extra effort without being asked	4.42	0.706	643
EE_BE4 I often go above what is expected of me to help my team be successful	4.51	0.652	643
EE_BE5 I work harder than expected to help my company be successful	4.31	0.743	643

Results of CFA

Kaiser-Meyer-Olkin Measure of Sampling adequacy and Bartlett's test of Sphericity were examined as a pre-requisite to factor analysis. Kaiser (1974) recommended that a KMO (<.90 to 1.00) can be interpreted as marvelous and that a factor analysis might be useful in my data analysis. KMO measures how suited the data is for factor analysis. The test statistic (.954) is a measure of the proportion of variance among variables that might be common variance. Bartlett's Test of Sphericity compares the observed correlation matrix to the identity matrix, and relates to the significance of the study and suitability of the responses. A significant p-value (p-value = <.05 Significant) indicates that the study variables are unrelated and suitable for structure detection (ibm.com) and that a factor analysis may be useful for data analysis.

Table 4.2 KMO and Bartlett's Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.954
Bartlett's Test of Sphericity	Approx. Chi-Square	30231.061
	df	2016
	Sig.	.000

CFA Fit Indices for Antecedent Discourse Scale.

Confirmatory factor analysis (CFA) was utilized to examine the antecedent discourse scale, the decision-making process scale, and the employee engagement scale. CFA utilized with Rasch measurement model is used to demonstrate internal relationships among measurement items (structural fidelity) or subsets of items (scales) (Messick, 1995). Chi square test of model fit is reported for each scale; however, chi square may be sensitive to sample size (Hoyle, 1995) and since structural equation modeling requires a large data set or sample size, fit indices (fit

indices by design avoid problems of sample size, distribution, and misspecification that may be associated with chi-square), a pattern matrix – factor loadings, and a model diagram are also included for each scale in this section.

Antecedent Discourse Scale.

A confirmatory factor analysis was run for the antecedent discourse scale which included: *Internal/External factors discourse, Leader/Manager factors discourse, Job characteristics discourse, Lower Level Hygiene Factor discourse, and Higher Order factors discourse.* Model fit indices are reported in Table 4.3. Fit indices are a summary statistic that generally quantify the extent to which the variation and covariation in the data are accounted for in the model (Hu & Bentler, 1998). Chi-Square test of model fit ($cmin/df = 3.78$) indicates that the model is good ($<.05$; Hu & Bentler, 1999). This scale’s Comparative Fit Index (CFI) meets the traditional threshold and indicates model fit. I would like to note that Hu & Bentler (1999) make a case that model fit is indicated by a CFI of .90 or greater, they also maintain that a CIF larger than .90 represents traditional fit or acceptable fit. However, it may be open to type I or type II error and perhaps even factor loading errors, therefore, all fit indices have been taken into consideration. Root Mean Square error of approximation (RMSEA) indicates moderate model fit, and the Standardized Root Mean Square Residual is $<.09$ (model: 0.067) confirms good model fit for this scale.

Table 4.3 Fit Indices for Confirmatory Factor Analysis- Antecedent Discourse Scale

Factor Model	χ^2	df	CFI	RMSEA	SRMR
Model	1187.971	314	0.902	0.066	0.067

Note: χ^2 = Chi-square test; df= degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual.

Factor Loadings for the scale are included in Table 4.4, all items resulted in p-values <.05 which is the recommended cut off and indicative of statistical significance. Standardized factor loadings loaded well into the theorized components for the antecedent discourse scales provided for in this study. Stevens (1999) suggests the use of a factor loading threshold of $\leq .4$, irrespective of sample size for interpretive purposes. Two items were discovered to have a factor loading less than .4; Int_Ext6 (0.319), and HOF_4 (0.219). These two items will be examined further utilizing Cronbach's Alpha – internal consistency reliability to determine if these items should be removed from this study.

Table 4.4 Pattern Matrix – Factor Loadings – Antecedent Discourse Scale

Factors	Items	Factor Loadings
Internal / External Discourse	Int_Ext1 I have a good understanding of the emotions of people	0.425
	Int_Ext2 I do not have to worry about how people perceive me at work	0.486
	Int_Ext3 I am enthusiastic about my work	0.710
	Int_Ext4 My colleagues make an effort to build rapport with me	0.584
	Int_Ext5 I am optimistic about my future	0.680
	Int_Ext6 I am confident in who I am as a person	0.319
Leader / Manager Discourse	LM_1 I receive enough feedback on my job performance to know how well I am doing	0.793
	LM_2 My immediate supervisor sets realistic expectations for me	0.885
	LM_3 My immediate supervisor's expectations are clear to me	0.918
	LM_4 My immediate supervisor encourages me to do my best	0.902
	LM_5 My immediate supervisor has aligned my goals with the vision and mission of the organization	0.881
	LM_6 My immediate supervisor is committed to protecting my interests	0.885
	LM_7 My immediate supervisor makes an effort to build rapport with me	0.876
Job Characteristics Discourse	JC_1 To what extent does the job require you to do many different things at work, using a variety of your skills and talents	0.798
	JC_2 My job "fits" how I see myself	0.598
	JC_3 My job challenges me	0.832
	JC_4 My job allows me to link my individual goals to the organizational goals	0.593
	JC_5 My organization provides me the resources I need to meet the demands of my job	0.716
Lower Level Hygiene Factors Discourse	LLH_1 I'm not afraid to be myself at work	0.412
	LLH_2 My organization really cares about my well-being	0.935
	LLH_3 My organization is very supportive	0.798
	LLH_4 Decisions, policies, and procedures are fairly and consistently applied to all employees	0.948
	LLH_5 I feel emotionally healthy at the end of my workday	0.687
Higher Order Factors Discourse	HOF_1 This organization ensures that my strengths are aligned with my job tasks	0.807
	HOF_2 My job activities are significant to me	0.589
	HOF_3 I think this organization does meaningful work	0.625
	HOF_4 A reward or a token of appreciation (e.g lunch) is very important to me	0.219

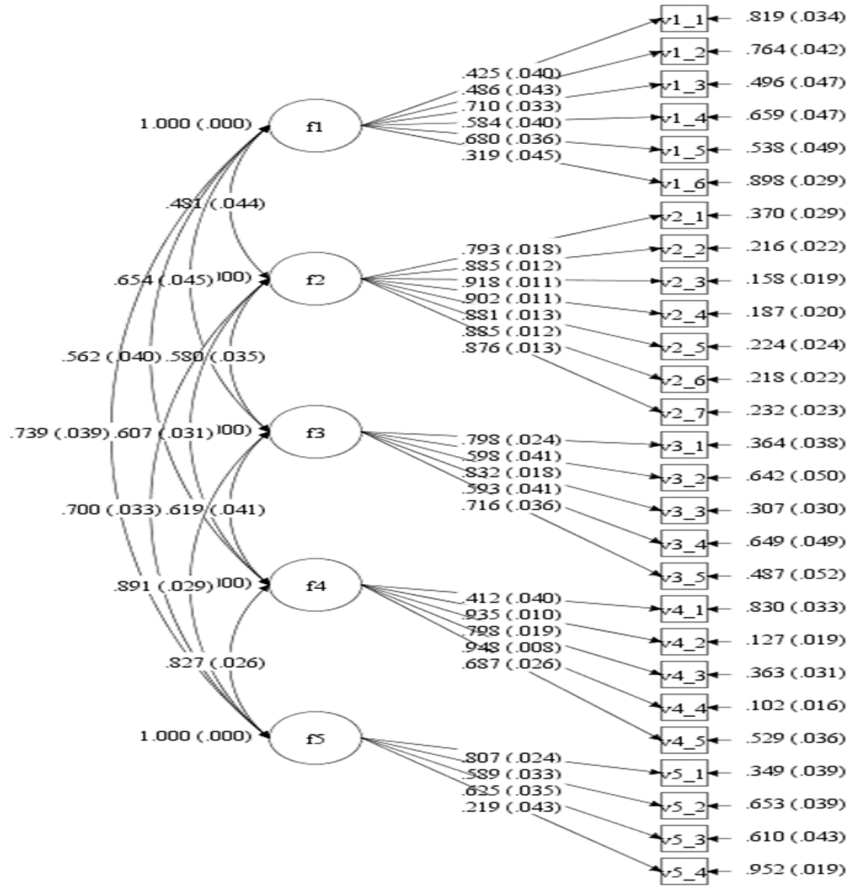
A correlation matrix is included for the Antecedent Discourse Scale. All variables were significant at a .05 level (p value $<.05$). The threshold adhered to for this study include $-1/+1$ where, -1 represents a strong negative correlation and $+1$ indicates a strong positive correlation. Only one correlation (Higher order factor discourse and Job characteristic discourse) was near the .9 threshold implying that high levels in one variable are associated with high levels in the other variable. A diagram (see Figure 4.1) of the Antecedent Discourse Scale is presented as a visual representation of factor loadings and correlations.

Table 4.5 Correlation Matrix – Antecedent Discourse Scale

Factors	1	2	3	4	5
Internal / External Discourse	1.000				
Leader / Manager Discourse	0.481*	1.000			
Job Characteristics Discourse	0.654*	0.580*	1.000		
Lower Level Hygiene Factors Discourse	0.562*	0.607*	0.619*	1.000	
Higher Order Factors Discourse	0.739*	0.700*	0.891*	0.827*	1.000

* $p <.05$ (two-tailed)

Figure 4.1 Antecedent Discourse Scale Model



Employee Engagement Scale.

Confirmatory factor analysis (CFA) was included for the Employee Engagement Scale which included: *cognitive engagement, emotional engagement, and behavioral engagement.* Model fit indices are reported in Table 4.6. This scale’s Chi-square (cmin/df = 3.24) indicates a good model fit. CFI meets the threshold of >.95, indicating good model fit and the RMSEA indicates that model fit is good to moderate per Hu and Bentler (1999). SRMR for this study (SRMR = 0.059) falls below the threshold of <.09 confirming good model fit.

Table 4.6 Fit Indices for Confirmatory Factor Analysis- Employee Engagement Scale

Factor Model	χ^2	df	CFI	RMSEA	SRMR
Model	282.063	87	0.953	0.059	0.052

Note: χ^2 = Chi-square test; df= degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual.

Factor loadings for the employee engagement scale are included in Table 4.7, all items resulted in significant p-values of $<.05$, the recommended cut off and is indicative of statistical significance. Standardized factor loadings loaded well within their respective factors for the Employee Engagement scale. A threshold of $\leq .4$, irrespective of sample size proposed by Stevens (1999) was utilized for interpretative purposes. There were no factor loadings that fell under the threshold.

A correlation matrix is including for the Employee Engagement Scale (see Table 4.8). All variables were statistically significant at a $p < .05$ cutoff. There were no correlations that fell near or above the .9 threshold employed in this study. A diagram for the Employee Engagement Scale is provided as a visual representation of factor loadings and correlations (see Figure 4.2).

Table 4.7 Pattern Matrix – Factor Loadings: Employee Engagement Scale

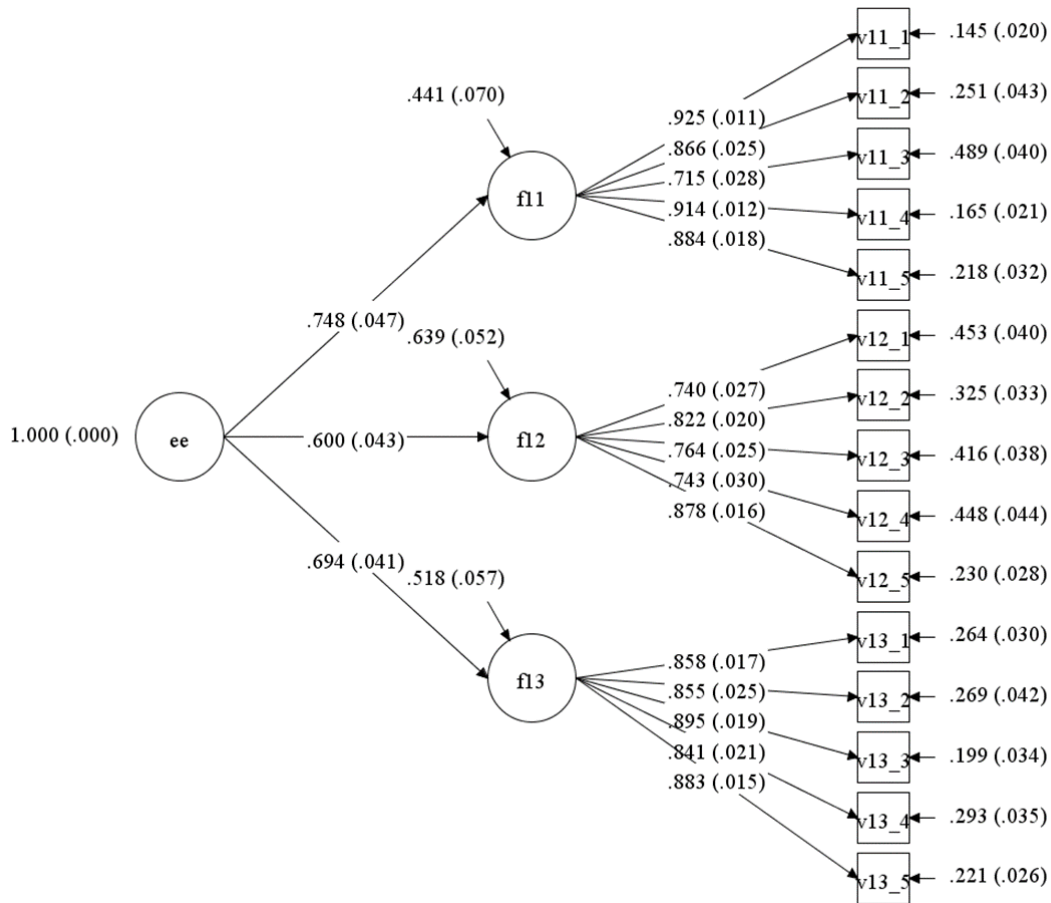
Factors	Items	Factor Loadings
Employee Engagement: Cognitive Engagement	EE_COG1 I am really focused on my job when I am working	0.925
	EE_COG2 I concentrate on my job when I am at work	0.866
	EE_COG3 When working, I think a lot about how I can give my best	0.715
	EE_COG4 At work, I am focused on my job	0.914
	EE_COG5 When I am at work, I give my job a lot of attention	0.884
Employee Engagement: Emotional Engagement	EE_EM1 Working at my current organization has a great deal of personal meaning	0.74
	EE_EM2 I feel a strong sense of belonging to my organization	0.822
	EE_EM3 I am proud to tell others that I work for my organization	0.764
	EE_EM4 I believe in the mission and purpose of my organization	0.743
	EE_EM5 I care about the future of my organization	0.878
Employee Engagement: Behavioral Engagement	EE_BE1 I do more than is expected of me	0.858
	EE_BE2 I really push myself to work beyond what is expected of me	0.855
	EE_BE3 I am willing to put in extra effort without being asked	0.895
	EE_BE4 I often go above what is expected of me to help my team be successful	0.841
	EE_BE5 I work harder than expected to help my company be successful	0.883

Table 4.8 Correlation Matrix – Employee Engagement Scale

Factor	1	2	3	EE
Cognitive Engagement	1.000			
Emotional Engagement	0.449*	1.000		
Behavioral Engagement	0.519*	0.417*	1.000	
Employee Engagement	0.748*	0.600*	0.694*	1.000

* $p < .05$ (two-tailed)

Figure 4.2 Employee Engagement Scale Model



Decision Making Process Scale.

CFA was run for the decision-making process scale utilized for this study which included: *Individual psychological experiences, social work contexts, and contextual – meaningfulness, contextual – safety, and contextual – psychological availability.* Model fit indices were reported in Table 4.9. Chi-square test of model fit (cmin/df = 3.61) indicates a permissible model fit (Hu & Bentler, 1999). CFI is less than >.95 threshold and indicates model fit. RMSEA (0.064)

indicates good to moderate model fit, and SRMR (.075) is less than the .09 cutoff, again implying good model fit.

Table 4.9 Fit Indices for Confirmatory Factor Analysis- Decision Making Process Scale

Factor Model	χ^2	df	CFI	RMSEA	SRMR
Model	738.332	204	0.908	0.064	0.075

Note: χ^2 = Chi-square test; df= degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual.

Factor loadings for the model are included in Table 4.10, all items resulted in p-values <.05, the recommended cut off and indicate that they were all statistically significant.

Standardized factor loadings loaded well into the respective factors provided for in this study. A threshold of $\leq .4$, suggested by Stevens (1999) was enforced for this study. There were no factor loadings at or below the cutoff.

Table 4.10 Pattern Matrix – Factor Loadings: Decision Making Process Scale

Factor	Item	Factor Loadings
Decision Making Process - Individual Psychological experiences	DMP_PSY1 I am confident I get the success I deserve in life	0.732
	DMP_PSY2 Overall, I am satisfied with myself	0.746
	DMP_PSY3 I have no doubts about my competence	0.538
	DMP_PSY4 I determine what will happen in my life	0.705
	DMP_PSY5 I feel in control of my success in my career	0.770
	DMP_PSY6 I am capable of coping with most of my problems	0.678
Decision Making Process - Social Work Contexts	DMP_SWC1 Top management in my organization commit resources to maintain and improve the quality of our work	0.923
	DMP_SWC2 Top management in my organization have a plan to improve the quality of our work and service	0.929
	DMP_SWC3 Managers in my organization recognize and appreciate high quality work and service	0.821
	DMP_SWC4 People in my work department are adequately trained to handle the introduction of new products and services	0.661
	DMP_SWC5 I understand the management vision of our organization	0.680
Decision Making Process: Contextual - Meaningfulness	DMP_CON_M1 I believe that I am working on projects that matter	0.834
	DMP_CON_M2 I understand how my work serves the organizations purpose	0.840
	DMP_CON_M3 I think the organization does meaningful work	0.765
	DMP_CON_M4 I think my work creates positive results	0.695
Decision Making Process: Contextual - Safety	DMP_CON_S1 I am not afraid to be myself at work	0.780
	DMP_CON_S2 I am not afraid to express my opinions at work	0.877
	DMP_CON_S3 I do not have to worry about a threatening environment at work	0.653
Decision Making Process: Contextual- Psychological availability	DMP_CON_PA1 I am confident in my ability to handle competing demands for work	0.856
	DMP_CON_PA2 I am confident in my ability to deal with problems that come up at work	0.894
	DMP_CON_PA3 I am confident in my ability to think clearly at work	0.824
	DMP_CON_PA4 I am confident in my ability to display the appropriate emotions at work	0.681

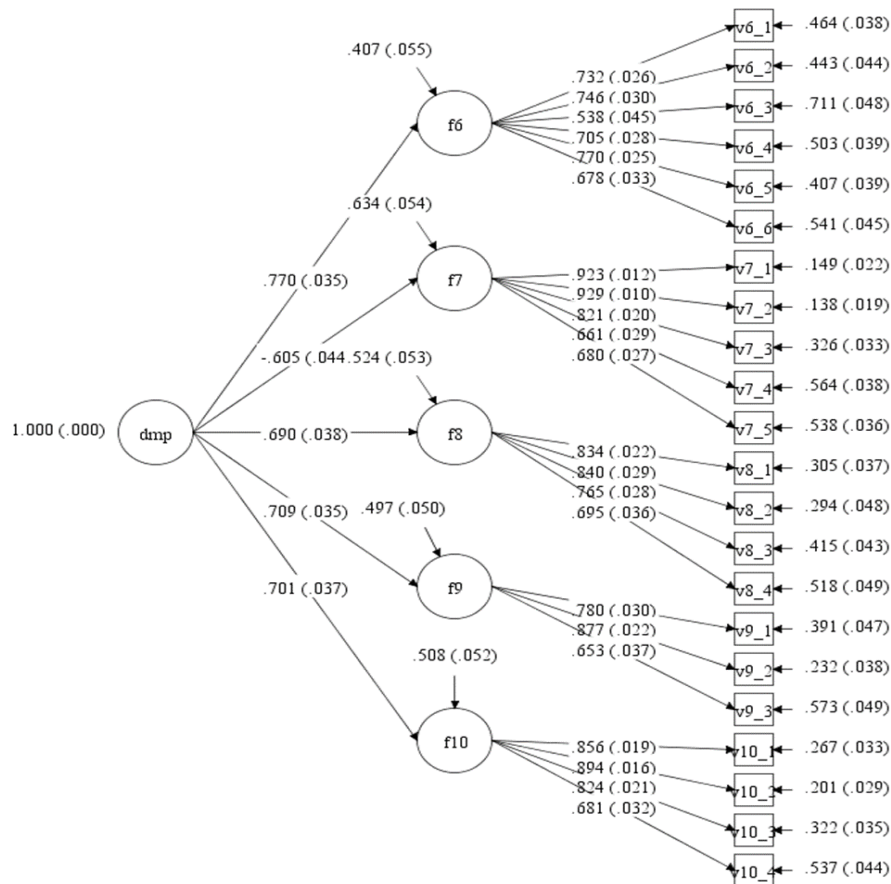
A correlation matrix for the decision making process scale is included in Table 4.11, all items were found to be significant at a .05 level (p value $<.05$). No items were found to be near or above the .9 cutoff implemented in this study, however, social work contexts loaded negatively against all other factors: individual psychological experiences, contextual – meaningfulness, contextual – safety, contextual – psychological availability, and the higher order factor of decision making process. A diagram of the decision making process scale and its loadings is provided in Figure 4.3.

Table 4.11 Correlation Matrix – Decision Making Process Scale

Factors	1	2	3	4	5	DMP
Decision Making Process - Individual Psychological experiences	1.000					
Decision Making Process - Social Work Contexts	-0.466*	1.000				
Decision Making Process: Contextual - Meaningfulness	0.531*	-0.418*	1.000			
Decision Making Process: Contextual - Safety	0.546*	-0.429*	0.490*	1.000		
Decision Making Process: Contextual- Psychological availability	0.540*	-0.424*	0.484*	0.498*	1.000	
Decision Making Process	0.770*	-0.605*	0.690*	0.709*	0.701*	1.000

* $p < .05$ (two-tailed)

Figure 4.3 Decision Making Process Scale Model



Estimates of Reliability

Estimates of reliability were conducted for the obtained thirteen factors used in the hypothesized model for this study. Reliability estimates were computed for *internal/external discourse, leader/manager discourse, job characteristics discourse, lower level hygiene factor discourse, higher order factors discourse, decision making process – individual psychological experiences, decision making process – social work contexts, decision making process – contextual: meaningfulness, decision making process – contextual: safety, decision making process – contextual: psychological availability, employee engagement – cognitive engagement, employee engagement – emotional engagement, and employee engagement – behavioral engagement* utilizing Cronbach's alpha technique. The results of the analysis are provided in the following Table (see Table 4.12). As indicated from the Table, all thirteen factors were found to be reliable. Kline (2005) argue that an alpha coefficient $>.70$ is an indication of adequate reliability for research purposes. Two items were found to be close to the $>.70$ cutoff, however, due to the low numbers in each factor (internal/external discourse 5 items, and higher order factors discourse 3 items), they were not dropped from the analysis. Kline (2005) contends that when items are fewer than ten, Cronbach's alpha values can be smaller.

Table 4.12 Estimates of Reliability

Dimensions	Factors	N of items	Cronbach's Alpha
Antecedent Discourse	Internal/External Discourse	5	0.72
	Leader/Manager Discourse	7	0.96
	Job Characteristics Discourse	5	0.83
	Lower Level Hygiene Factors Discourse	5	0.88
	Higher Order Factors Discourse	3	0.71
Decision Making Process	Decision Making Process Individual Psychological	5	0.85
	Decision Making Process Social Work Contexts	5	0.91
	Decision Making Process Contextual - Meaningfulness	4	0.86
	Decision Making Process Contextual - Safety	3	0.80
	Decision Making Process Contextual - Psychological Availability	4	0.88
	Employee Engagement - Cognitive Engagement	5	0.93
	Employee Engagement - Emotional Engagement	5	0.89
	Employee Engagement - Behavioral Engagement	5	0.94
	(Overall)	61	0.94

Implying that at least 88% (Overall Cronbach's Alpha $0.94 \times 0.94 = 0.88$) of the total variance was systematic and reliable. Table 4.13 Cronbach's Alpha (if item deleted) was also included to help identify any problem items that can negatively affect the internal consistency among all the thirteen factors. Based on the findings of this analysis two problem items were excluded from this study (Int_Ext6 and HOF4). These same two items were already identified from findings of the CFA discussed earlier, thereby confirming the necessity of their removal from the study.

Five items were identified that would increase the reliability coefficients if item was deleted (JC_4: 0.844 alpha if deleted, 0.826 alpha if included; LLH_1: 0.906 alpha if deleted, 0.875 alpha if included; DMP_CON_S4: 0.894 alpha if deleted, 0.883 alpha if included; DMP_CON_PA4: 0.943 alpha if deleted, 0.929 alpha if included, and EE_COG3: 0.943 alpha if deleted, 0.929 alpha if included). However, DMP_CON_S3 was retained because excluding the item would leave only two items for the *Decision Making Process – Contextual: Safety* scale. The remainder of the items were also retained because the alpha coefficient was already above .70 (>.70; Kline, 2005), and would increase very slightly (JC_4 [0.18 increase]; LLH_1: [.031 increase], DMP_CON_PA4 [0.61 increase], and EE_COG3: [0.014 increase]).

Table 4.13 Cronbach’s Alpha (if item deleted)

Factor	Items	Cronbach's Alpha if item Deleted	Cronbach's Alpha if item Included
Internal / External Factors Discourse	Int_Ext1 I have a good understanding of the emotions of people	0.70	0.72
	Int_Ext2 I do not have to worry about how people perceive me at work	0.68	0.72
	Int_Ext3 I am enthusiastic about my work	0.63	0.72
	Int_Ext4 My colleagues make an effort to build rapport with me	0.67	0.72
	Int_Ext5 I am optimistic about my future	0.65	0.72
Leader / Manager Discourse	LM_1 I receive enough feedback on my job performance to know how well I am doing	0.96	0.96
	LM_2 My immediate supervisor sets realistic expectations for me	0.95	0.96
	LM_3 My immediate supervisor's expectations are clear to me	0.95	0.96
	LM_4 My immediate supervisor encourages me to do my best	0.95	0.96
	LM_5 My immediate supervisor has aligned my goals with the vision and mission of the organization	0.95	0.96
	LM_6 My immediate supervisor is committed to protecting my interests	0.95	0.96
	LM_7 My immediate supervisor makes an effort to build rapport with me	0.95	0.96

Table 4.13 Cronbach's Alpha (if item deleted) Continued

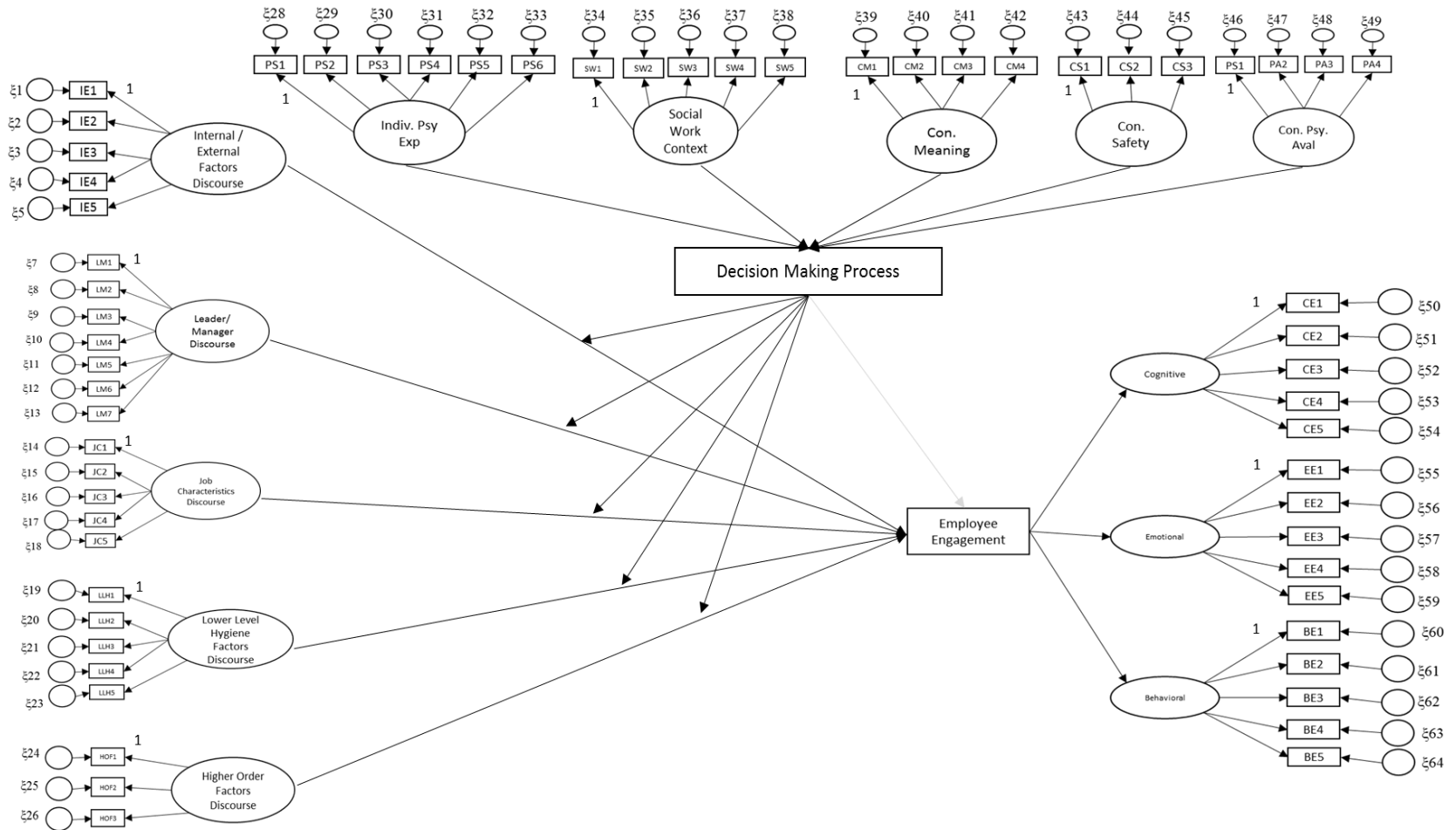
Job Characteristics Discourse	JC_1 To what extent does the job require you to do many different things at work, using a variety of your skills and talents	0.76	0.83
	JC_2 My job "fits" how I see myself	0.81	0.83
	JC_3 My job challenges me	0.76	0.83
	JC_4 My job allows me to link my individual goals to the organizational goals	0.84	0.83
	JC_5 My organization provides me the resources I need to meet the demands of my job	0.78	0.83
Lower Level Hygiene Factor Discourse	LLH_1 I'm not afraid to be myself at work	0.91	0.88
	LLH_2 My organization really cares about my well-being	0.81	0.88
	LLH_3 My organization is very supportive	0.84	0.88
	LLH_4 Decisions, policies, and procedures are fairly and consistently applied to all employees	0.81	0.88
	LLH_5 I feel emotionally healthy at the end of my workday	0.85	0.88
Higher Order Factor Discourse	HOF_1 This organization ensures that my strengths are aligned with my job tasks	0.62	0.71
	HOF_2 My job activities are significant to me	0.63	0.71
	HOF_3 I think this organization does meaningful work	0.61	0.71
Decision Making Process - Individual Psychological Experiences	DMP_PSY1 I am confident I get the success I deserve in life	0.82	0.85
	DMP_PSY2 Overall, I am satisfied with myself	0.81	0.85
	DMP_PSY3 I have no doubts about my competence	0.85	0.85
	DMP_PSY4 I determine what will happen in my life	0.82	0.85
	DMP_PSY5 I feel in control of my success in my career	0.81	0.85
	DMP_PSY6 I am capable of coping with most of my problems	0.82	0.85
Decision Making Process - Social Work Contexts	DMP_SWC1 Top management in my organization commit resources to maintain and improve the quality of our work	0.87	0.91
	DMP_SWC2 Top management in my organization have a plan to improve the quality of our work and service	0.87	0.91
	DMP_SWC3 Managers in my organization recognize and appreciate high quality work and service	0.88	0.91
	DMP_SWC4 People in my work department are adequately trained to handle the introduction of new products and services	0.90	0.91
	DMP_SWC5 I understand the management vision of our organization	0.90	0.91
Decision Making Process - Contextual: Meaningfulness	DMP_CON_M1 I believe that I am working on projects that matter	0.80	0.86
	DMP_CON_M2 I understand how my work serves the organizations purpose	0.80	0.86
	DMP_CON_M3 I think the organization does meaningful work	0.83	0.86
	DMP_CON_M4 I think my work creates positive results	0.86	0.86

Table 4.13 Cronbach's Alpha (if item deleted) Continued

Decision Making Process - Contextual: Safety	DMP_CON_S1 I am not afraid to be myself at work	0.71	0.80
	DMP_CON_S2 I am not afraid to express my opinions at work	0.64	0.80
	DMP_CON_S3 I do not have to worry about a threatening environment at work	0.82	0.80
Decision Making Process - Contextual: Psychological Availability	DMP_CON_PA1 I am confident in my ability to handle competing demands for work	0.84	0.88
	DMP_CON_PA2 I am confident in my ability to deal with problems that come up at work	0.82	0.88
	DMP_CON_PA3 I am confident in my ability to think clearly at work	0.84	0.88
	DMP_CON_PA4 I am confident in my ability to display the appropriate emotions at work	0.89	0.88
Employee Engagement: Cognitive Engagement	EE_COG1 I am really focused on my job when I am working	0.90	0.93
	EE_COG2 I concentrate on my job when I am at work	0.91	0.93
	EE_COG3 When working, I think a lot about how I can give my best	0.94	0.93
	EE_COG4 At work, I am focused on my job	0.9	0.93
	EE_COG5 When I am at work, I give my job a lot of attention	0.91	0.93
Employee Engagement: Emotional Engagement	EE_EM1 Working at my current organization has a great deal of personal meaning	0.87	0.89
	EE_EM2 I feel a strong sense of belonging to my organization	0.86	0.89
	EE_EM3 I am proud to tell others that I work for my organization	0.86	0.89
	EE_EM4 I believe in the mission and purpose of my organization	0.87	0.89
	EE_EM5 I care about the future of my organization	0.84	0.89
Employee Engagement: Behavioral Engagement	EE_BE1 I do more than is expected of me	0.92	0.94
	EE_BE2 I really push myself to work beyond what is expected of me	0.93	0.94
	EE_BE3 I am willing to put in extra effort without being asked	0.92	0.94
	EE_BE4 I often go above what is expected of me to help my team be successful	0.93	0.94
	EE_BE5 I work harder than expected to help my company be successful	0.92	0.94

The items for each of the thirteen factors had excellent reliability. The hypothesized model is provided in Figure 4.4, regarding the obtained thirteen factors and the sixty-two items.

Figure 4.4 Hypothesized model of the EE process



Revised CFA - Antecedent Discourse scale

A CFA was utilized to re-examine the antecedent discourse scale after the removal of the identified problem items (Int_Ext6 and HOF4) found in the first CFA and then in the estimates of reliability. The antecedent discourse scale which included: *Internal/External discourse, Leader/Manager discourse, Job characteristics discourse, Lower Level Hygiene Factor discourse, and Higher Order factors discourse*. Model fit indices are reported in Table 4.14. Chi-Square test of model fit (cmin/df = 4.0124) indicates that the model is acceptable (<.05 = permissible fit; Hu & Bentler, 1999). This models Comparative Fit Index (CFI) meets the traditional threshold and indicates model fit. Root Mean Square error of approximation (RMSEA) indicates moderate model fit, and the Standardized Root Mean Square Residual is <.09 (model: 0.068) confirms good model fit for this scale.

Table 4.14 Fit Indices for Confirmatory Factor Analysis- Antecedent Discourse Scale

Factor Model	χ^2	df	CFI	RMSEA	SRMR
Model	1063.294	265	0.907	0.068	0.068

Note: χ^2 = Chi-square test; df= degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual.

Factor Loadings for the revised model are included in Table 4.15, all items resulted in p-values <.05 which is the recommended cut off and indicates statistical significance. Standardized factor loadings loaded well into the theorized components for the antecedent discourse scales provided for in this study. Stevens (1999) suggests the use of a factor loading threshold of $\leq .4$, irrespective of sample size for interpretive purposes.

Table 4.15 Pattern Matrix – Revised CFA Factor Loadings – Antecedent Discourse Scale

Factors	Items	Factor Loadings
Internal / External Discourse	Int_Ext1 I have a good understanding of the emotions of people	0.413
	Int_Ext2 I do not have to worry about how people perceive me at work	0.473
	Int_Ext3 I am enthusiastic about my work	0.709
	Int_Ext4 My colleagues make an effort to build rapport with me	0.580
	Int_Ext5 I am optimistic about my future	0.689
Leader / Manager Discourse	LM_1 I receive enough feedback on my job performance to know how well I am doing	0.793
	LM_2 My immediate supervisor sets realistic expectations for me	0.885
	LM_3 My immediate supervisor's expectations are clear to me	0.918
	LM_4 My immediate supervisor encourages me to do my best	0.902
	LM_5 My immediate supervisor has aligned my goals with the vision and mission of the organization	0.881
	LM_6 My immediate supervisor is committed to protecting my interests	0.884
	LM_7 My immediate supervisor makes an effort to build rapport with me	0.876
Job Characteristics Discourse	JC_1 To what extent does the job require you to do many different things at work, using a variety of your skills and talents	0.798
	JC_2 My job "fits" how I see myself	0.597
	JC_3 My job challenges me	0.833
	JC_4 My job allows me to link my individual goals to the organizational goals	0.593
	JC_5 My organization provides me the resources I need to meet the demands of my job	0.716
Lower Level Hygiene Factors Discourse	LLH_1 I'm not afraid to be myself at work	0.413
	LLH_2 My organization really cares about my well-being	0.934
	LLH_3 My organization is very supportive	0.798
	LLH_4 Decisions, policies, and procedures are fairly and consistently applied to all employees	0.948
	LLH_5 I feel emotionally healthy at the end of my workday	0.687
Higher Order Factors Discourse	HOF_1 This organization ensures that my strengths are aligned with my job tasks	0.807
	HOF_2 My job activities are significant to me	0.589
	HOF_3 I think this organization does meaningful work	0.625

A correlation matrix is included for the Antecedent Discourse Scale. All variables were significant at a .05 level (p value $<.05$). Only one correlation (Higher order factor discourse and Job characteristic discourse) was near the .9 threshold implying that high levels in one variable are associated with high levels in the other variable. A diagram (see Figure 4.5) of the

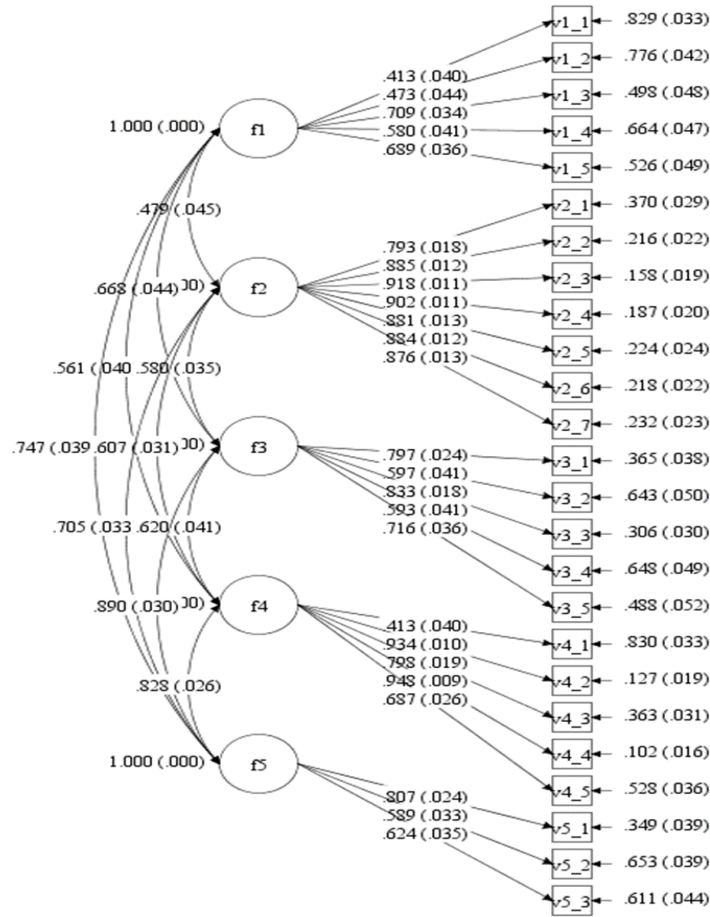
Antecedent Discourse Scale is presented as a visual representation of factor loadings and correlations.

Table 4.16 Correlation Matrix – Antecedent Discourse Scale

Factors	1	2	3	4	5
Internal / External Discourse	1.000				
Leader / Manager Discourse	0.479*	1.000			
Job Characteristics Discourse	0.668*	0.580*	1.000		
Lower Level Hygiene Factors Discourse	0.561*	0.607*	0.620*	1.000	
Higher Order Factors Discourse	0.747*	0.705*	0.890*	0.828*	1.000

* $p < .05$ (two-tailed)

Figure 4.5 Antecedent Discourse Scale Model



Estimates of Validity

Rasch rating scale (Linacre, 1994) analysis was utilized using WinSteps to examine estimates of validity for this study. The following are included in this section, item analysis, item difficulty, rating scale analysis, and differential item functioning are included.

Item Analysis.

To present evidence of construct validity for the scales being used for this study, item polarity utilizing Rasch rating scale analysis (Linacre, 1994) was utilized. Table 4.17 is provided below; items are displayed in order by point-measure correlation. This answers the question, does the item difficulty align with the abilities of the person. This fundamental concept in Rasch measurement is that higher person measures have higher ratings on items and higher ratings on items are from persons with higher person measures. However, items that have negative correlations usually indicate that the responses to the items contradict the direction of the latent variables. The expected correlation shows what the correlation would be if the data matched the Rasch model. The first step in diagnosing a problem with item polarity is to double check for reversed item coding/wording. After double checking for rescaling of items, I determined that all items in variable 7 DMP – Social work contexts were correctly coded and worded. This raises a flag for this variable and will require more investigation. All other point measure correlations were good.

Table 4.17 Item Polarity

Entry Item #	Total Score	Total Count	Measure	Model S.E.	Infit		Outfit		PtMeasure - AL		Exact	Match	Item
					MNSQ	ZSTD	MNSQ	ZSTD	Correlation	Expected	OBS %	EXP%	
36	1682	642	1.49	0.04	2.65	9.9	3.28	9.9	-0.62	0.55	20.7	33.9	V7_3
37	1658	642	1.53	0.04	2.34	9.9	2.87	9.9	-0.55	0.55	22.7	34	V7_4
34	1744	642	1.4	0.04	2.34	9.9	2.87	9.9	-0.54	0.55	20.6	33.8	V7_1
35	1761	642	1.37	0.04	2.41	9.9	2.93	9.9	-0.53	0.55	21.2	33.9	V7_2
38	1546	643	1.7	0.04	2.46	9.9	3.04	9.9	-0.52	0.55	26.4	34.7	V7_5

Item Difficulty.

Items used to represent a construct should be in a hierarchical level of difficulty, ranging from less difficult to most difficult. Table 4.18 depicts items by order of item difficulty – from most difficult or challenging to least difficult or challenging. Items V7_5, V7_4, V7_3, V7_1, and V7_2 which measure variable: *Decision making process – Social work contexts*, seems to be the most difficult or challenging for respondent to answer. Additionally, items with empirical average measures which were found to be in reverse order require further psychometric investigation. Observed average measures for persons indicates the distribution of respondents on the variable ranges across the operational range of the instrument, as difficulty goes up, the tighter the range of the empirical average numbers gets. This is expected, the higher the category, more of the latent variable is measured. Category numbers are positioned at the average measures of the sample participants. Number 6 (V1_6 also labeled Int_Ext6) had disordered empirical average measures, indicating that I must investigate this item further (arrow A, Table 4:18), recall from Cronbach's Alpha and result of CFA, V1_6 (Int_Ext6) and V5_4 (HOF4) were identified as problem items and confirms the items deletion. Item difficulty provides evidence of construct validity of an instrument.

Evidence of predictive validity (Kerlinger, 1986) may be found in the empirical average measures (indicated by arrow B, Table 4.18) which shows the distribution of the participants on the variable, that indicates the mean of 62 participants fell one logit above the zero-point of the measurement scale. The local origin at zero is set at the average difficulty of the items. This would be the location at which the average response to the survey question is "1" or neutral. The empirical average measures indicate that 62 participants fall one logit above the local origin. The

Table 4.18. Item Difficulty (Hierarchy)

Observed Average Measures for PERSON (unscored) (by Observed Category)

-4	-3	-2	-1	0	1	2	3	4	5	NUM	ITEM
				5432	1					38	V7_5
				543	2.1					37	V7_4
				543	2.1					36	V7_3
				54	32	1.				34	V7_1
				54.32	1					35	V7_2
				21345						6	V1_6
				.12345						27	V5_4
				12.34	5					21	V4_3
				1	23.4	5				20	V4_2
				12	3.4	5				24	V5_1
				1	23	4.5				22	V4_4
				1	2	3	4	5.		7	V2_1
				12	3	4	5			17	V3_4
				12	34	.5				12	V2_6
				123	4	5				11	V2_5
				12.34	5					9	V2_3
				1	23	4.5				16	V3_3
				1	23	4	5			23	V4_5
				12	34	5				10	V2_4
				12	34.	5				4	V1_4
				1234	5					45	V9_3
				12	34.	5				44	V9_2
				123	4.5					13	V2_7
				1	23	4	5	.		56	V12_2
				1	23.4	5				8	V2_2
				123.4	5					14	V3_1
				2	134.5					1	V1_1
				123	4	5.				18	V3_5
				123	4	5				28	V6_1
				123	4	5				32	V6_5
				2	314	5				19	V4_1
				2134	5					43	V9_1
				123	4	5.				3	V1_3
				123	4.5.					15	V3_2
				2	134.5					31	V6_4
				12.3	4	5				26	V5_3
				123	4	5				59	V12_5
				123	4	5.				55	V12_1
				1	2	3	4	5		5	V1_5
				1234	5					39	V8_1
				1	23.4	5				29	V6_2
				12	34	5				61	V13_2
				1	23	4	5			49	V10_4
				234.15						30	V6_3
				1	2	3	4	5		64	V13_5
				23.4	5					46	V10_1
				2314	5.					52	V11_3
				1	234	5.				57	V12_3
				123	4	5				40	V8_2
				1234	5					41	V8_3
				23	4	5				47	V10_2
				1	324	5				33	V6_6
				123.4	5					25	V5_2
				1	2	3	4	5		60	V13_1
				1	23	4	5			2	V1_2
				1	23	4	5			62	V13_3
				2	3	4	5			48	V10_3
				2	134	5.				53	V11_4
				2	314	5.				51	V11_2
				2	134	5.				50	V11_1
				1324	.5					42	V8_4
				1	2	34	.5			58	V12_4
				1	2	34	5			63	V13_4
				2	34	.5				54	V11_5

← A

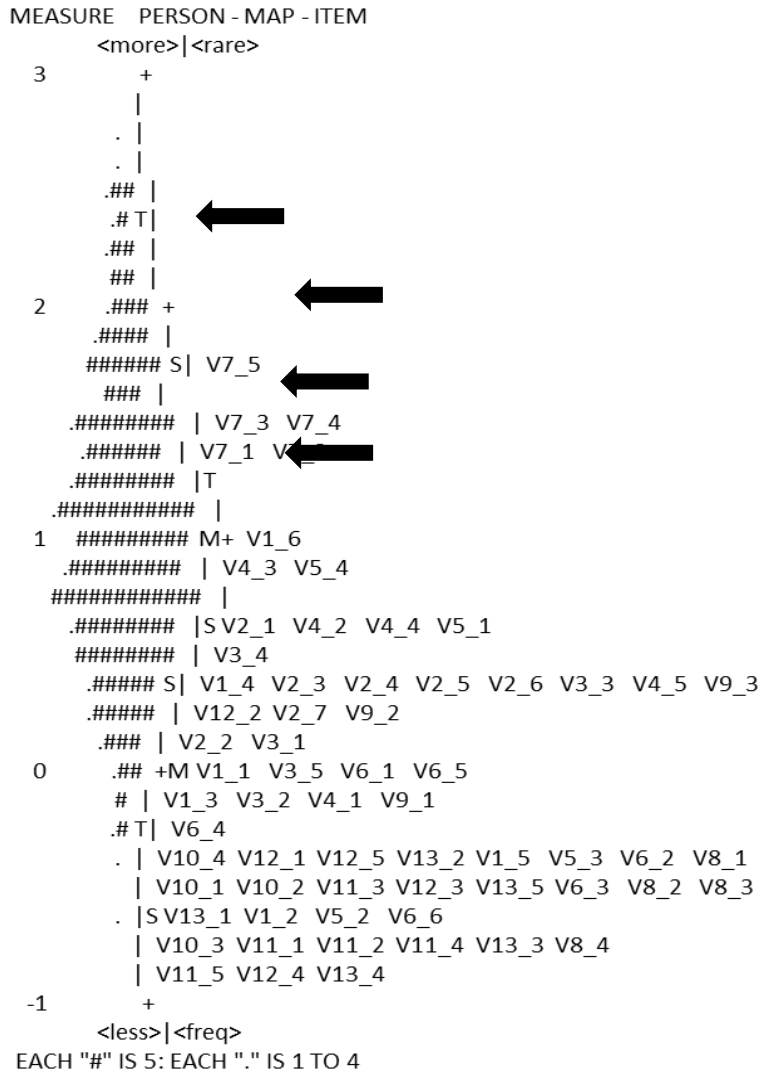
-4	-3	-2	-1	0	1	2	3	4	5	NUM	ITEM
				1234666655322111							
				168798889260165381232							
				T S M S T							PERSON
				0 10 40 70 80 90 99							PERCENTILE

B ←

mean falling on “1” indicates that I am measuring more of what I am seeking, I am measuring more of the latent variable, which is a success in terms of the standard Rasch item-scoring cutoff.

A person item map (Figure 4.6) is included to show levels of measuring range from high (3) to lowest (-1). Measure on the left indicates the linear measures, persons are depicted as (#), and shows where they fall in person ability or motivation, and finally, item difficulty or challenge can be seen on the right of the map. Each item is labeled by the measurement variable name. This diagram indicates that persons with higher ability/motivation fall within 2 and 3 on the person item map, those with lower abilities/motivation fall within 0 and -1. Items on the right side of the line, are ranked in the same order and regarded as item difficulty. Items within the bounds of 1 and 2 are considered more challenging items. Item gaps are indicated with an arrow to point where items are recommended to be included to fill in gaps through the measures to create more precision of the measurement. The item- person map indicates that the participants are normally distributed, and items are less challenging based on person abilities.

Figure 4.6 Person / Item Map



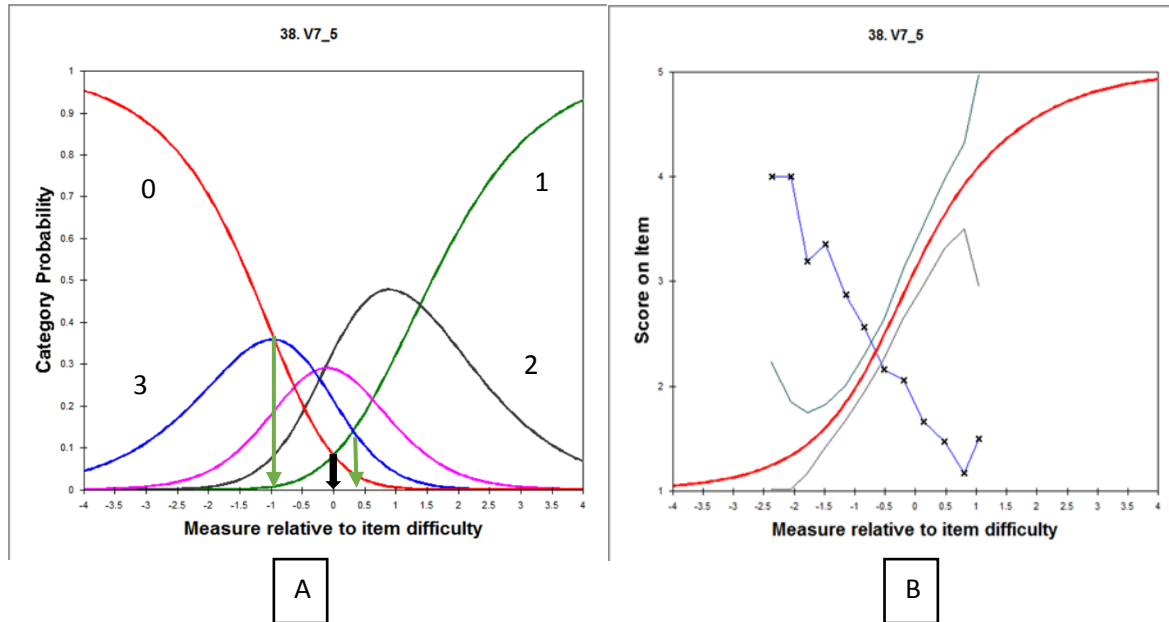
The following Figure (4.7) depicts the model item characteristics (Bond & Fox, 2007) curve (A) and the empirical item characteristics (Bond & Fox, 2007) curve (B) for items in the DMP- Social work context scale, as it was identified to have the most difficult or challenging items. In Figure A, the red curved line indicates the model ICC as expected by Rasch measurement model. The blue curved line is the empirical ICC, the black is item difficulty, and

the green is the Rasch-Andrich threshold. The first thing to look at is the intersection of the 0 and the 3, that point measures the item difficulty and the first threshold.

The intersection points between 1 and 3 is item difficulty and the second threshold. The item difficulty “is located at the point where the higher and the lowest categories are equally probable” (Linacre 2012, p. 15), as indicated in the graph with a black arrow. Figure B, depicts the model predicted dispersion of the observation around their expectations from the Rasch model (red line), and the grey/black lines represent the two-sided confidence bands and are 1.96 errors vertically away from the model ICC’s. The blue line is the empirical ICC, here the observations are outside of the confidence intervals. The downward shape of the empirical ICC indicates the level of logits more difficult or challenging than person ability, meaning that they were more difficult or challenging for respondents. Although there is strong evidence to delete these items from the study, they were retained for this study.

Appendix 9- model and empirical item characteristics curve diagrams are included in this study to show strong evidence for the necessity of future revision or exclusion of items in variable 7: DMP – Social work contexts from the analysis. Observations are outside the confidence intervals for the model, which is somewhat surprising, but will be retained for the present study.

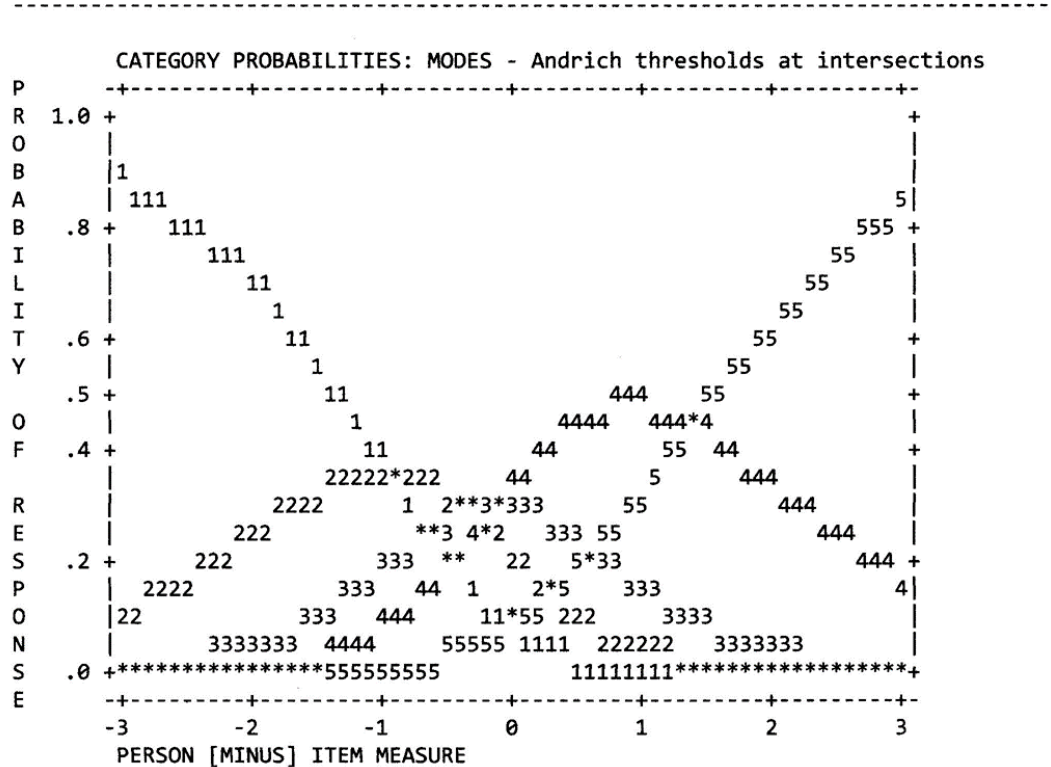
Figure 4.7 Model and Empirical Item Characteristics Curve



Rating scale analysis.

Linacre (2002) provides guidelines in terms of regular observation distribution of observations across categories for optimal step calibration (p. 94). He further goes on to state that possible “problematic areas in the distribution curve appear as roller coaster form. Figure 4.8 provides a visualization of possible problematic areas in the distribution curve and are depicted with an *, they are between 1 and 2, between 1 and 3, between 1 and 4, and 1 and 5. Additionally, problematic areas were found to be between 2 and 3, 2 and 4, 2 and 5, 5 and 3, and 4 and 5. This means that in a Likert type scale offering five options to answer is problematic. This will be a consideration for future studies.

Figure 4.8 Rating Scale Category Probabilities



Rasch Item Analysis.

The Rasch model specifies a uniform level of randomness. To examine mean-squared fit statistics of the model-specified uniform value of randomness, Table 4.19 has been provided. Linacre (1994) provides fit statistic cutoffs that will be adhered to in this study. INFIT MNSQ and OUTFIT MNSQ statistics were examined and found to be productive for measurement (0.5 – 1.5 = productive for measurement; Linacre, 1994). INFIT ZSTD and OUTFIT ZSTD also resulted in data having a reasonable predictability (-1.9 to 1.9 = data have reasonable predictability; Linacre, 1994). This means that the Rasch Item analysis is good for making predictions about what is expected from the data. It provides confirmation.

Table 4.19 Rasch Item Analysis

		Mean	Min	Max
INFIT	MNSQ	1.00	0.59	2.65
	ZSTD	-1.20	-9.40	9.90
OUTFIT	MNSQ	1.03	0.60	3.28
	ZSTD	-1.40	-7.80	9.90
Point Measure Correlation		0.00	-0.92	1.70
<i>Item Reliability = Upper bound= .99, Lower bound= .99</i>				

Differential Item Functioning.

Differential item functioning was analyzed utilizing WinSteps - pairwise DIF (bias) analysis to test item difficulty for male participants versus item difficulty for female participants. Statistical significance (<.05) and substantive differences between the groups (.5 logits or larger) were examined to determine if item bias was present. No items met both criterion of item bias indicating that there is no item bias.

Results of Correlation Analysis

Bivariate correlations (r) between and among *internal/external discourse, leader/manager discourse, job characteristics discourse, lower level hygiene factor discourse, higher order factors discourse, decision making process – individual psychological experiences, decision making process – social work contexts, decision making process – contextual: meaningfulness, decision making process – contextual: safety, decision making process – contextual: psychological availability, employee engagement – cognitive engagement, employee engagement – emotional engagement, and employee engagement – behavioral engagement* were examined. Preliminary analysis showed that there were no violations in the assumptions of normality, linearity, or homoscedasticity. A correlation matrix (Pearson’s r values; Table 4.20) is included

to depict significant correlations (**) at the .01 level (2-tailed). A review of the bivariate correlations for issues of multicollinearity resulted in no values larger than >.80 cutoff (Meyers, Gamst, and Guarino, 2013). Allison (1999) argues that correlations resulting in the high .70's should be of concern. However, bivariate correlation values (Table 4.20) did not result in values in the high .70's.

There was a moderate positive relationship between *leader/manager discourse* and *internal/external discourse* (Cohen, 1988), all were statistically significant at .01 level (2-tailed). *Job Characteristics discourse* was found to have a moderate positive relationship with *internal/external discourse* and *leader/manager discourse*, all three were statistically significant at .01 level (2-tailed). *Lower level hygiene factors discourse* was found to have a moderate positive relationship with *internal/external discourse* and *leader/manager discourse*, but had a strong linear relationship with *job characteristics discourse*, all were found to be statistically significant at .01 level (2-tailed). *Higher order factors* were found to have a moderate positive relationship with *internal/external discourse*, *leader/ manager factors discourse*, and a strong positive relationship with *job characteristics discourse* and *lower level hygiene factors discourse*, all were statistically significant at .01 level (2-tailed). *DMP – individual psychological factors discourse* was found to have a weak positive relationship with *leader/manager discourse* and a moderate positive relationship with *internal/external discourse*, *job characteristics discourse*, *lower level hygiene factors discourse*, and *higher order factors discourse*, all were statistically significant at .01 level (2-tailed).

DMP- social work contexts were found to have a weak negative relationship with *DMP- individual psychological factors discourse*, a moderate negative relationship with *internal/ external discourse*, *leader/manager discourse*, *job characteristics discourse*, and a strong

negative relationship with *lower level hygiene factors discourse* and *higher order factors discourse*, all correlations were statistically significant at .01 level (2-tailed). *DMP- contextual-meaningfulness* was found to have a weak positive relationship with *leader/manager discourse* and a moderate positive relationship with *internal/external discourse, job characteristics discourse, lower level hygiene factors discourse, and DMP – individual psychological factors discourse*. *DMP – contextual – meaningfulness* was also found to have a strong positive relationship with *higher order factors discourse*, and a moderate negative relationship with *DMP - social work contexts discourse*, all correlations with *DMP- contextual- meaningfulness* were statistically significant at .01 level (2-tailed). *DMP-Contextual – psychological availability* was found to have a moderate positive relationship with *internal/ external discourse, leader/manager discourse, job characteristics discourse, higher order factors discourse, DMP-individual psychological factors discourse, and DMP – contextual- meaningfulness*. *DMP – contextual – psychological availability* was also found to have a strong positive relationship with *lower level hygiene factors discourse*, and a moderate negative relationship with *DMP-social work contexts*. All correlations between *DMP – contextual – meaningfulness* were statistically significant at .01 level (2-tailed). *DMP-contextual-psychological availability* was found to have a weak positive relationship with *leader/manager discourse, job characteristics, lower level hygiene factors discourse*, and a weak negative relationship with *DMP – social work contexts*. *DMP- contextual – psychological availability* also had a moderate positive relationship with *internal/external discourse, higher order factors discourse, DMP- individual psychological factors discourse, DMP-contextual meaningfulness, and DMP-contextual- safety*, all correlations were statistically significant at .01 level (2-tailed).

Employee engagement- cognitive engagement was found to have a weak positive relationship with *leader/manager discourse, job characteristics discourse, lower level hygiene factors discourse, higher order factors discourse, and DMP-contextual- safety*. *Employee engagement- cognitive engagement* was found to have a weak negative relationship with *DMP- social work contexts discourse* and a moderate positive relationship with *internal/external discourse, DMP- individual psychological experiences, DMP-contextual- meaningfulness* and *DMP-contextual- psychological availability*, all correlations were statistically significant at .01 level (2-tailed). *Employee engagement – emotional engagement* was found to have a weak positive relationship with *DMP-Contextual-psychological availability*, and a moderate positive relationship with *internal/external discourse, leader/manager discourse, job characteristics discourse, DMP-individual psychological factors discourse, and DMP- contextual- safety*. *Employee engagement – emotional engagement* was also found to have a strong positive relationship with *lower level hygiene factors discourse, higher order factors discourse, DMP – contextual-meaningfulness*, and a strong negative relationship with *DMP- social work contexts discourse*, all correlations were statistically significant at .01 level (2-tailed). Finally, *employee engagement – behavioral engagement* was found to have a weak negative relationship with *DMP- social work contexts discourse*, and a weak positive relationship with *leader/manager discourse, job characteristics discourse, lower level hygiene factors discourse, higher order factors discourse, DMP-individual psychological experiences, DMP-contextual meaningfulness, DMP- contextual – safety, and employee engagement – emotional engagement*. *Employee engagement – behavioral engagement* had a moderate positive relationship with *internal/external discourse, DMP-contextual- psychological availability, and employee engagement – cognitive engagement*, all correlations were statistically significant at .01 level (2-tailed).

Table 4.20 Bivariate Correlations

		1	2	3	4	5	6	7	8	9	10	11	12	13
Internal / External Discourse	Pearson Correlation	1	.412**	.509**	.490**	.538**	.597**	-.475**	.481**	.480**	.522**	.434**	.526**	.435**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	643	643	643	643	642	643	643	643	643	643	643	641	643
Leader Manager Discourse	Pearson Correlation	.412**	1	.541**	.591**	.571**	.288**	-.553**	.368**	.478**	.232**	.236**	.455**	.202**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	643	643	643	643	642	643	643	643	643	643	643	641	643
Job Characteristics Discourse	Pearson Correlation	.509**	.541**	1	.601**	.722**	.425**	-.592**	.570**	.455**	.331**	.362**	.600**	.374**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	643	643	643	643	642	643	643	643	643	643	643	641	643
Lower Level Hygiene Factors Discourse	Pearson Correlation	.490**	.591**	.601**	1	.688**	.446**	-.728**	.485**	.657**	.359**	.270**	.607**	.229**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	643	643	643	643	642	643	643	643	643	643	643	641	643
Higher Oder Factors Discourse	Pearson Correlation	.538**	.571**	.722**	.688**	1	.460**	-.688**	.687**	.509**	.428**	.399**	.724**	.358**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000
	N	642	642	642	642	642	642	642	642	642	642	642	640	642
Decision Making Process: Individual Psychological	Pearson Correlation	.597**	.288**	.425**	.446**	.460**	1	-.391**	.413**	.461**	.554**	.459**	.447**	.365**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000
	N	643	643	643	643	642	643	643	643	643	643	643	641	643
Decision Making Process: Social Work Contexts	Pearson Correlation	-.475**	-.553**	-.592**	-.728**	-.688**	-.391**	1	-.560**	-.486**	-.344**	-.317**	-.659**	-.276**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000
	N	643	643	643	643	642	643	643	643	643	643	643	641	643
Decision Making Process: Contextual - Meaningfulness	Pearson Correlation	.481**	.368**	.570**	.485**	.687**	.413**	-.560**	1	.404**	.450**	.409**	.712**	.396**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000
	N	643	643	643	643	642	643	643	643	643	643	641	643	643
Decision Making Process: Contextual - Safety	Pearson Correlation	.480**	.478**	.455**	.657**	.509**	.461**	-.486**	.404**	1	.439**	.275**	.476**	.244**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000
	N	643	643	643	643	642	643	643	643	643	643	643	641	643
Decision Making Process: Contextual - Psychological Availability	Pearson Correlation	.522**	.232**	.331**	.359**	.428**	.554**	-.344**	.450**	.439**	1	.434**	.389**	.412**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000
	N	643	643	643	643	642	643	643	643	643	643	643	641	643
Employee Engagement: Cognitive Engagement	Pearson Correlation	.434**	.236**	.362**	.270**	.399**	.459**	-.317**	.409**	.275**	.434**	1	.432**	.510**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000
	N	641	641	641	641	640	641	641	641	641	641	641	641	641
Employee Engagement: Emotional Engagement	Pearson Correlation	.526**	.455**	.600**	.607**	.724**	.447**	-.659**	.712**	.476**	.389**	.432**	1	.399**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000
	N	643	643	643	643	642	643	643	643	643	643	643	641	643
Employee Engagement: Behavioral Engagement	Pearson Correlation	.435**	.202**	.374**	.229**	.358**	.365**	-.276**	.396**	.244**	.412**	.510**	.399**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
	N	643	643	643	643	642	643	643	643	643	643	643	641	643

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

Results of SEM

Structural equation modeling was utilized using MPlus to examine if the theoretically hypothesized model is supported by the data. To accomplish this, I utilized the steps of model specification, estimation, and finally, fit evaluation (Kline, 2005; Hoyle, 1995). To establish this, it was handled in two steps, first, the model was examined utilizing SEM to establish predictive paths between the antecedent discourses and the higher order factor of employee engagement. This was conducted to ensure that significant paths were available to document the existence of a relationship. Due to the complexity of the model, and at the risk of experiencing multicollinearity issues (see bivariate correlation matrix, Table 4.20, of latent variables relationship between antecedent factors and Table 4.16 correlation matrix – antecedent discourse scales), the model was simplified by breaking it down by antecedent discourses (*internal/external discourse, leader/manager discourse, job characteristics discourse, lower level hygiene factors discourse and higher order factors discourse*) and their relationship with *employee engagement* (see Figure 4.9, Figure 4.10, Figure 4.11, Figure 4.12, and Figure 4.13 further in the chapter). Fit indices are reported in the respective tables for each model being examined.

Next, the structural models were examined with the inclusion of the moderation higher order factor of the *decision making process* to establish if there are any interaction effects on the relationship of the *antecedent discourses* and *employee engagement*. AIC, BIC, parameter estimates, model diagram, and a diagram of the moderation effects are reported for each of the five models being examined (see Figure 4.15, Figure 4.17, Figure 4.19, Figure 4.21, and Figure 4.23 further in the chapter).

Predictive Path Models.

In this section, the structural model estimates are reported for each of the antecedent discourses (*internal/external discourse, leader/manager discourse, job characteristics discourse, lower level hygiene factors discourse and higher order factors discourse*).

Internal/External Discourse and Employee Engagement.

As represented in Table 4.21, the *internal/external discourse* structural model had a relative chi-square (cmin/df, 501.872/166=3.02, p=.000). To make a case of model fit, three other fit indices were examined. As reported in Table 4.21 fit indices, the model was sufficiently supported by the empirical data collected for this research study. Hu and Bentler, (1999) recommend the following cutoffs for fit indices which will be adhered to for this study, >.95 for CFI, <.08 SRMR, and <.06 RMSEA, these cutoffs result in lower type II error rates. Fit indices of >.95 CFI, and <.09 SRMR result in less type I and type II error rates. As mentioned previously, Hu & Bentler (1999) also make a case that CFI model fit greater than .90 represents traditional fit or acceptable fit. However, it may be open to type I or type II error and perhaps even factor loading errors, therefore, as mentioned previously all fit indices were taken into consideration.

In this model, CFI exhibited traditional fit (>.90, Hu & Bentler, 1999), RMSEA resulted in moderate fit (.05 - .10 moderate fit, Hu & Bentler, 1999), and SRMR was under the threshold of good model fit (<.09, Hu & Bentler, 1999). Figure 4.9, a diagram of the predictive path *internal/external discourse and employee engagement* is provided for a visual representation of the standardized regression coefficients.

Table 4.21 Fit Indices: Internal/External Factors Discourse

Factor Model	χ^2	df	CFI	RMSEA	SRMR
Model	501.871	166	0.940	0.056	0.059

Note: χ^2 = Chi-square test; df= degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual.

Leader/Manager Discourse and Employee Engagement.

As represented below in Table 4.22, the *leader/manager discourse* structural model had a permissible chi-square (cmin/df, 1187.971/314=3.78, p=.000), since chi-square is sensitive to sample size. To make a case of model fit, three other fit indices were examined. As reported in Table 4.22 fit indices, the model was sufficiently supported by the empirical data collected for this research study. In this model, CFI exhibited traditional fit (>.90, Hu & Bentler, 1999), RMSEA resulted in moderate fit (.05 - .10 moderate fit, Hu & Bentler, 1999), and SRMR was under the threshold of good model fit (<.09, Hu & Bentler, 1999). Figure 4.10 predictive path *leader/ manager discourse* and *employee engagement* is provided for a visual representation of the standardized regression coefficients.

Table 4.22 Fit Indices: Leader/Manager Discourse

Factor Model	χ^2	df	CFI	RMSEA	SRMR
Model	1187.971	314	0.902	0.066	0.067

Note: χ^2 = Chi-square test; df= degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual.

Job Characteristics and Employee Engagement.

As represented in Table 4.23, the *job characteristics discourse* structural model had a permissible chi-square ($cmin/df$, $667.179/179 = 4.019$, $p = .000$), due to sensitivity of sample size. To make a case of model fit, three other fit indices were examined. As reported in Table 4.23 fit indices, the model was sufficiently supported by the empirical data collected for this research study. In this model, CFI exhibited traditional fit ($>.90$, Hu & Bentler, 1999), RMSEA resulted in moderate fit ($.05 - .10$ moderate fit, Hu & Bentler, 1999), and SRMR was under the threshold of good model fit ($<.09$, Hu & Bentler, 1999). Figure 4.11, a diagram of the predictive path *job characteristics discourse* and *employee engagement* is provided for a visual representation of the standardized regression coefficients.

Table 4.23 Fit Indices: Job Characteristics Discourse

Factor Model	χ^2	df	CFI	RMSEA	SRMR
Model	667.179	166	0.918	0.069	0.076

Note: χ^2 = Chi-square test; df= degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual.

Lower Level Hygiene Factors Discourse and Employee Engagement.

Table 4.24, the *lower level hygiene factors discourse* structural model had a permissible chi-square ($cmin/df$, $565.808/166=3.408$, $p=.000$). To make a case of model fit, three other fit indices were examined. As reported in Table 4.24 fit indices, the model was sufficiently supported by the empirical data collected for this research study. In this model, CFI exhibited traditional fit ($>.90$, Hu & Bentler, 1999), RMSEA resulted in moderate fit ($.05 - .10$ moderate fit,

Hu & Bentler, 1999). However, SRMR was slightly above the threshold of good model fit (<.09, Hu & Bentler, 1999). Figure 4.12, a diagram of the predictive path *Lower level hygiene factors discourse* and *employee engagement* is provided for a visual representation of the standardized regression coefficients.

Table 4.24 Fit Indices: Lower Level Hygiene Factors Discourse

Factor Model	χ^2	df	CFI	RMSEA	SRMR
Model	565.808	166	0.939	0.061	0.098

Note: χ^2 = Chi-square test; df= degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual.

Higher Order Factor Discourse and Employee Engagement.

As represented in Table 4.25, the *higher order factors discourse* structural model had a permissible chi-square (cmin/df, 512.873/131=3.915, p=.000). To make a case of model fit, three other fit indices were examined. As reported in Table 4.25 fit indices, the model was sufficiently supported by the empirical data collected for this research study. In this model, CFI exhibited great model fit (>.90, Hu & Bentler, 1999), RMSEA resulted in moderate fit (.05 - .10 moderate fit, Hu & Bentler, 1999). However, SRMR was above the threshold of good model fit (<.09, Hu & Bentler, 1999). Figure 4.13, diagram for the predictive path *higher order factors discourse* and *employee engagement* is provided for a visual representation of the standardized regression coefficients.

Table 4.25 Fit Indices: Higher Order Factors Discourse

Factor Model	χ^2	df	CFI	RMSEA	SRMR
Model	512.873	131	0.927	0.067	0.095

Note: χ^2 = Chi-square test; df= degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual.

Figure 4.9 Predictive Path Model – Internal/External Factors Discourse and Employee Engagement

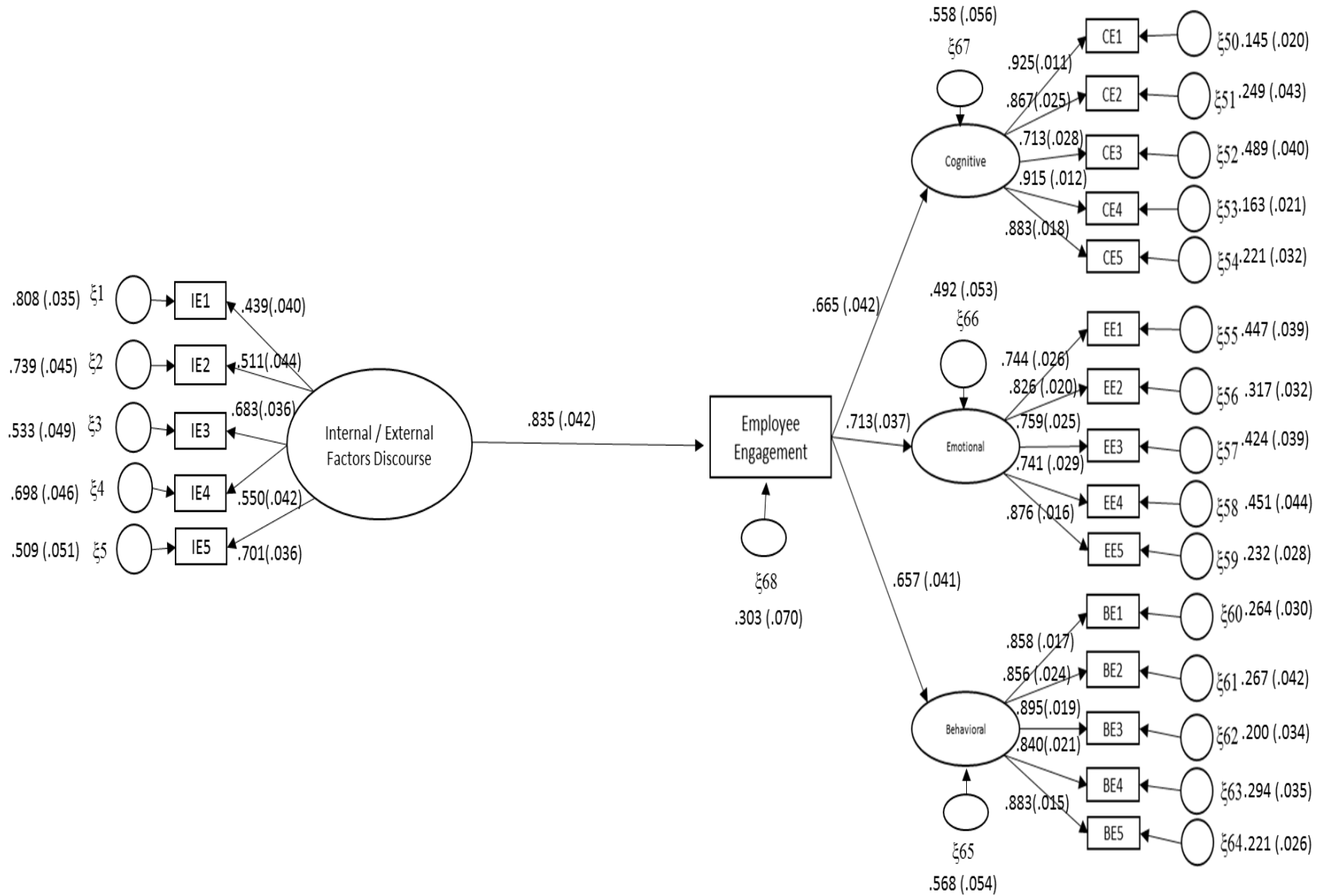


Figure 4.10 Predictive Path Model – Leader/Manager Discourse and Employee Engagement

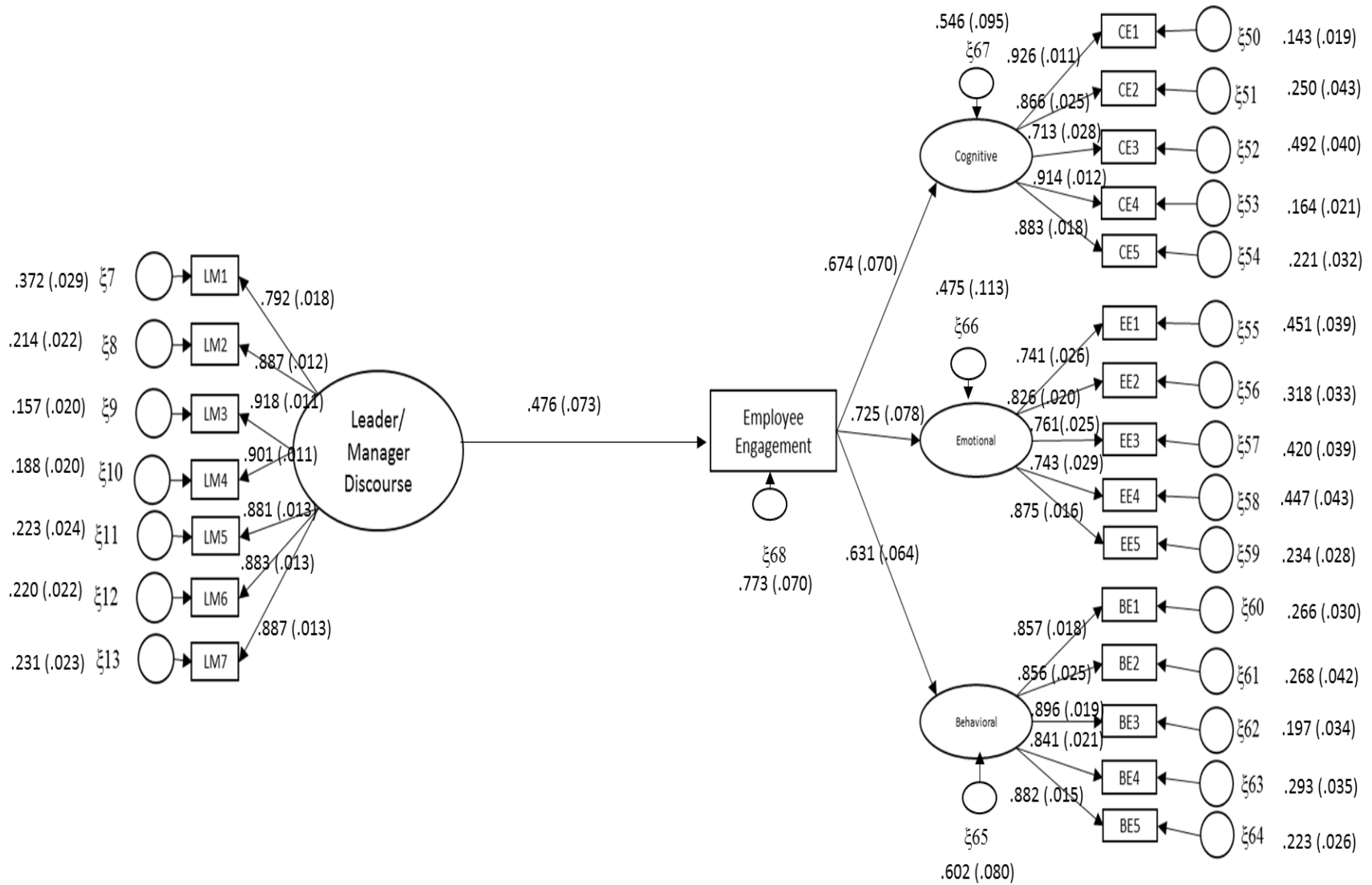


Figure 4.11 Predictive Path Model – Job Characteristics Discourse and Employee Engagement

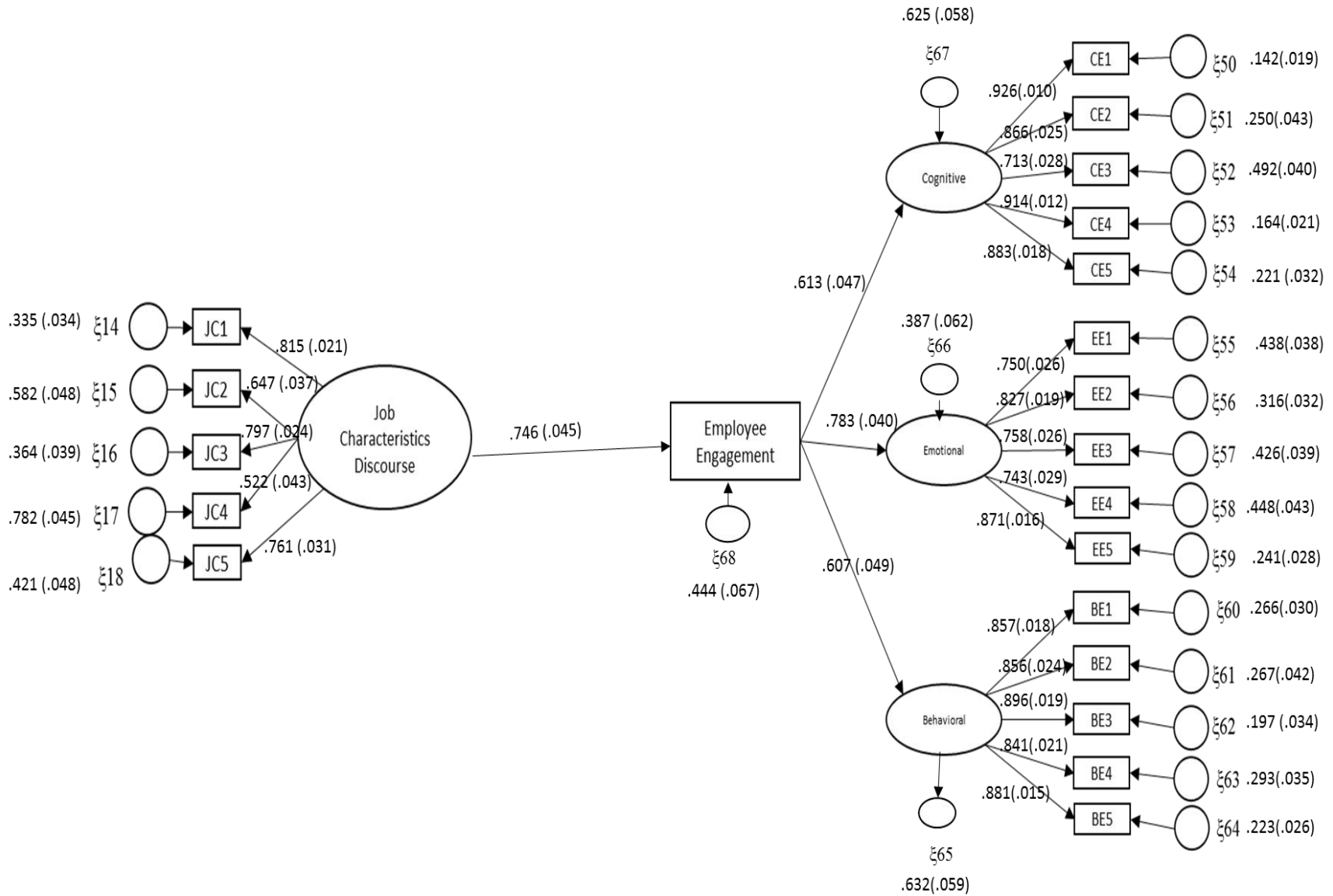


Figure 4.12 Predictive Path Model – Lower Level Hygiene Factors Discourse and Employee Engagement

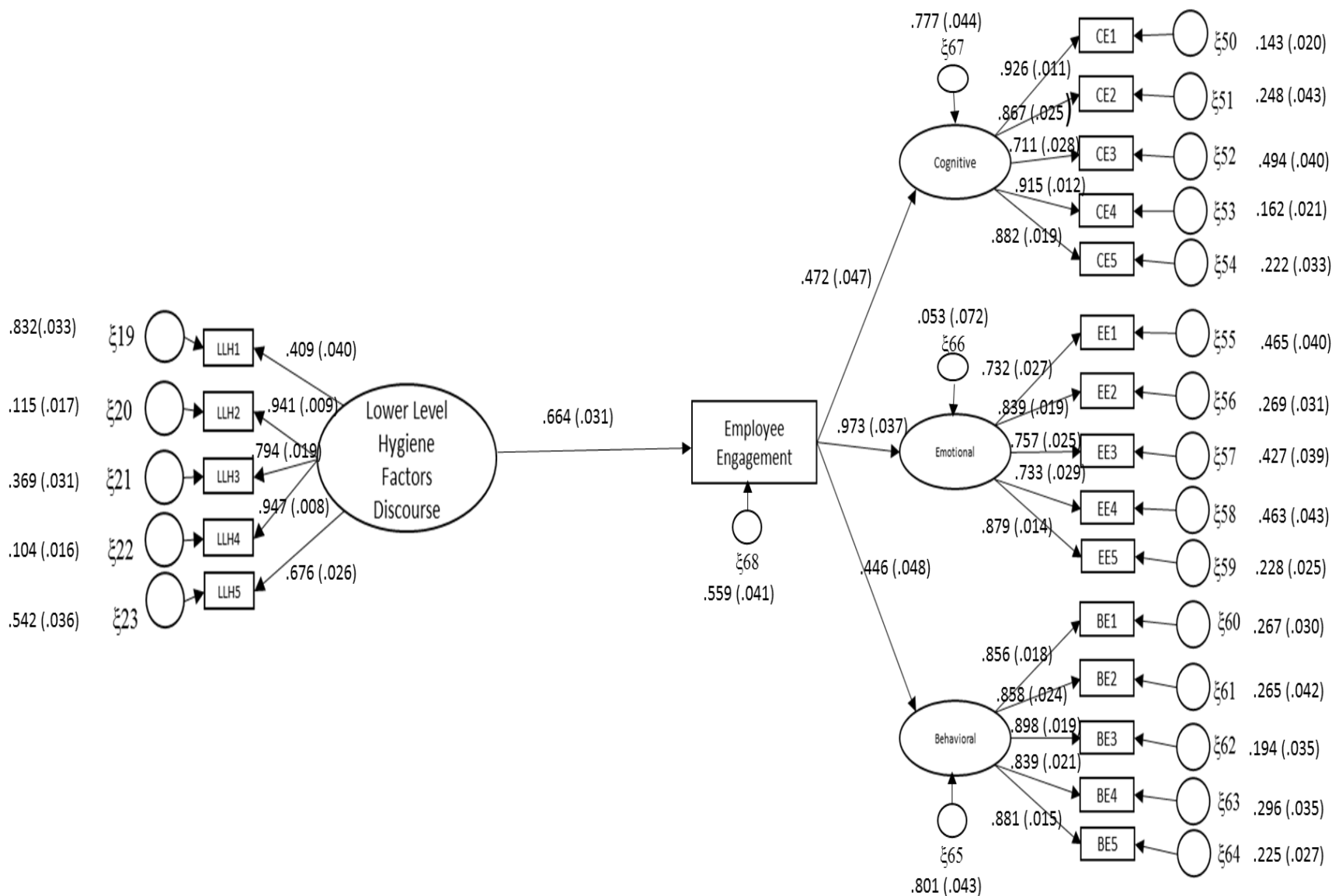
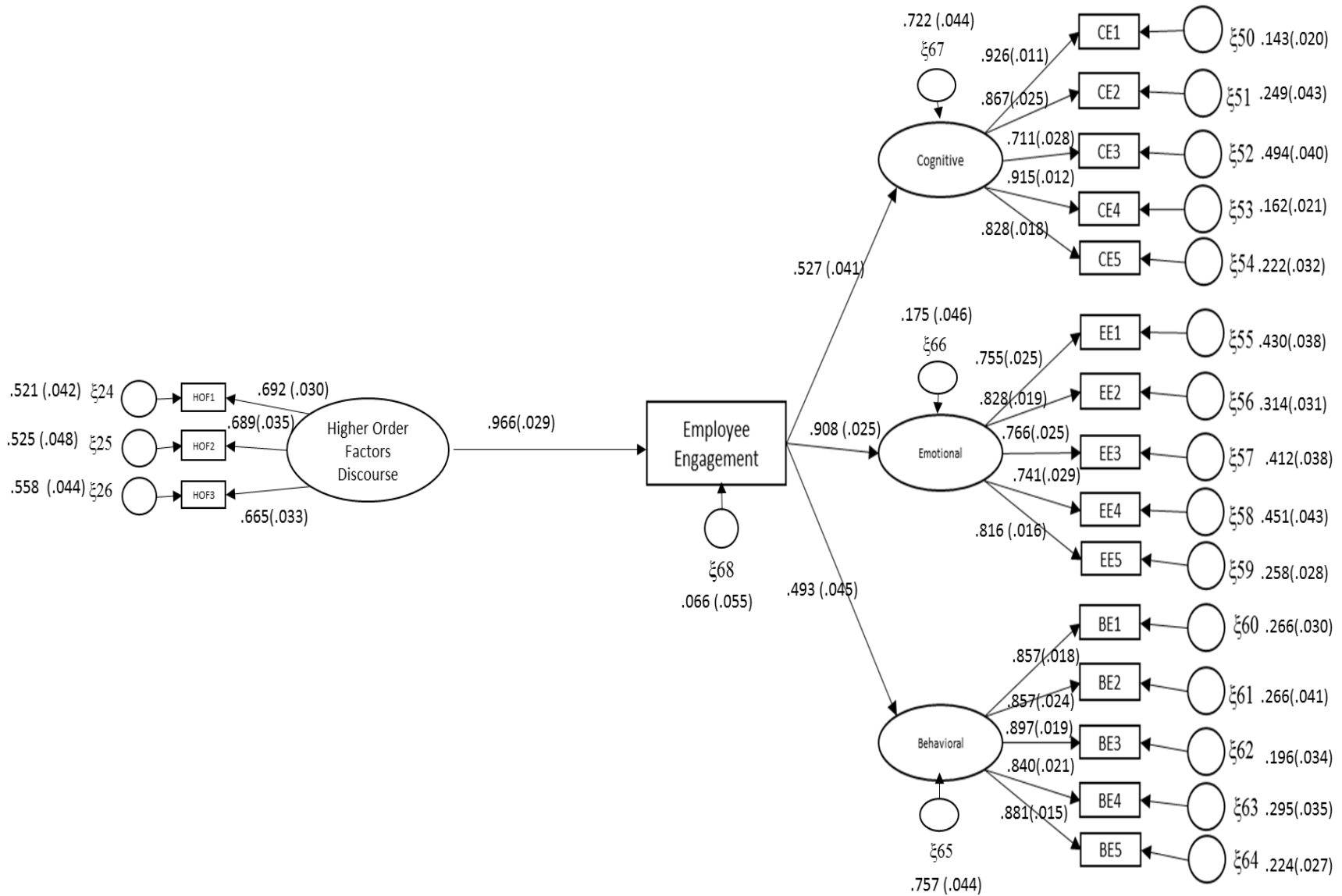


Figure 4.13 Predictive Path Model – Higher Order Factors Discourse and Employee Engagement



Moderation Models.

Since all predicative paths were found to be statistically significant for the five previous two-way interaction models, implying that the hypothesized predictive paths were present, I then proceeded to examine for moderation effects. Conditional process modeling with SEM was utilized in examining the five models and the moderation effects for each. This process was used to examine if the antecedent discourse variable's effect on the consequent variable of employee engagement is dependent on or moderated by, the decision making process. To do this, I relied upon the six-step process introduced by Hayes and Preacher (2013) to fine tune the conceptual model utilized in this study. The steps utilized include step 1) derive the number of linear models necessary to model the process statistically, step 2) label the points of moderation in the conceptual model, step 3) construct sequences of variable names for each consequence, step 4) expansion of sequences with at least three variable names, step 5) use the list of sequences to generate the linear models for each consequent, and finally, step 6) fine tune the models (Hayes & Preacher (2013).

This section will unfold with examining each discourse antecedent variable model, AIC and BIC are reported for each model, parameters of estimates and interactions are reported, a hypothesized model is provided, and finally diagram reporting regression coefficients, moderation effects, and interactions are provided.

Internal/External Discourse.

The *internal/external discourse* structural equation model (Figure 4.14) was examined with the inclusion of the moderation higher order factor of the *decision making process* to examine if 1) there were any changes in the predictive path models' regression coefficients when the interaction effects are introduced in the model and 2) to examine the interaction estimate and

significance of the model. Table 4.26 report AIC and BIC for this model and Table 4.27 parameter estimates and interaction are provided. The *employee engagement* variable when regressed on the *internal/external discourse* resulted in a significant regression coefficient of .802 (.180), and an interaction estimate of -0.090 (see Figure 4.15). The regression coefficient decreased slightly from the original predictive path model (see Figure 4.9; .835) implying that the negative interaction effect slightly reduced the levels of employee engagement for this study sample.

Table 4.26 AIC, BIC: Internal/External Factors Discourse

AIC	48389.176
BIC	49001.38

Table 4.27 Parameter Estimates and Interactions Standardized – Internal/External Factors Discourse

Employee Engagement	Estimate	P Value
Internal / External Discourse	0.802	0.000
Decision Making Process	0.164	0.363
Interaction	-0.090	0.007

Figure 4.14 Moderation Effects Model: Internal/External Discourse

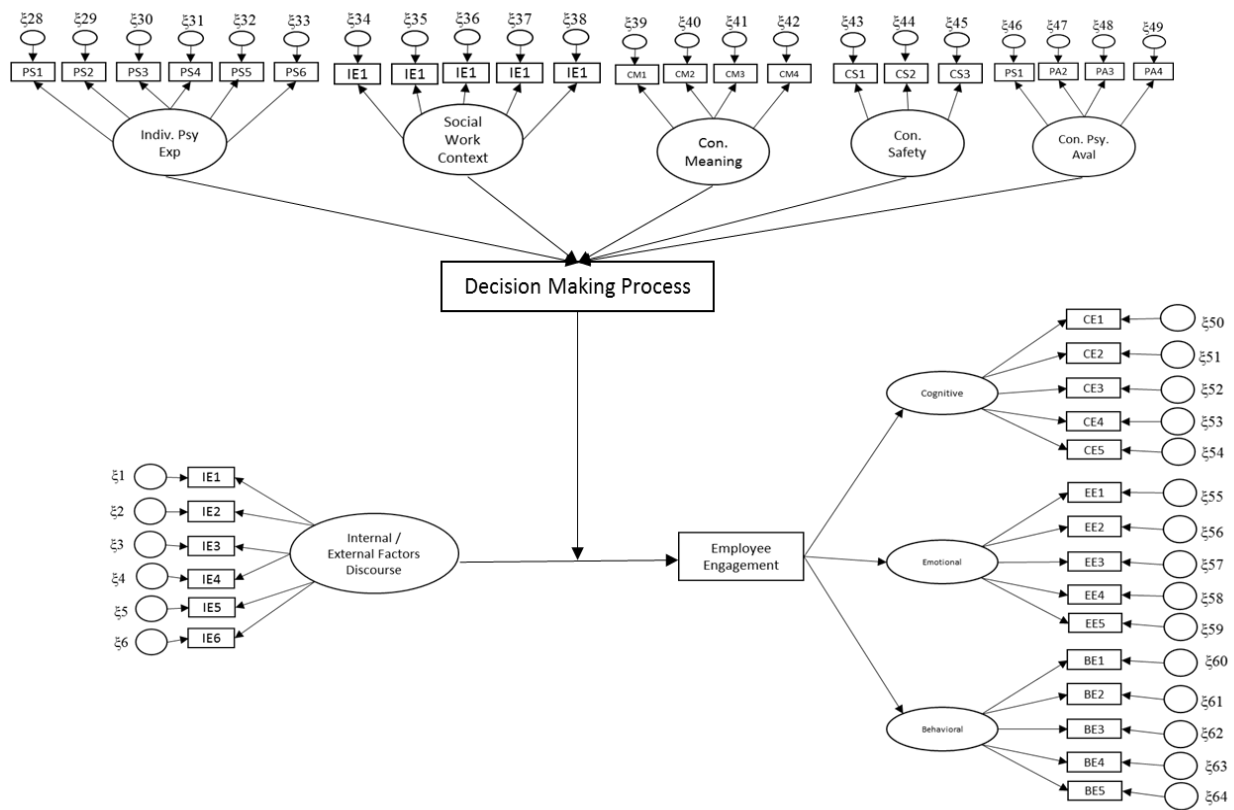
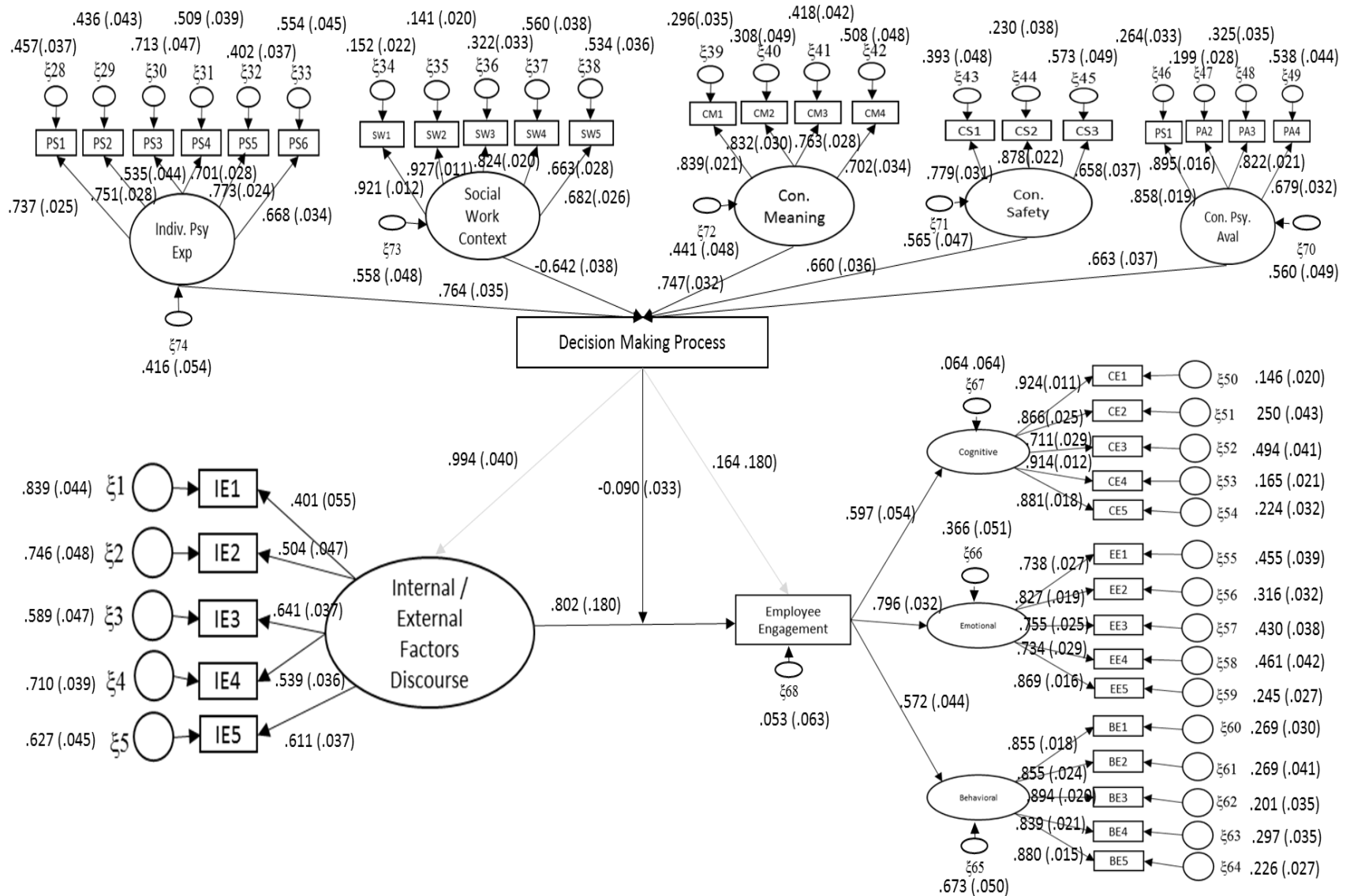


Figure 4.15 Internal/External Factors Discourse, Employee Engagement, and Moderation Effects of Decision Making Process



Leader/Manager Discourse.

The *leader/manager discourse* structural equation model (Figure 4.16) was examined with the inclusion of the moderation higher order factor of the *decision making process* to examine if 1) there were any changes in the predictive path models' regression coefficients when the interaction effects are introduced in the model and 2) to examine the interaction estimate and significance of the model. Table 4.28 report AIC and BIC for this model and Table 4.29 parameter estimates and interaction are provided. The *employee engagement* variable when regressed on the *leader/manager discourse* resulted in a significant negative regression coefficient of -0.128, p value 0.023, and an interaction estimate of -0.086 (see Figure 4.17). The regression coefficient decreased significantly from the original predictive path model (see Figure 4.10; .476) implying that the negative interaction effect significantly reduced the levels of employee engagement for this study sample.

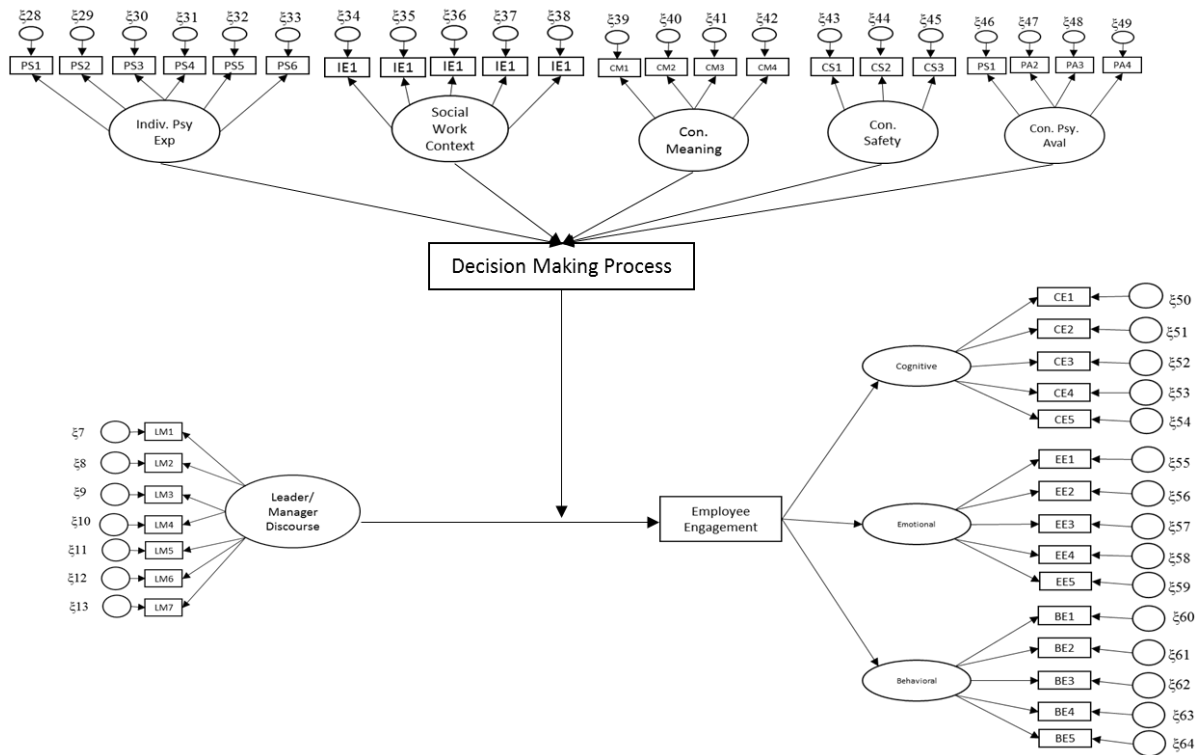
Table 4.28 AIC, BIC Leader/Manager Discourse

AIC	50627.826
BIC	51270.950

Table 4.29 Parameter Estimates and Interaction Standardized – Leader/Manager Discourse

Employee Engagement	Estimate	P Value
Leader / Manager Discourse	-0.128	0.023
Decision Making Process	1.094	0.000
Interaction	-0.086	0.007

Figure 4.16 Moderation Effects Model: Leader/Manager discourse



Job Characteristics Discourse.

The *job characteristics discourse* structural equation model (Figure 4.18) was examined with the inclusion of the moderation higher order factor of the *decision making process* to examine if 1) there were any changes in the predictive path model’s regression coefficients when the interaction effects are introduced in the model and 2) to examine the interaction estimate and significance of the model. Table 4.30 report AIC and BIC for this model and Table 4.31 parameter estimates and interaction are provided. The *employee engagement* variable when regressed on the *job characteristics discourse* resulted in a significant negative regression coefficient of -0.126, p value 0.0186, and an interaction estimate of -0.100 (see Figure 4.19). The regression coefficient decreased significantly from the original predictive path model (see Figure 4.11; .746) implying that the negative interaction effect significantly reduced the levels of employee engagement for this study sample.

Figure 4.17 Leader/Manager Discourse, Employee Engagement, and Moderation Effects of Decision Making Process

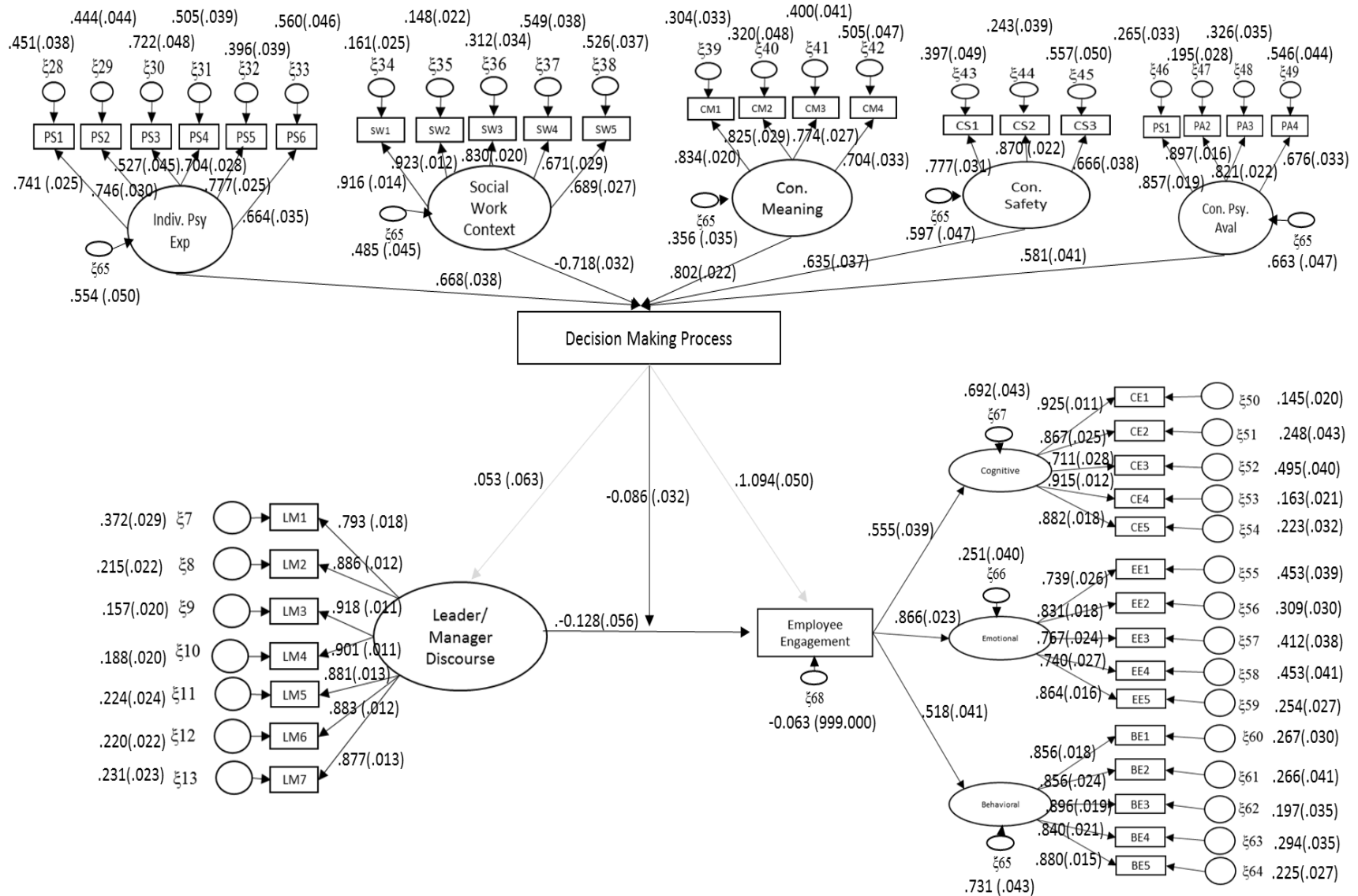


Table 4.30 AIC, BIC, Job Characteristics Discourse

AIC	49056.737
BIC	49673.065

Table 4.31 Parameter Estimates and Interaction Standardized – Job Characteristics Discourse

Employee Engagement	Estimate	P Value
Job Characteristics Discourse	-0.126	0.186
Decision Making Process	1.117	0.000
Interaction	-0.100	0.000

Figure 4.18 Moderation Effects Model: Job Characteristics Discourse

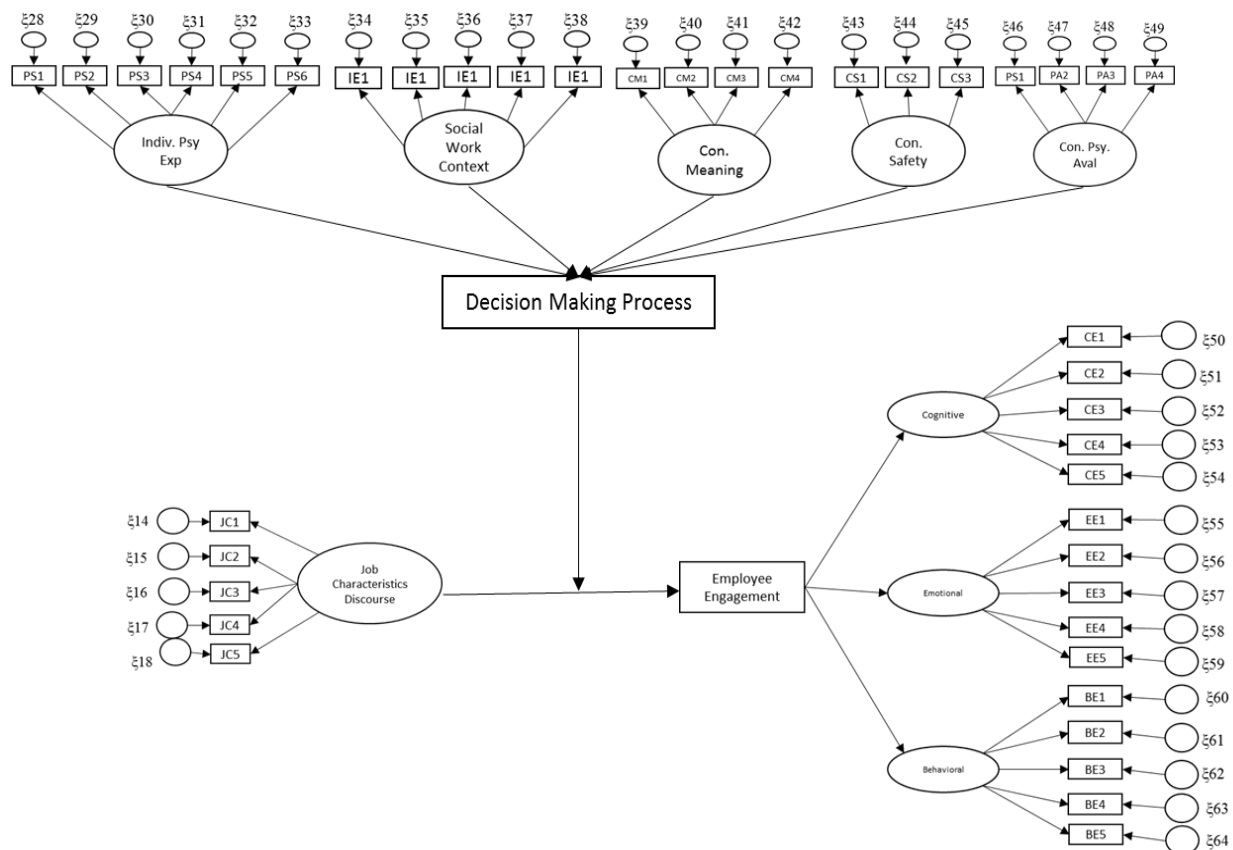
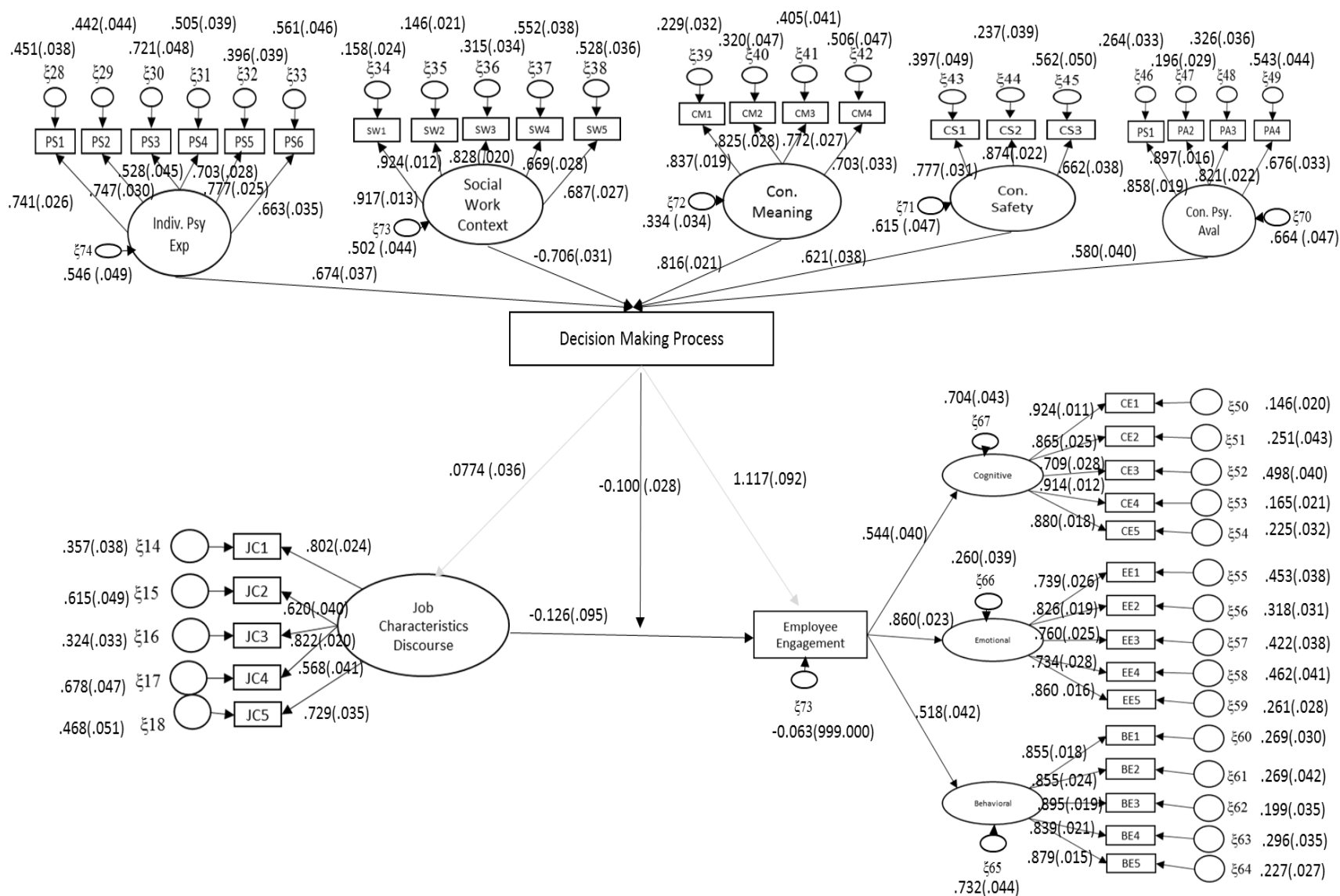


Figure 4.19 Job Characteristics Discourse, Employee Engagement, and Moderation Effects of Decision Making Process



Lower Level Hygiene Factors Discourse.

The *lower level hygiene factors discourse* structural equation model (Figure 4.20) was examined with the inclusion of the moderation higher order factor of the *decision making process* to examine if 1) there were any changes in the predictive path models regression coefficients when the interaction effects are introduced in the model and 2) to examine the interaction estimate and significance of the model. Table 4.32 report AIC and BIC for this model and Table 4.33 parameter estimates and interaction are provided. The *employee engagement* variable when regressed on the *lower level hygiene factors discourse* resulted in a significant negative regression coefficient of -0.568, p value 0.000, and an interaction estimate of -0.150 (see Figure 4.21). The regression coefficient decreased significantly from the original predictive path model (see Figure 4.12; .664) implying that the negative interaction effect significantly reduced the levels of employee engagement for this study sample.

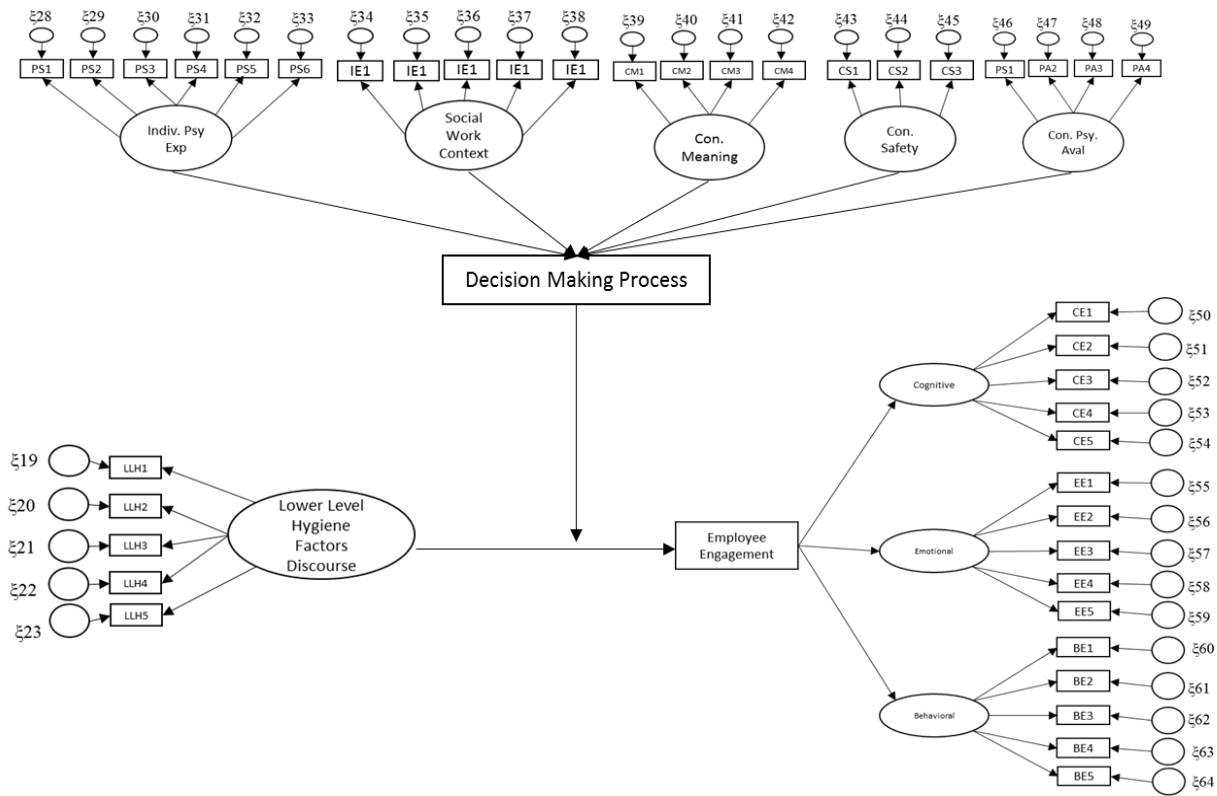
Table 4.32 AIC, BIC, Lower Level Hygiene Factors Discourse

AIC	48775.157
BIC	49391.485

Table 4.33 Parameter Estimates and Interaction Standardized – Lower Level Hygiene Factors Discourse

Employee Engagement	Estimate	P Value
Internal / External Factors Discourse	-0.568	0.000
Decision Making Process	1.466	0.000
Interaction	-0.150	0.000

Figure 4.20 Moderation Effects Model: Lower Level Hygiene Factors Discourse



Higher Order Factors Discourse.

The *higher order factors discourse* structural equation model (Figure 4.22) was examined with the inclusion of the moderation higher order factor of the *decision making process* to examine if 1) there were any changes in the predictive path model’s regression coefficients when the interaction effects are introduced in the model and 2) to examine the interaction estimate and significance of the model. Table 4.34 report AIC and BIC for this model and Table 4.35 parameter estimates and interaction are provided. The *employee engagement* variable when regressed on the *higher order factors discourse* resulted in a significant negative regression coefficient of -0.030, p value 0.0138, and an interaction estimate of -0.126 (see Figure 4.23). The regression coefficient decreased significantly from the original predictive path model (see Figure

4.9; .966) implying that the negative interaction effect significantly reduced the levels of employee engagement for this study sample.

Figure 4.21 Lower Level Hygiene Factors Discourse, Employee Engagement, and Moderation Effects of Decision Making Process

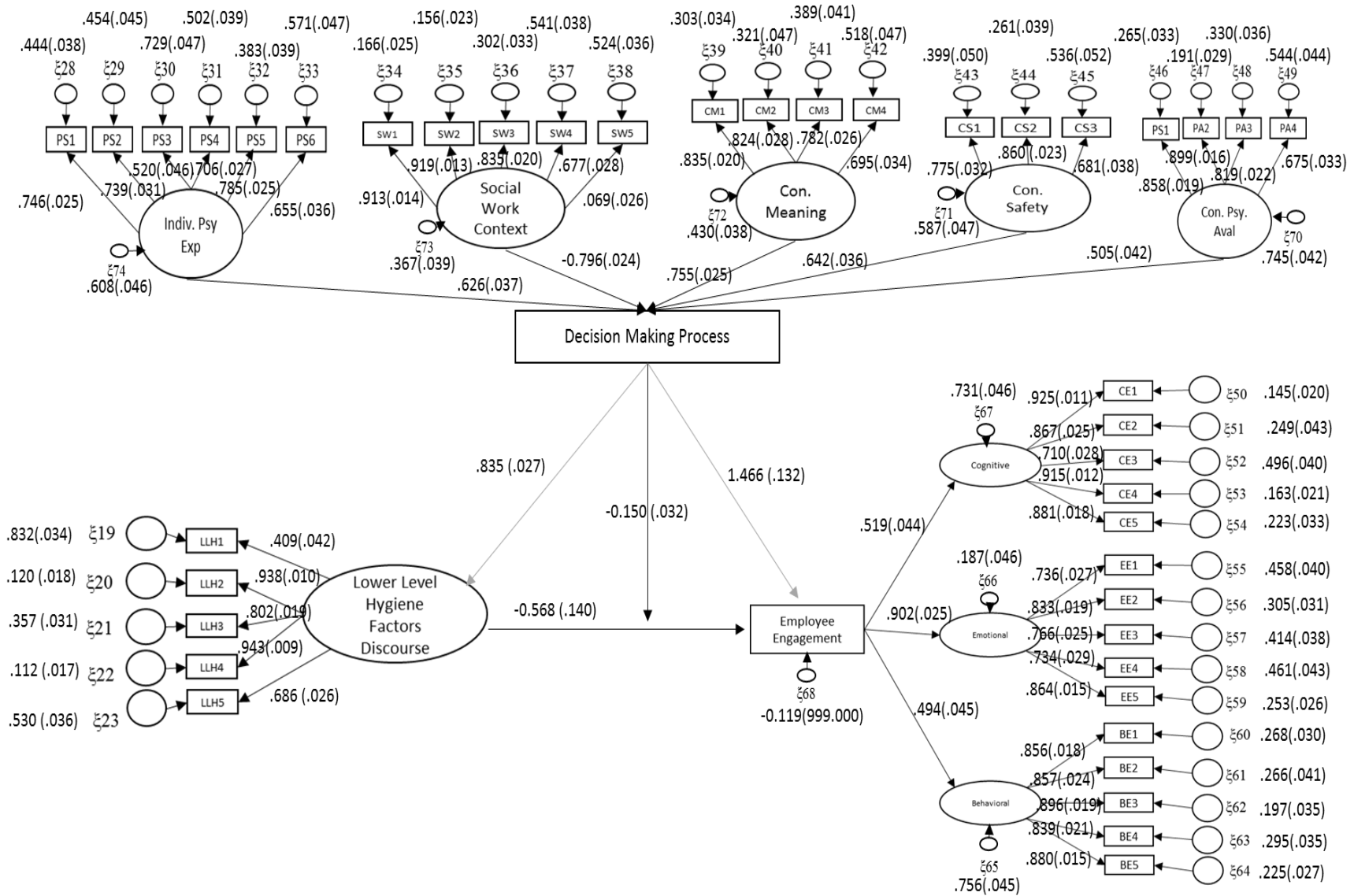


Table 4.34 AIC, BIC, Higher Order Factors Discourse

AIC	45160.177
BIC	45745.242

Table 4.35 Parameter Estimates and Interaction Standardized - Higher Order Factors Discourse

Employee Engagement	Estimate	P Value
Higher Order Factors Discourse	-1.030	0.138
Decision Making Process	1.998	0.004
Interaction	-0.126	0.000

Figure 4.22 Moderation Effects Model: Higher Order Factors Discourse

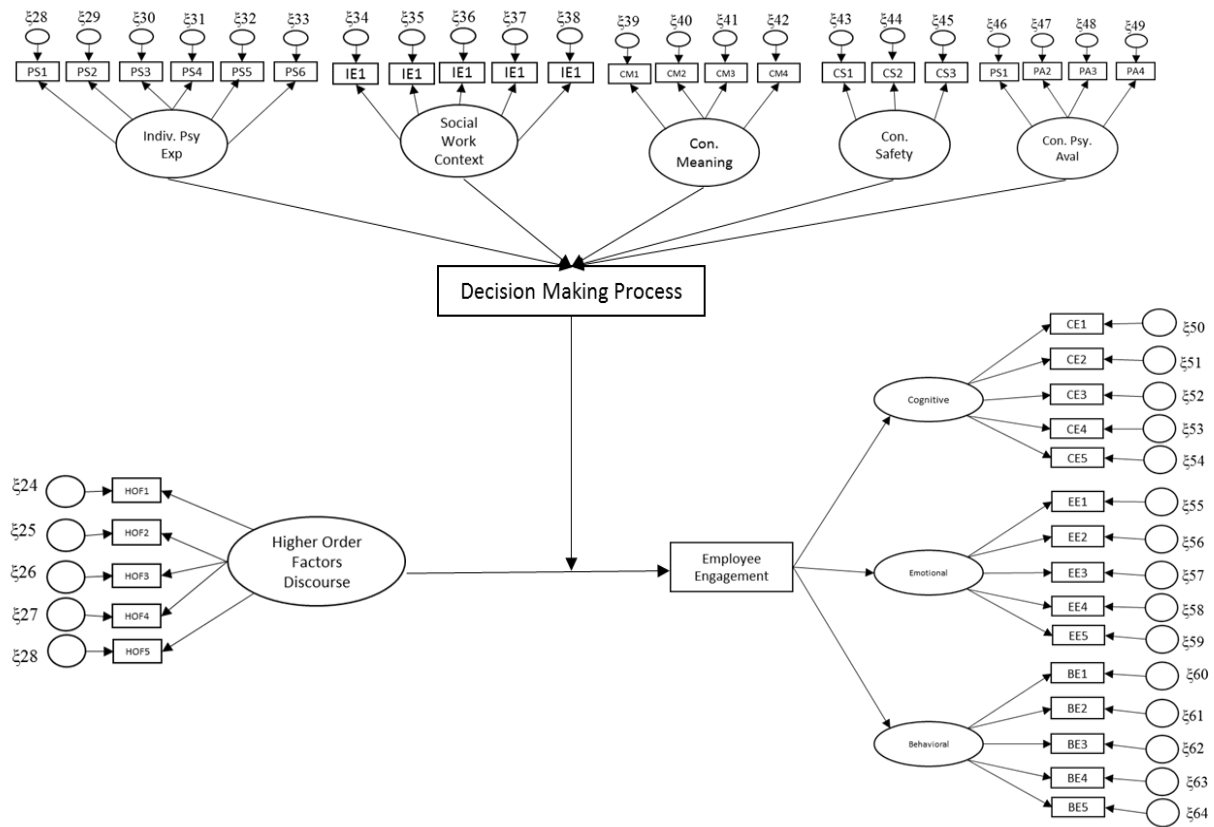
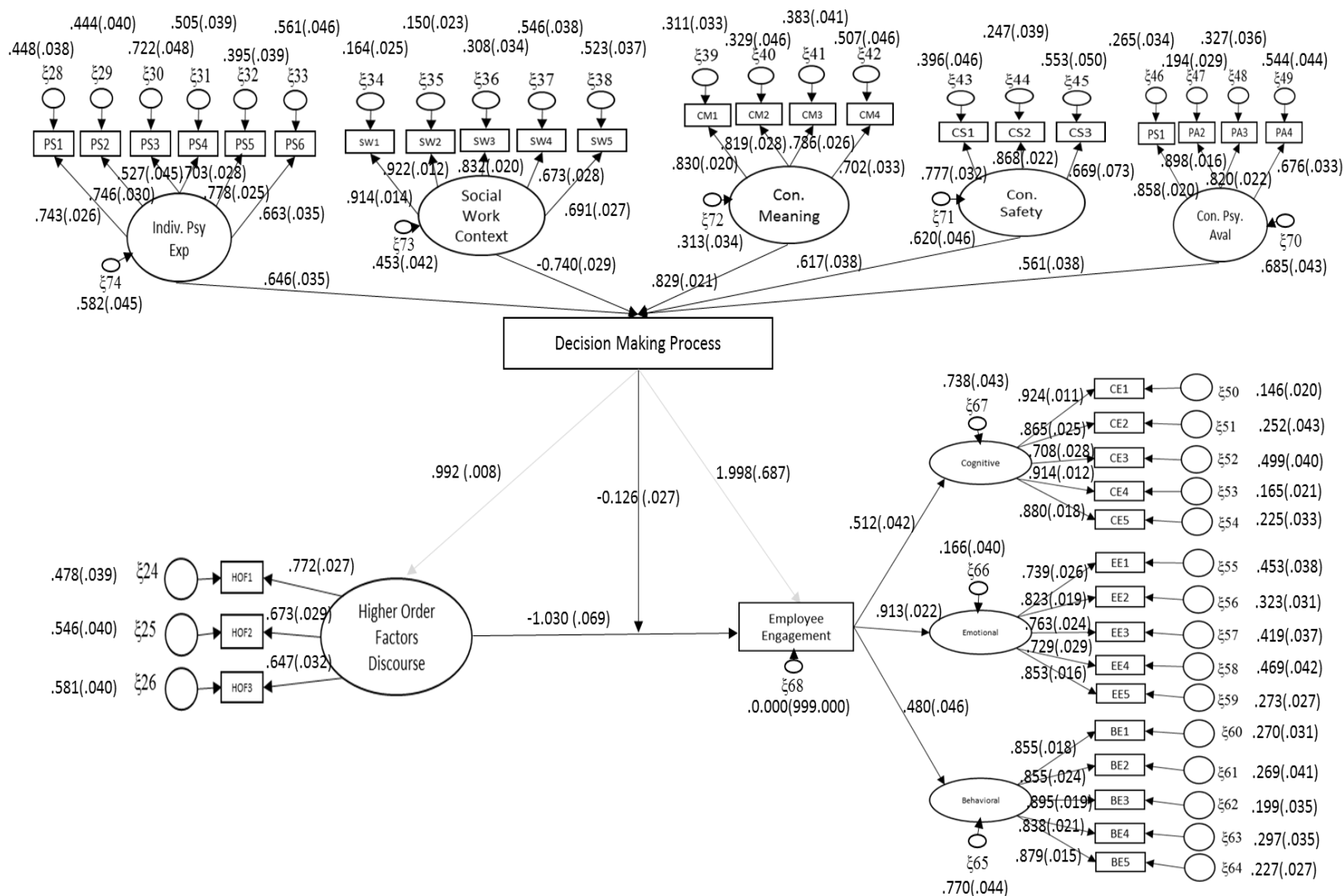


Figure 4.23 Higher Order Factors Discourse, Employee Engagement, and Moderation Effects of Decision Making Process



SEM Model Comparisons

Next, Table 4.36 is provided to compare the estimates of standardized regression coefficients of the predictive path models to the models that include the higher order factor decision making process and the changes in the regression estimate (revised estimate) and the moderation effects.

Table 4.36 Standardized Regression Coefficients: Predictive Model and Moderation Effects

Estimate of Standardized Regression- Predictive Model				Moderation Effects					
				Parameter estimates and interaction		EE <---DMP		Interaction	
	Estimate	S.E	P	Revised Estimate	P	Estimate	P	Estimate	P
EE <--- Internal External Factors Discourse	0.835	0.420	0.000	0.802	0.000	0.164	0.363	-0.090	0.007
EE <--- Leader Manager Discourse	0.476	0.073	0.000	-0.128	0.023	1.094	0.000	-0.086	0.007
EE <--- Job Characteristics Discourse	0.746	0.450	0.000	-0.126	0.186	1.117	0.000	-0.100	0.000
EE <--- Lower Level Hygiene Factors Discourse	0.664	0.031	0.000	-0.568	0.000	1.466	0.000	-0.150	0.000
EE <--- Higher Order Factors Discourse	0.966	0.029	0.000	-1.030	0.138	1.998	0.004	-0.126	0.000

Summary

Results from CFA, estimates of reliability and validity, correlation analysis, and SEM provide a good deal of information about the relationships between factor variables being examined in this study. A more in-depth discussion of study results, implications for HRD research and practice, limitations of the study, recommendations, and directives for future research will be discussed in Chapter V.

CHAPTER V

OVERVIEW, DISCUSSIONS, IMPLICATIONS, AND RECOMMENDATIONS

This chapter will unfold in the following manner, first I will summarize the study, then a discussion section will be included, implications for HRD research, theory, and practice will then be discussed. Finally, limitations, recommendations and directives for future research will be addressed. The purpose of this study was to examine the framework of the Employee Engagement Process model by first examining the relationship between employee engagement antecedent's discourses and employee engagement and then look at the moderating affects that the decision making process may have on their relationship. The research questions that guided this study were, 1.) What is the relationship between antecedent factors and employee engagement? 2.) How does the employee decision making process moderate the relationship between the antecedent factors and employee engagement?

Summary of the Study

Variables included in this study (see Figure 3.1, Triad Study Model expanded) were, antecedents: internal/external discourse, leadership/manager discourse, job characteristics discourse, lower level hygiene factors discourse, and higher order factors discourse. Variables used to measure the decision making process were: individual psychological experiences, social work contexts, and contextual - safety, meaningfulness, and psychological availability. Variables used to measure employee engagement were, cognitive engagement, emotional engagement, and finally behavioral engagement.

An electronic survey was utilized to collect data from faculty, staff, and administrative personnel at a local community college district. 643 respondents completed the survey out of 2,303, with a response rate of 28%.

SEM analysis was included to examine if the theoretical hypothesized model is supported by the data. The hypothesized model was complex in its original form; therefore, the model was broken down into models by antecedent discourse, and this was beneficial for two reasons. First, it would certainly avoid issues with multicollinearity that may arise (see Table 4.20 bivariate correlations, and Table 4.16 correlation matrix for antecedent discourses). Second, it would allow for the ability to run two types of models for each of the antecedent discourses (*internal/external discourse, leader/manager discourse, job characteristics discourse, lower level hygiene factors discourse, and higher order factors discourse*), a predicative path model and then a moderation model.

First, the hypothesized model was examined utilizing SEM to establish model fit (see Figure 4.4 hypothesized model of the employee engagement process). The first model examined was *internal/external discourse* and employee engagement. The *internal/external discourse* model resulted in a relative Chi-square ($cmin/df, 501.872/166 = 3.02, p = .000$) and the model was sufficiently supported by the empirical data collected for this research. Additional model fit indices reported include, CFI (CFI = 0.940) which exhibited traditional fit ($>.90$, Hu & Bentler, 1999). RMSEA resulted in moderate fit (RMSEA = 0.056, threshold of .05 - .10 moderate fit, Hu & Bentler, 1999) and SRMR was found to be under the threshold for good model fit (SRMR = 0.059, threshold of $<.09$, Hu & Bentler, 1999). The predictive path model resulted in a statistically significant positive regression coefficient of 0.835, meaning that *internal/external factors discourse* is a good predictor of employee engagement. When the moderation effects of the decision making process was introduced, the model produced a statistically significant reduced regression coefficient of 0.802 and a statistically significant negative interaction effect of -0.090.

The second model examined was *leader/manager discourse* and employee engagement. The *leader/manager discourse* model resulted in a permissible chi-square (cmin/df, 1187.971/341 = 3.78, $p = .000$), and the model was sufficiently supported by the empirical data collected for this research. Additional model fit indices reported include, CFI (CFI = 0.902) which exhibited traditional fit ($>.90$, Hu & Bentler, 1999). RMSEA resulted in moderate fit (RMSEA = 0.066, threshold of .05 - .10 moderate fit, Hu & Bentler, 1999) and SRMR was found to be under the threshold of good model fit (SRMR = 0.067, threshold of $<.09$, Hu & Bentler, 1999). The predictive path model resulted in a statistically significant positive regression coefficient of 0.476, meaning that the leader/ manager discourse is a good predictor of employee engagement. When the moderation effects of the decision making process were introduced, the model produced a statistically significant reduced negative regression coefficient of -0.128 and a statistically significant negative interaction effect of -0.086.

The third model examined was *job characteristics discourse* and employee engagement. The *job characteristics discourse* model resulted in a permissible Chi-square (cmin/df, 667.179/179 = 4.019, $p = .000$), and the model was sufficiently supported by the empirical data collected for this research. Additional model fit indices reported include, CFI (CFI = 0.918) which exhibited traditional fit ($>.90$, Hu & Bentler, 1999). RMSEA resulted in moderate fit (RMSEA = 0.069, threshold of .05 - .10 moderate fit, Hu & Bentler, 1999) and SRMR was found to be under the threshold of good model fit (SRMR = 0.076, threshold of $<.09$, Hu & Bentler, 1999). The predictive path model resulted in a statistically significant positive regression coefficient of 0.746, meaning that job characteristics discourse is a good predictor of employee engagement. When the moderation effects of the decision making process was introduced, the model produced a reduction and negative regression coefficient of -0.126 which was not

statistically significant ($p=0.186$) and a statistically significant negative interaction effect of -0.100.

The fourth model examined was *lower level hygiene factors discourse* and employee engagement. The *lower level hygiene factors discourse* model resulted in a permissible Chi-square ($cmin/df, 565.808/166 = 3.408, p = .000$), and the model was sufficiently supported by the empirical data collected for this research. Additional model fit indices reported include, CFI (CFI = 0.939) which exhibited traditional fit ($>.90$, Hu & Bentler, 1999). RMSEA resulted in moderate fit (RMSEA = 0.061, threshold of .05 - .10 moderate fit, Hu & Bentler, 1999) and SRMR was found to be slightly above the threshold of good model fit (SRMR = 0.098, threshold of $<.09$, Hu & Bentler, 1999). The predictive path model resulted in a statistically significant positive regression coefficient of 0.664, meaning that lower level hygiene factors discourse is a good predictor of employee engagement. When the moderation effects of the decision making process was introduced, the model produced a reduction and negative regression coefficient of -0.568 which was statistically significant ($p=0.000$) and a statistically significant negative interaction effect of -0.150.

The last model examined was *higher order factors discourse* and employee engagement. The *higher order factors discourse* model resulted in a permissible Chi-square ($cmin/df, 512.873/131 = 3.915, p = .000$), and the model was sufficiently supported by the empirical data collected for this research. Additional model fit indices reported include, CFI (CFI = 0.927) exhibited great model fit ($>.90$, Hu & Bentler, 1999). RMSEA resulted in moderate fit (RMSEA = 0.067, threshold of .05 - .10 moderate fit, Hu & Bentler, 1999) and SRMR was found to be slightly above the threshold of good model fit (SRMR = 0.095, threshold of $<.09$, Hu & Bentler, 1999). Findings have been stable and consistent throughout all statistical tests utilized for this

research study. The predictive path model resulted in a statistically significant positive regression coefficient of 0.966, meaning that job characteristics discourse is a good predictor of employee engagement. When the moderation effects of the decision making process was introduced, the model produced a negative regression coefficient of -1.030 which was not statistically significant ($p=0.138$) and a statistically significant negative interaction effect of -0.126.

Discussion

In this section results are discussed and compared with the literature. Before continuing with the discussion, I would like to mention that the hypothesized conceptual model of the Employee Engagement Process utilized for this study was a large and extremely complex model in its original form. Therefore, I was forced to simplify the model because MPlus would not run the entire model as hypothesized due to its complexity. Consequently, I broke it down into smaller less complex sub-models by antecedent discourses to examine predictive paths and then inclusion of the moderation effect for each model. This simplification of the model did not negate or take away the original intention of the hypothesized model, it was simplified for ease of obtaining results utilizing structural equation modeling. Furthermore, this simplification of model structure provided five smaller complex sub-models from which to examine each antecedent discourse and its relationship with employee engagement (predictive path models), and then later the moderation effects of the decision making process was applied (moderation models). The hypothesized theoretical models and structural relationships were tested and supported by the empirical data from the study sample.

Research Questions.

This section will discuss study findings in terms of the research questions that guided this research study. Findings for the first research question were provided for by the predictive path

models for each of the five antecedent discourses (*internal/external discourse, leader/manager discourse, job characteristics discourse, lower level hygiene factors discourse, and higher order factors discourse*).

Research Question 1.

1) What is the relationship between antecedent factors and employee engagement?

From the review of literature for this research study, 52 antecedents to employee engagement were discovered. From the long list of antecedents, five major discourses emerged. Since this is the first-time antecedent discourses have been measured, no empirical evidence was available to determine if the antecedent factors of *internal/external discourse, leader/manager discourse, job characteristics discourse, lower level hygiene factors discourse, and higher order factors discourse* would be predictors of the higher order factor of employee engagement. This concept is new to current research and the assumption was that the antecedent factors would predict employee engagement.

To answer the presented research question, structural equation modeling- predictive path models were utilized to examine if the sub-models of antecedent discourses would indeed predict employee engagement. Significant paths were found to be in line with the sub-models being supported by the empirical data collected for this study. Structural equation modeling, a comprehensive statistical approach, was used to examine predictive paths between antecedent discourse variables of *internal/external discourse, leader/manager discourse, job characteristics discourse, lower level hygiene factors discourse, higher order factors discourse* and *employee engagement*. Robust maximum likelihood estimation for model estimation was implemented in all SEM models.

Internal/external discourse was found to be a direct predictor of *employee engagement* ($\beta = .835, p < .001$). *Leader/manager discourse* was found to be a predictor of *employee engagement* ($\beta = .476, p < .001$). *Job characteristics discourse* was found to be a predictor of *employee engagement* ($\beta = .746, p < .001$). *Lower level hygiene factors discourse* was also found to be a predictor of *employee engagement* ($\beta = .664, p < .001$). Finally, *higher order factors discourse* was also found to be a predictor of *employee engagement* ($\beta = .966, p < .001$).

All five antecedent discourse predictive path models resulted in being good predictors of employee engagement. These findings make a significant contribution to HRD practitioners and allows for a streamlining in assessing an organization to select the appropriate antecedent discourse that may be used to tailor a training program or event for an organization with the expectation of increasing employee engagement. Since, this was the first-time using the antecedent discourses, created for this study, as predictors of employee engagement, these findings are significance and are a huge step in the right direction in terms of employee engagement research.

Research Question 2.

- 2) How does the employee decision making process moderate the relationship between the antecedent factors and employee engagement?

Since predictive path models for all five antecedent discourses were found to be statistically significant and resulted in positive regression coefficients, the five sub-models were then examined with the inclusion of the moderating variable of the *decision making process*. The inclusion of the *decision making process* resulted in a negative interaction effect ($\beta = -0.090, p < .05$) on the relationship between *internal/external discourse* and *employee engagement*. Furthermore, the regression coefficient between the antecedent discourse *internal/external*

discourse and *employee engagement* was reduced (Predictive path model $\beta = .835$, $p < .01$, moderation model revised predictive path $\beta = .802$, $p < .01$). Next, the inclusion of the *decision making process* resulted in a negative interaction effect ($\beta = -0.086$, $p < .05$) on the relationship between *leader/manager discourse* and *employee engagement*. Furthermore, the regression coefficient between the antecedent discourse *leader/manager discourse* and *employee engagement* was also reduced (Predictive path model $\beta = .476$, $p < .01$, moderation model revised predictive path $\beta = -0.128$, $p < .05$). The inclusion of the *decision making process* resulted in a negative interaction effect ($\beta = -0.100$, $p < .01$) on the relationship between *job characteristics discourse* and *employee engagement*. Furthermore, the regression coefficient between the antecedent discourse *job characteristics discourse* and *employee engagement* was reduced (Predictive path model $\beta = .746$, $p < .01$, moderation model revised predictive path $\beta = -0.126$, $p = 0.186$, non-significant). The inclusion of the *decision making process* resulted in a negative interaction effect ($\beta = -0.150$, $p < .01$) on the relationship between *lower level hygiene factors discourse* and *employee engagement*. Furthermore, the regression coefficient between the antecedent discourse *lower level hygiene factors discourse* and *employee engagement* was reduced (Predictive path model $\beta = .664$, $p < .01$, moderation model revised predictive path $\beta = -0.568$, $p < .01$). Finally, the inclusion of the *decision making process* resulted in a negative interaction effect ($\beta = -0.126$, $p < .01$) on the relationship between *higher order factors discourse* and *employee engagement*. Furthermore, the regression coefficient between the antecedent discourse *higher order factors discourse* and *employee engagement* was reduced (Predictive path model $\beta = .966$, $p < .01$, moderation model revised predictive path $\beta = -1.030$, $p = 0.138$ non-significant).

Interaction effects of the decision making process (individual psychological experiences, social-work contexts, and contextual: meaningfulness, safety, and availability) resulted in significant negative effects on the relationship between antecedent discourses and employee engagement. Hoyle (1995) argued that “if the research methods and design that generate the data favor a causal inference, then such an inference can be made” (p. 175).

All five interaction effects (see Table 4.36) were negative and resulted in a decrease in regression coefficient estimates between the antecedent discourses and employee engagement. This means that even though the antecedent discourses were found to lead to employee engagement, when introducing the decision making process, regression coefficients were significantly reduced. Meaning that the decision making process negatively affected the relationship between all sub-models of antecedent discourses and employee engagement. At this point in time it is difficult without further study to find out which of the variables within the decision making process were the cause of the negative relationships between the antecedent discourses and employee engagement. However, at this point all I can do is speculate. Recall, the conceptual model (see Figure 2.3 Decision making process) utilized for this study highlights the decision making process that employees experience in deciding whether to be engaged or disengaged and is founded on Kahn’s (1999) work on engagement. The model itself if broken in to three main variables: individual, social, and contextual. Individual per Kahn (1999) concerns the person’s individual psychological experiences. As explained by Kahn (1990) this is how a person sees themselves within the context of their work and their work role. Lee (2012) argues that consists a person’s individual core self-evaluations. The second psychological condition that influences behavior according to Kahn (1990) is social. Social or work contexts consists of the persons perceptions of the psychological climate within the social or work context (Lee, 2012) or

the interpretation of the world around them (Shuck and Herd, 2012) and the external sources of influence (Bandura, 1991). The final psychological condition proposed by Kahn (1990) consist of contextual sources; meaningfulness, safety, and availability. Meaningfulness consists of the individual's perceptions of the importance of their work, whereas, safety deals with the workplace safety, and availability consists of the individual's psychological availability to get involved.

One other observation from the findings, which necessitates inclusion is that social work context loaded negatively on every one of the moderation models. Further analysis will be necessary to see which one of the variables or all within the decision making process leads to a negative regression coefficient between the antecedent discourse and employee engagement. However, that is beyond the scope of this study. But I can speculate that based on the decision making process model, I venture to say that positive or negative workplace climate may be the rudimentary cause of the negative effect of the decision making process on the relationship between antecedent discourses and employee engagement or disengagement.

One thing we can say for sure is that the decision making process can moderate the relationship between the antecedent discourses and employee engagement and these findings were aligned with anticipations or results from earlier research and serves to provide empirical evidence that the employees experiences of "ebbs and flows" and "pushes and pulls" (Kahn, 1990) are very dependent on what goes on in terms of the decision making process. Kahn (1990) termed it as "calibrations of self-in-role, enabling them to cope with both internal ambivalences and external conditions" (p. 694). Shuck (2012) alluded to an appraisal judgment process based on 'emotions' (Frederickson & Joiner, 2002) which may affect an employee's decision of engagement based on internalization of contextual experiences.

Findings support Schaufeli's (2012) argument that employee's interpretation of situational circumstances influence decisions regarding level of intensity of engagement. This research study provides empirical evidence towards a framework for the Employee Engagement Process model (EPPM) where the decision making process could increase or decrease employee engagement levels, however, the exact nature of the association cannot be demonstrated (Hoyle, 1995) in this study. But, this study does provide evidence that individuals respond to conditions within the DMP and result in varying degrees of employee engagement (Saks, 2006) or disengagement, which until now had only been an assumption (Harter, Schmit & Hayes, 2012; Kahn, 1990; Maslach et al., 2010; Saks 2006; Shuck, Twyford, Reio, & Shuck, 2014).

Findings confirm the theoretical framework that is foundational to this study which consist of Employee Engagement theory (Kahn 1990), Human Capital theory, and Social Exchange theory. No longer can we just measure antecedents and employee engagement without taking into consideration the decision making process. From a HCT and SET approach, organizations investments and training (antecedent factors) can only lead to equity for the organization (employee engagement) if an employee's decision making process through the lens of interpretation of the psychological experiences (social exchange experiences, work contexts, contextual meaningfulness, safety, and availability) of employees is considered. This theoretical framework supports findings for the employee engagement process model (EPPM) proposed in this study.

Until now, every nomological framework of employee engagement (needs satisfaction approach, anti-thesis of burnout approach, satisfaction engagement approach, multi-dimensional approach, employee work passion approach, job demands resources approach, dualistic approach, and the employee focused experience approach) agreed only to the point that the employee

engagement process exists. Because of this, there is currently no widely accepted theory of the employee engagement process and the effects of the decision making process, the current employee engagement process model (EPPM) is foundational in employee engagement research. It provides empirical evidence of the employee's decision making process, which may be foundational in providing a holistic unifying theoretical model for the phenomenon of employee engagement, especially where very little empirical research exists that explains the developmental process of engagement (Chalofsky & Krishna, 2009). Findings from this research support the premise of the employee engagement process, which is grounded in Kahn's (1990) work, and is defined as, the process employees experience when antecedent interventions are introduced into the work context. This process includes a decision making process that includes the individual assessing how they see themselves at work, the context of their work, and how they see themselves in the work role (individual). It also takes into consideration the individuals' perceptions of meaningfulness, safety, and psychological availability (contextual), and the decisions of how to express themselves, employ themselves, or even defend themselves (social) within their work role context which results in the decision about the levels of intensity of engagement they will be willing to exert.

Implications for HRD Research and Theory

This study's findings have several implications for HRD researchers. The following implications emerged from this research study, first this study offers empirical evidence as to the decision making process (psychological assessment) which was an underlying assumption in HRD research on the phenomenon of employee engagement.

Second, this research study supports the use of Employee Engagement theory, Human Capital theory, and Social Exchange theory to explain the phenomenon of the employee

engagement process. Human Capital theory and Social Exchange theory were used to form and support the moderation variable of the decision making process, and Employee Engagement theory was utilized in the formation of the antecedent discourse scales (*internal/external discourse, leader/manager discourse, job characteristics discourse, lower level hygiene factors discourse, and higher order factors discourse*). Findings from this current study indicated that the antecedent discourses may be used to predict employee engagement. Furthermore, the decision making process moderated the relationship between antecedent discourses and employee engagement.

Third, the Employee Engagement Process Model (EPPM) provides a clearer holistic approach of the employee engagement phenomenon, utilizing all the constructs of employee engagement (nomological approaches to employee engagement, antecedent factors of employee engagement, and cognitive engagement, emotional engagement, and behavioral engagement) and provided empirical evidence towards the science of employee engagement and provides a better understanding of the developmental process in which engagement occurs (Chalofsky & Krishna, 2009). Lastly, this research provides empirical data to help begin to fill in the research gap of a unifying theoretical approach to employee engagement.

Implications for Practice

First, this current research study provides empirical evidence as to the Employee Engagement Process model (EPPM) and the effects that the decision making process has on employee engagement results. The EPPM might provide a better understanding as to why employees respond to engagement interventions in varying degrees. HRD practitioners who have a better understanding of the employee engagement process will be better equipped in creating effective and efficient engagement interventions with this knowledge.

Second, the antecedent discourse scales (*internal/external discourse, leader/manager discourse, job characteristics discourse, lower level hygiene factors discourse, and higher order factors discourse*) utilized in this research study provide a starting point to assess company, departmental, and organizational needs in pinpointing employee engagement antecedents that will be effective within their organization.

Lastly, the assessment of individuals, teams, work units, organization units, departmental units, etc. utilizing the decision making process scale (individual psychological experiences, social work context, and contextual: meaningfulness, safety, and availability) will help in assessing for other areas within the organization that have an impact on employee engagement levels (i.e. alienating effect of a social system, see Figure 2.3).

Limitations of the Study

This study offers important findings and implications for research, theory, and practice; however, this research is not without its limitation. First, the sample study came from within the higher education industry, therefore, results may not be generalizable to other industries (Swanson & Holton, 2002). Second, participant self-reported and were voluntary. The study sample may have introduced bias into the study.

Next, this study provides implications for conducting qualitative research on the topics of antecedent discourses, the decision making process, and employee engagement, in doing so, qualitative research may provide the depth of knowledge into the decision making process. Finally, there are implications to conduct this same study in a different setting, perhaps internationally, to validate the findings revealed in this study.

Recommendations and Directives for Future Research

Further research is needed to confirm and extend current research findings on employee engagement. First, as explained earlier, this is the first research study on the employee engagement process model, and the first to introduce the decision making process as it applies to employee engagement, more research is necessary to advance the study of employee engagement especially since until now it has only been an underlying assumption and alluded to by researchers.

Second, examining the Employee Engagement Process model utilizing other means of measurement for employee engagement to compare antecedent discourse and their influence on other types of engagement (task engagement, work engagement, intellectual engagement, job engagement, state/work engagement, general engagement, affective engagement, felt engagement, group/team engagement, social engagement, organization engagement, and cognitive organizational engagement).

Next, the inclusion of outcomes (i.e. organizational commitment, job performance, and job satisfaction) in the model would serve provide the full picture of the Employee Engagement Process Model and would serve to link all the components of the employee engagement construct for the fullness of what the Employee Engagement process model represents would be most beneficial to advancing research, theory, and practice. Additionally, HRD practitioners should explore interpersonal, intergroup, and organizational contexts that can promote or undermine employee engagement.

Lastly, this study was the first to provide a holistic model of the Employee Engagement Process in a comprehensive manner. Further study and the inclusion of directives as explained above would serve to further extend the efficacy of the model presented in this research study.

Instrument validity of the decision making process scale and the discourse scales utilized in this study also need to be further established. Since the decision making process is an emerging research area within the field of HRD, processes are still evolving. More research studies are necessary to establish, construct validity, predictive validity, and convergent and discriminant validity. Furthermore, this study utilized Rasch Rating scale analysis, future research may impose classic test theory to provide for such validity of the survey instrument utilized in this research study.

It is also recommended that researchers implement research in other settings and industries to strengthen the context of inferences made with the study findings. Employee Engagement is a phenomenon that crosses all industries and has no demographical boundaries. A study utilizing the Employee Engagement Process Model in an international setting or a cross-cultural setting would serve to provide for rich data and advance the field of knowledge for both national and international HRD practitioners.

Summary

In Chapter V, the current study was reviewed and a summary was provided. The theorized model of the employee engagement process and related findings were discussed and compared to a review of literature. Findings conclude that predictive path models for internal/external factors discourse, leader manager discourse, job characteristics discourse, lower level hygiene factors discourse, and higher order factors discourse resulted in positive statistically significant regression coefficients, meaning that all five discourses were found to be good predictors of employee engagement. However, when introducing the decision making process as a moderator for all five models of antecedent discourses, the regression coefficient between antecedent discourses and employee engagement resulted in negative direct affects and

statistically significant negative interaction effects. The constructs of the decision making process include, individual psychological experiences, social work context, and contextual (meaningfulness, safety, and availability) are foundational for Kahn's (1999) work on engagement and shed light on the theory of the employee engagement process utilized for this study.

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APPENDIX 1

SURVEY INSTRUMENT

The Employee Engagement Process Survey - Final

Default Question Block

Block Options

Q1

Welcome to the Employee Engagement Process Survey

Informed Consent:

Thank you for participating in this survey. Your feedback is important. Please answer the following questions as honestly as possible. These questions concern the processes of engaging employees.

The purpose of this survey is to help me, the researcher measure the relationship between employee engagement antecedents, and employee engagement, and measure the moderating effects that the decision making process has on this relationship.

I do not anticipate that taking this survey will contain any risk or inconveniences to you. Furthermore, your participation is strictly voluntary and you may withdraw your participation at any time without penalty.

All information collected will be used only for my research and will be kept confidential. There will be no connection to you specifically in the results or in future publication of the results. Once the study is completed, I will be happy to share the results with you, if you desire. In the meantime, if you have any questions please ask or contact:

Marie A. Valentin marie.valentin@tamu.edu or
Dr. Larry Dooley l_dooley@tamu.edu

Additionally, if you have any concerns about your treatment as a participant in this study, please call or write:

Chair, Institutional Review Board for Protection of Human Participants, irb@tamu.edu (979) 458-4067

Although the chairperson may ask your name, all complaints are kept in confidence.

Opening Instructions:

By clicking START SURVEY you are verifying that you have read the explanation of the study, and that you agree to participate. You also understand that your participation in this study is strictly voluntary.

1. The estimated time in completing this survey is approximately 15-20 minutes.
2. Your participation in this study is confidential and your responses are confidential.
3. Please be as candid as possible with your answers, since the information you provide will help us continue to improve research in the employee engagement field.

As a token of my appreciation, I will be offering participants who complete the survey in its entirety a chance to win a \$50. Walmart gift card. A total of 19 gift cards will be available for the drawing.

Please remember to complete the survey through the end without skipping any questions to be entered into a survey completion drawing for a change to win a \$50 gift card from Walmart. You will be prompted at the end of the survey to submit your name and email address to be entered into the drawing.

- START SURVEY

Page Break

Q2

Age: What is your age group? Please make your selection by clicking one of the following options.

- 18-24

- 25-34
- 35-44
- 45-54
- 55-64
- 65-74
- 75 years or older

Q3
Ethnicity origin (or race)
Please specify your ethnicity

- White
- Hispanic or Latino
- Black or African American
- American Indian or Alaska Native
- Asian
- Native Hawaiian or Pacific Islander
- Other

Q4
Marital Status
What is your marital status?

- Married
- Widowed
- Divorced
- Separated
- Never married

Q5
Education: What is the highest degree or level of school you have completed? (if enrolled, highest degree received)

- Less than high school
- High school graduate

- Some college
- 2 year degree
- 4 year degree
- Masters Degree
- Doctorate

Q6
Gender
What is your gender?

- Male
- Female

Q7
Type of employment:

- Employed full time
- Employed part time

Q8
Job level

- Faculty - Adjunct
- Faculty - Full time
- Staff/Professional
- Administrative/Classified personnel
- Other

Q9
Job tenure - How many total years have you carried the same job title that you have now?

- Less than one year
- 1 year to less than 3 years
- 3 years to less than 5 years
- 5 years to less than 10 years
- 10 years to less than 15 years

- 15 years to less than 20 years
- 20 years to less than 25 years
- 25 years to less than 30 years
- 30 years or more than 30 years

Q10

Organization tenure - How long have you been at the current organization

- Less than one year
- 1 year to less than 3 years
- 3 years to less than 5 years
- 5 years to less than 10 years
- 10 years to less than 15 years
- 15 years to less than 20 years
- 20 years to less than 25 years
- 25 years to less than 30 years
- 30 years or more than 30 years

Q11

Please select the institution that you are affiliated with:

- San Antonio College
- St. Phillips College
- Palo Alto College
- Northeast Lakeview College
- Northwest Vista College
- District Office

Page Break

Q12

EMPLOYEE- INTERNAL AND EXTERNAL DISCOURSE: Cognitive effects of an employee's self, such as, emotional fit, optimism, and core self-evaluations.

The following set of statements asks about perceptions that you have about yourself and how you see yourself at work. Please select the best possible option that reflects your level of agreement using the scale provided below.

Please make the best possible selection for each statement provided below:

	Describes me extremely well	Describes me very well	Describes me moderately well	Describes me slightly well	Does not describe me
1. I have a good understanding of the emotions of people around me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I do not have to worry about how people perceive me at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I am enthusiastic about my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. My colleagues make an effort to build rapport with me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I am optimistic about my future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I am confident in who I am as a person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Q13

LEADERSHIP - MANAGER DISCOURSE - Leadership styles and foundation management principals, such as: transformation leadership styles, manager self-efficacy, and manager expectations.

The following set of statements asks about your perceptions of your immediate supervisor. Please consider the best possible selection that most reflects your level of agreement using the scale provided below.

Please make the best possible selection for each statement provided below:

	To a very great extent	To a great extent	To some extent	To a little extent	Not at all
1. I receive enough feedback on my job performance to know how well I am doing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. My immediate supervisor sets realistic expectations for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. My immediate supervisor's expectations are clear to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. My immediate supervisor encourages me to do my best	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. My immediate supervisor has aligned my goals with the vision and mission of the organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. My immediate supervisor is committed to protecting my interests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please make the best possible selection for each statement provided below:

	To a very great extent	To a great extent	To some extent	To a little extent	Not at all
7. My immediate supervisor makes an effort to build rapport with me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Q14

JOB CHARACTERISTICS DISCOURSE - Consists of job role expectations and task expectations, such as: job characteristics, job fit, task challenge, and job demands.

The following set of statements asks about how you feel about your current job role and characteristics. Please select the best possible option that best reflects your level of agreement using the scale provided below.

Please make the best possible selection for each statement provided below:

	Always	Most of the time	About half the time	Sometimes	Never
1. How much variety is there in your job? That is, to what extent does the job require you to do many different things at work, using a variety of your skills and talents?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. My job "fits" how I see myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. My job challenges me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. My job allows me to link my individual goals to the organizational goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. My organization provides me the resources I need to meet the demands in my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Q15

LOWER LEVEL HYGIENE FACTOR DISCOURSE - Lower level hygiene factors that are foundation to employee engagement, such as, perceptions of workplace safety, perceptions of organizational support and workplace climate, and resources.

The following set of statements asks about your perceptions of how you feel about workplace safety and organizational support. Please select the best possible choice that reflects your level of agreement using the scale provided below.

Please make the best possible selection for each statement provided below:

	Always	Most of the time	About half the time	Sometimes	Never
1. I'm not afraid to be myself at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. My organization really cares about my well-being	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please make the best possible selection for each statement provided below:

	Always	Most of the time	About half the time	Sometimes	Never
3. My organization is very supportive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Decisions, policies, and procedures are fairly and consistently applied to all employees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I feel emotionally healthy at the end of my workday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Q16

HIGHER ORDER FACTOR DISCOURSE - Factors that deal with employees' higher order perceptions of intrinsic and extrinsic motivation, such as, use of strength, employee motivation, value congruence, autonomy, and job control.

The following set of statements deals with your perceptions about intrinsic and extrinsic motivation at work. Please select the best possible selection that most reflects your level of agreement using the scale provided below.

Please make the best possible selection for each statement provided below:

	To a very great extent	To a great extent	To some extent	To a little extent	Not at all
1. This organization ensures that my strengths are aligned with my job tasks.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. My job activities are significant to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I think this organization does meaningful work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. A reward or a token of appreciation (e.g. lunch) is very important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Q17

THE DECISION MAKING PROCESS

Individual Psychological Experiences, such as, how an employee sees' themselves at work, how they see their work, how they view the context of their work, and how they see themselves within their work role.

The following set of statements asks about your perceptions about your personal core self-evaluations at work. Please make the best possible selection that most reflects your level of agreement using the scale provided below.

Please make the best possible selection for each statement provided below:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1. I am confident I get the success I deserve in life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Overall, I am satisfied with myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I have no doubts about my competence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please make the best possible selection for each statement provided below:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
4. I determine what will happen in my life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I feel in control of my success in my career	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I am capable of coping with most of my problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q18

SOCIAL -Work Contexts, such as, an employee's interpretations of the work world around them.

The following set of statements asks about your perceptions and opinions about your work climate. Please make the best possible selection which most reflects your level of agreement using the scale provided below.

	To a very great extent	To a great extent	To some extent	To a little extent	Not at all
1. Top management in my organization commit resources to maintain and improve the quality of our work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Top management in my organization have a plan to improve the quality of our work and service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Managers in my organization recognize and appreciate high quality work and service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. People in my work department are adequately trained to handle the introduction of new products and services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I understand the management vision of our organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Q19

Contextual: Meaningfulness, such as, an employee's perceptions of the importance of their work.

The following set of statements asks about your perception of the meaningfulness of your work. Please make the best possible selection that most reflects your level of agreement using the scale provided below.

Please make the best possible selection for each statement provided below:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1. I believe that I am working on projects that matter	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I understand how my work serves the organizations purpose	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I think the organization does meaningful work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I think my work creates positive results	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Q20

Contextual- Safety, such as, an employee’s perceptions of workplace safety for learning and growing.

The following set of statements asks about your perceptions about your work place safety. Please select the best possible selection that most reflects your level of agreement using the scale provided below.

Please make the best possible selection for each statement provided below:

	Describes me extremely well	Describes me very well	Describes me moderately well	Describes me slightly well	Does not describe me
1. I am not afraid to be myself at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I am not afraid to express my opinions at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I do not have to worry about a threatening environment at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Q21

Contextual -Psychological Availability, such as, an employee's perceptions of their individual psychological availability to get involved in their work.

The following set of statements asks about your perceptions about your own abilities at work. Please make the best possible selection that most reflects your level of agreement using the scale provided below.

Please make the best possible selection for each statement provided below:

	Describes me extremely well	Describes me very well	Describes me moderately well	Describes me slightly well	Does not describe me
1. I am confident in my ability to handle competing demands for work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I am confident in my ability to deal with problems that come up at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I am confident in my ability to think clearly at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I am confident in my ability to display the appropriate emotions at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Q22

Employee Engagement: Cognitive Engagement, an employee's appraisal of workplace climate and if there are adequate resources to complete the task at hand.

The following set of statements asks about your perceptions of your personal level of cognitive engagement. Please make the best possible selection that most reflects your level of agreement using the scale provided below.

Please make the best possible selection for each statement provided below:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Somewhat disagree
1. I am really focused on my job when I am working	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please make the best possible selection for each statement provided below:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Somewhat disagree
2. I concentrate on my job when I am at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. When working, I think a lot about how I can give my best	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. At work, I am focused on my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. When I am at work, I give my job a lot of attention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q23

Emotional Engagement, such as, an employee's feelings of involvement with their work.

The following set of statements asks about your perceptions about your level of emotional engagement at work. Please select the best possible selection that most reflects your level of agreement using the scale provided below.

se make the best

	Strongly agree	Agree	Neither agree not disagree	Disagree	Strongly disagree
1. Working at my current organization has a great deal of personal meaning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I feel a strong sense of belonging to my organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I am proud to tell others that I work for my organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I believe in the mission and purpose of my organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I care about the future of my organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Q24

Behavioral Engagement, such as, a natural reaction to a positive cognitive appraisal and a willingness to invest personal resources. A physical manifestation of cognitive and emotional engagement, what we actually see employees do at work.

The following set of statements asks about how you are willing to express yourself behaviorally at work. Please make the best possible selection that most reflects your level of agreement using the scale provided below.

Please make the best possible selection for each statement provided below:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1. I do more than is expected of me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please make the best possible selection for each statement provided below:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
2. I really push myself to work beyond what is expected of me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I am willing to put in extra effort without being asked	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I often go above what is expected of me to help my team be successful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I work harder than expected to help my company be successful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Q30
Can you please share any suggestions about how employee engagement can be improved within your institution?

Thank you for completing the survey! Your participation is greatly appreciated.

APPENDIX 2

IRB SUBMISSION

DIVISION OF RESEARCH



DATE: August 11, 2016

MEMORANDUM

TO: Larry Dooley
TAMU - College Of Education & Human Dev - Educational Adm & Human Resource Develop

FROM: Dr. James Fluckey
Chair, TAMU IRB

SUBJECT: Expedited Approval

Study Number: IRB2016-0333D

Title: Exploring the Antecedents and Outcomes of Employee Engagement: Towards a framework of the employee engagement process, an HRD perspective

Date of

Determination:

Approval Date: 08/11/2016

Continuing

Review Due: 07/01/2017

Expiration Date: 08/01/2017

Documents Reviewed and Approved: Only IRB-stamped approved versions of study materials (e.g., consent forms, recruitment materials, and questionnaires) can be distributed to human participants. Please log into iRIS to download the stamped, approved version of all study materials. If you are unable to locate the stamped version in iRIS, please contact the iRIS Support Team at 979.845.4969 or the IRB liaison assigned to your area.

Submission Components			
Study Document			
Title	Version Number	Version Date	Outcome
A REVISED Traditional format proposal M Valentin - 3-2016	Version 2.1	05/09/2016	Approved
IRB submission to Alamo Colleges	Version 1.0	07/13/2016	Approved
IRB submission to Alamo Colleges	Version 1.0	07/13/2016	Approved
EEPS Dissertation -All discourses Survey draft 6-15-2016	Version 2.0	07/13/2016	Approved
Information sheet	Version 1.0	05/13/2016	Approved
Survey	Version 2.0	05/13/2016	Approved
Appendix 3 Invitation letter 2	Version 2.0	05/13/2016	Approved

Document of Consent: Waiver approved under 45 CFR 46.117 (c) 1 or 2/ 21 CFR 56.109 (c)1

Provisions: Please note that no data collection may occur until IRB approval has been obtained from participating colleges; documentation must be provided to the

750 Agronomy Road, Suite 2701
1186 TAMU
College Station, TX 77843-1186
Tel. 979.458.1467 Fax. 979.862.3176
<http://rcb.tamu.edu>

TAMU IRB.

- Comments:**
- This IRB study application has been reviewed and approved by the IRB. Research may begin on the approval date stated above.
 - Research is to be conducted according to the study application approved by the IRB prior to implementation.
 - Any future correspondence should include the IRB study number and the study title.

Investigators assume the following responsibilities:

1. **Continuing Review:** The study must be renewed by the expiration date in order to continue with the research. A Continuing Review application along with required documents must be submitted by the continuing review deadline. Failure to do so may result in processing delays, study expiration, and/or loss of funding.
2. **Completion Report:** Upon completion of the research study (including data collection and analysis), a Completion Report must be submitted to the IRB.
3. **Unanticipated Problems and Adverse Events:** Unanticipated problems and adverse events must be reported to the IRB immediately.
4. **Reports of Potential Non-compliance:** Potential non-compliance, including deviations from protocol and violations, must be reported to the IRB office immediately.
5. **Amendments:** Changes to the protocol and/or study documents must be requested by submitting an Amendment to the IRB for review. The Amendment must be approved by the IRB before being implemented.
6. **Consent Forms:** When using a consent form or information sheet, the IRB stamped approved version must be used. Please log into iRIS to download the stamped approved version of the consenting instruments. If you are unable to locate the stamped version in iRIS, please contact the iRIS Support Team at 979.845.4969 or the IRB liaison assigned to your area. Human participants are to receive a copy of the consent document, if appropriate.
7. **Post Approval Monitoring:** Expedited and full board studies may be subject to post approval monitoring. During the life of the study, please review and document study progress using the PI self-assessment found on the RCB website as a method of preparation for the potential review. Investigators are responsible for maintaining complete and accurate study records and making them available for post approval monitoring. Investigators are encouraged to request a pre-initiation site visit with the Post Approval Monitor. These visits are designed to help ensure that all necessary documents are approved and in order prior to initiating the study and to help investigators maintain compliance.
8. **Recruitment:** All approved recruitment materials will be stamped electronically by the HRPP staff and available for download from iRIS. These IRB-stamped approved documents from iRIS must be used for recruitment. For materials that are distributed to potential participants electronically and for which you can only feasibly use the approved text rather than the stamped document, the study's IRB Study Number, approval date, and expiration dates must be included in the following format: TAMU IRB#20XX-XXXX Approved: XX/XX/XXXX Expiration Date: XX/XX/XXXX.
9. **FERPA and PPRA:** Investigators conducting research with students must have appropriate approvals from the FERPA administrator at the institution where the research will be conducted in accordance with the Family Education Rights and Privacy Act (FERPA). The Protection of Pupil Rights Amendment (PPRA) protects the rights of parents in students ensuring that written parental consent is required for participation in surveys, analysis, or evaluation that ask questions falling into categories of protected information.
10. **Food:** Any use of food in the conduct of human research must follow Texas A&M University Standard Administrative Procedure 24.01.01.M4.02.
11. **Payments:** Any use of payments to human research participants must follow Texas A&M University Standard Administrative Procedure 21.01.99.M0.03.
12. **Records Retention:** Federal Regulations require records be retained for at least 3 years. Records of a study that collects protected health information are required to be retained for at least 6 years. Some sponsors require extended records retention. Texas A&M University rule 15.99.03.M1.03 Responsible Stewardship of Research Data requires that research records be retained on Texas A&M property.

APPENDIX 3 LETTER OF INVITATION

APPENDIX 3

Letter of Invitation

Study Title: Exploring the Antecedents and Outcomes of employee engagement: Towards a framework of the employee engagement Process, an HRD perspective.

Dear _____,

My name is Marie A. Valentin. I am a doctoral candidate in the Department of Education and Human Development at Texas A&M University in College Station. I am conducting a research study as part of the requirements for my Doctoral degree in Human Resource Development, and I would like to invite you to participate.

I am studying the constructs of employee engagement to examine the employee engagement process. In particular, I am researching the antecedents, decision process, and outcomes of the employee engagement process.

If you decide to participate, you will be asked to complete an online survey that will take between one hour to an hour and a half of your time. In particular, you will be asked questions that pertain to your personal experiences in a work setting with regards to intrinsic and extrinsic motivation, and the type of engaging activities you have been involved with and your perceptions of the outcomes of these activities.

Your participation consists of no known risks either physical, psychological, social or economic. Although you probably won't directly benefit from participating in this study (no monetary compensation), we hope that our research findings will benefit HRD practitioners in general.

Participation is confidential and study information will be kept in a secure location at Texas A&M University. Furthermore, this study provides for participant anonymity, which means that the data collected from participants will not be linked to any one participant's identity. The results of the study may be published or presented at professional meetings.

You are not obligated to participate and there will be no negative consequences if you withdraw. I will be happy to answer any questions that you may have. Please feel free to contact me by telephone at 210-269-8715, or by email at marie.valentin@tamu.edu.

For questions about your rights as a research participant, to provide input regarding research, or if you have questions, complaints, or concerns about the research, you may call the Texas A&M University Human Subjects Protection Program office by phone at 1-979-458-4067, toll free at 1-855-795-8636, or by email at irb@tamu.edu.

Thank you for your consideration. If you would like to participate please click on the link below and begin the online survey.

With Kind Regards,
Marie A. Valentin
210-269-8715
Marie.valentin@tamu.edu



IRB NUMBER: IRB2016-0333D
IRB APPROVAL DATE: 08/11/2016
IRB EXPIRATION DATE: 08/01/2017

APPENDIX 4

INVITATION EMAIL TO PARTICIPANTS

Good Morning,

My name is Marie A. Valentin, I am an adjunct faculty at Palo Alto College, I am currently working on my Ph. D. from Texas A&M University in College Station. I would like to ask for your help with my data collection. I am looking for participants to complete my survey.

Please see the invitation letter attached along with the IRB approvals from both The Alamo Colleges and Texas A&M University.

I appreciate you taking a few minutes of your time to complete this survey in its entirety. As a token of appreciation, I will be offering participants who complete the survey in its entirety a chance to win a \$50. Walmart gift card. A total of 19 gift cards will be available for the drawing.

Please remember to complete the survey through the end without skipping any questions to be entered into the survey completion drawing. You will be prompted at the end of the survey to submit your email address to be entered into the drawing. This information will be kept confidential. Again, thank you for your assistance with this very important research.

CLICK HERE TO TAKE THE SURVEY

https://tamucehd.qualtrics.com/jfe/form/SV_9KQFTDCgvW5Mtbm

Kind Regards,
Marie

Marie A. Valentin, MBA, Ph.D. ABD
Doctoral Candidate - HRD
Education Administration and Human Resource Development
College of Education and Human Development
Texas A&M University
College Station, Texas

210-269-8715
marie.valentin@tamu.edu

2 week reminder

Howdy,

Two weeks ago you were invited to participate in a research study on "Exploring the antecedents and outcomes of employee engagement: Towards a framework of the employee engagement process, an HRD perspective" conducted by Marie A. Valentin, Ph.D. candidate at Texas A&M University and adjunct faculty at Palo Alto College.

This is a second reminder request, if you have already completed the survey, your participation is greatly appreciated. If you have not, please consider doing so at your earliest convenience. This survey will only take about 20 minutes of your time and is anonymous and voluntary. I greatly appreciate your support.

Please feel free to contact me if you have any questions or comments at marie.valentin@tamu.edu or mvalentin5@alamo.edu, or call at 201-269-8715. Thank you for your help with this important study.

Sincerely,
Marie

FINAL REMINDER: Participants needed for dissertation data collection

Howdy,

Four weeks ago you were invited to participate in a research on "Exploring the antecedents and outcomes of employee engagement: Towards a framework of the employee engagement process, an HRD perspective" conducted by Marie A. Valentin, a Ph.D. candidate at Texas A&M University.

This is the final reminder request that you participate in this online survey. The survey is set to close on Wednesday, April 26, 2017 at 5:00 PM. The survey will only take about 10 minutes of your time. Participation is confidential and strictly voluntary. Participants who complete the survey in its entirety may enter their email address in my completion drawing where 19 Walmart gift cards valued at \$50.00 each will be given away.

I greatly appreciate your assistance and support with this and encourage you to participate.

CLICK HERE TO TAKE THE SURVEY

https://tamucehd.qualtrics.com/jfe/form/SV_9KQFTDCgvW5Mtbm

Feel free to contact me if you have any questions or comments at marie.valentin@tamu.edu or mvalentin5@alamo.edu or call me at 210-269-8715. Thank you for your help with this very important study.

Kind Regards,

Marie

APPENDIX 5

TEXAS A&M UNIVERSITY HUMAN SUBJECTS PROTECTION PROGRAM CONSENT INFORMATION SHEET

Project Title: Exploring the Antecedents and Outcomes of Employee Engagement: Towards a framework of the employee engagement process, an HRD perspective

You are invited to take part in a research study being conducted by Marie A. Valentin, a researcher from Texas A&M University in completion of Doctoral requirements. The information in this form is provided to help you decide whether or not to take part. If you decide you do not want to participate, there will be no penalty to you, and you will not lose any benefits you normally would have.

Why Is This Study Being Done?

The purpose of this study is to evaluate the constructs of employee engagement in order to examine the employee engagement process. In particular, I am exploring the relationship between antecedents and employee engagement and the moderating affects that the decision making process may have on the relationship.

Why Am I Being Asked To Be In This Study?

You are being asked to be in this study because you fall within the parameters of being a faculty, professional, and or classified personnel within your institution.

How Many People Will Be Asked To Be In This Study?

500 people (participants) will be invited to participate in this study locally. Overall, a total of 100 people will be invited from each of the five of the Alamo Community Colleges.

What Are the Alternatives to being in this study?

You are given the right to have an alternative to participation, the alternative for this study is simply not to participate with no ramification or penalty what so ever.

What Will I Be Asked To Do In This Study?

You will be asked to complete an online survey at your convenience. Your participation in this study will last up to one hour of your time and includes the full completion of all sections in the online survey.

Are There Any Risks To Me?

The things that you will be doing are no more/greater than risks than you would come across in everyday life.

Are There Any Benefits To Me?

The direct benefit to you by being in this study is help advance the field of research on employee engagement and the employee engagement process.

Will There Be Any Costs To Me?

Aside from your time, there are no costs for taking part in the study.

Will I Be Paid To Be In This Study?

You will not be paid for being in this study .

Will Information From This Study Be Kept Private?

The records of this study will be kept private. No identifiers linking you to this study will be included in any sort of report that might be published. Research records will be stored securely and only Marie A. Valentin will have access to the records.

Information about you will be stored in locked file cabinet; computer files protected with a password.

Information about you will be kept confidential to the extent permitted or required by law. People who have access to your information include the Principal Investigator and research study personnel. Representatives of regulatory agencies such as the Office of Human Research Protections (OHRP) and entities such as the Texas A&M University Human Subjects Protection Program may access your records to make sure the study is being run correctly and that information is collected properly.

The institution(s) where study procedures are being performed (Alamo College District) may also see your information. However, any information that is sent to them will be coded with a number so that they cannot tell who you are.

Information about you and related to this study will be kept confidential to the extent permitted or required by law.

Who may I Contact for More Information?

You may contact the Principal Investigator, Larry Dooley, PhD. to tell him about a concern or complaint about this research at (979)845-5300 or l-dooley@tamu.edu. You may also contact the Protocol Director, Marie A. Valentin at (210) 269-8715 or marie.valentin@tamu.edu.

For questions about your rights as a research participant; or if you have questions, complaints, or concerns about the research, you may call the Texas A&M University Human Subjects Protection Program office at (979) 458-4067 or irb@tamu.edu.

What if I Change My Mind About Participating?

This research is voluntary and you have the choice whether or not to be in this research study. You may decide to not begin or to stop participating at any time. If you choose not to be in this study or stop being in the study, there will be no effect on you.

By participating in completing the survey, you are giving permission for the investigator to use your information for research purposes.

Thank you.

Marie A. Valentin

APPENDIX 6

DESCRIPTION OF MEASUREMENT OF CONSTRUCTS FOR THE STUDY

Discourse	Definition	Dimensions	Items	Recorded Cronbach's Alpha	Source
Individual Employee Internal and External discourse	Cognitive effects of an employee's self	Emotional fit Self-Consciousness Self-Esteem – Self Efficacy Employee connectedness Optimism Core self-evaluation	1. I have a good understanding of the emotions of the people around me 2. I worry about how people perceive me at work 3. I am enthusiastic about my work 4. My colleagues make an effort to build rapport with me 5. I am optimistic about my future 6. I am confident in who I am as a person	Item created for this study $\alpha = 0.83$ $\alpha = 0.72$ $\alpha = 0.94$ Items created for this study	May et al., (2004) Shaufeli, Bakker, and Salanova (2006) Nimon et al., (2011)
Leadership / Manager discourse	Leadership styles and foundational management principles	Feedback Manager expectations Clear expectations Encouragement Mission and vision	1. I receive enough feedback on my job performance to know how well I am doing. 2. My immediate supervisor sets realistic expectations for me 3. My immediate supervisor's expectations are clear to me 4. My immediate supervisor encourages me to do my best 5. My immediate supervisor has aligned my goals with the vision and	$\alpha = 0.94$ Items created for this study $\alpha = 0.95$	Nimon et al., (2011)

		Perceived supervisor support Engaging leaders	mission of the organization 6. My immediate supervisor is committed to protecting my interests 7. My immediate supervisor makes an effort to build rapport with me	$\alpha = 0.95$	May et al., (2004) Nimon et al., (2011)
Job Characteristics discourse	Job role expectations and task expectations	Job characteristics Job Fit Task Challenge Linking indiv. / organizational goals Job demands	1. How much variety is there in your job? That is, to what extent does the job require you to do many different things at work, using a variety of your skills and talents? 2. My job “fits” how I see myself 3. My job challenges me. 4. My job allows me to link my individual goals to the organizational goals. 5. My organization provides me the resources I need to meet the demands in my job.	$\alpha = 0.79$ $\alpha = 0.92$ Items created for this study	Saks (2006) May et al., (2004)
Lower level hygiene factors discourse	Lower level hygiene factors that are foundational to employee engagement	Perceptions of workplace safety Perceived organizational support Supportive organizational culture Distributive justice /fairness	1. I’m not afraid to be myself at work. 2. My organization really cares about my well-being 3. My organization is very supportive 4. Decisions, policies, and procedures are fairly and consistently applied to all.	$\alpha = 0.71$ $\alpha = 0.89$ Items created for this study $\alpha = 0.86$	May et al., (2004) Saks (2006) Nimon et al., (2011)

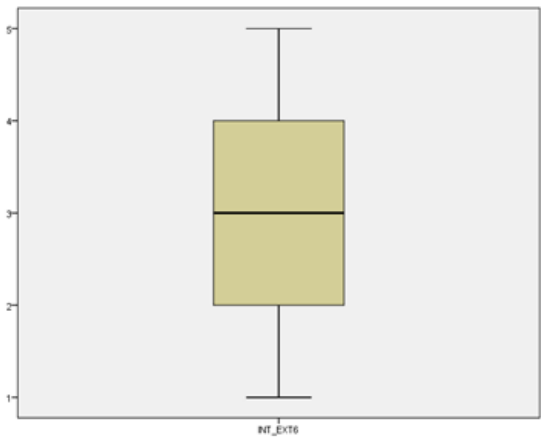
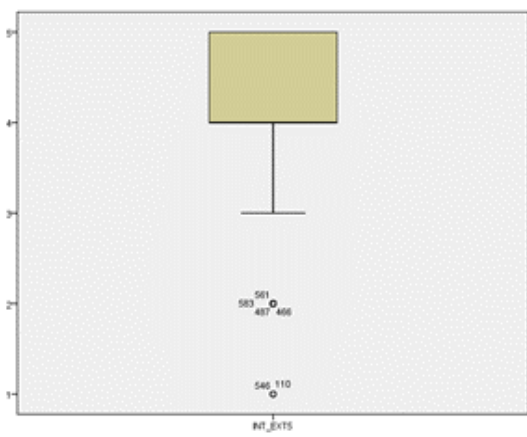
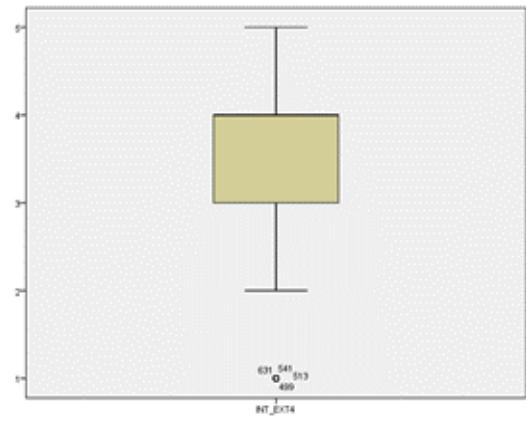
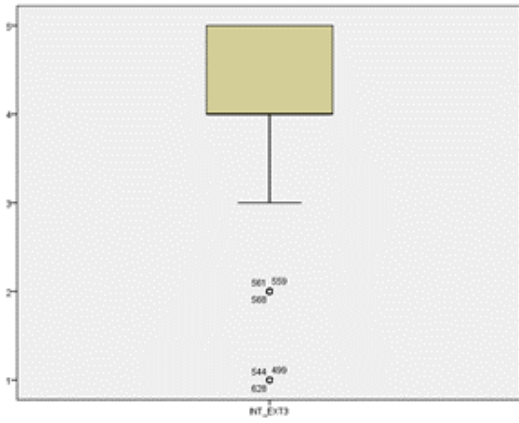
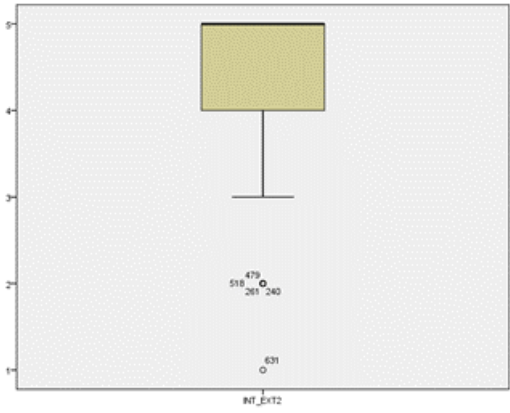
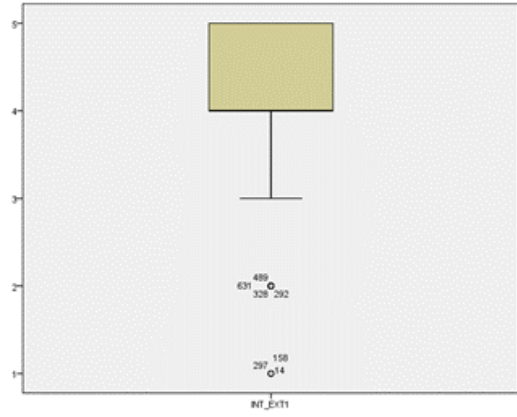
		Job resources	5. I feel emotionally healthy at the end of my workday	$\alpha = 0.91$	May et al., (2004)
Higher order factors discourse	Employees higher order perceptions of intrinsic and extrinsic motivation	Use of strengths	1. This organization ensures that my strengths are aligned with my job tasks	$\alpha = 0.96$	Els, Mostert, Van Woerkom, Rothmann, and Bakker (In Press)
		Involvement in meaningful work	2. My job activities are significant to me	$\alpha = 0.90$	May et al., (2004)
		Meaningful work	3. I think this organization does meaningful work	$\alpha = 0.88$	Nimon et al., (2011)
		Rewards and recognition	4. A reward or a token of appreciation (e.g. lunch) is very important to me.	$\alpha = 0.80$	Saks (2006)
The decision-making process	Perceptions of Psychological climate and how employees express, employ, or defend themselves at work	Social and work context –	1. Top management in my organization commits resources to maintain and improve the quality of our work	$\alpha = 0.93$	Lee (2012)
			2. Top management in my organization have a plan to improve the quality of our work and service		
			3. Managers in my organization recognize and appreciate high quality work and service		
			4. People in my work unit/team/department are adequately trained to handle the introduction of new products and services		
			5. I understand the management vision of our organization		
		Contextual – meaningfulness: meaningful work	1. I believe I am working on projects that matter	$\alpha = 0.88$	Nimon et al., (2011)

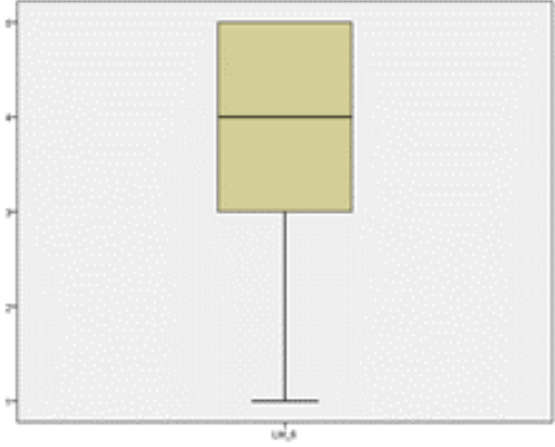
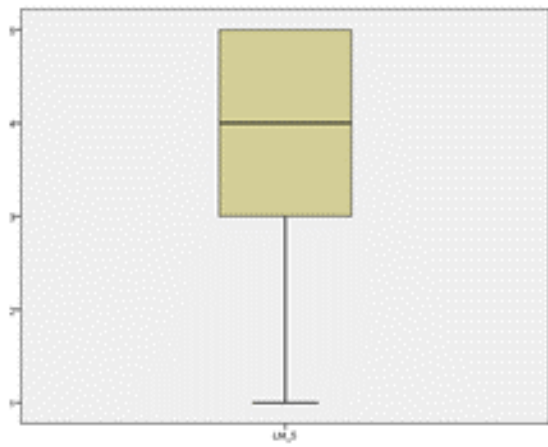
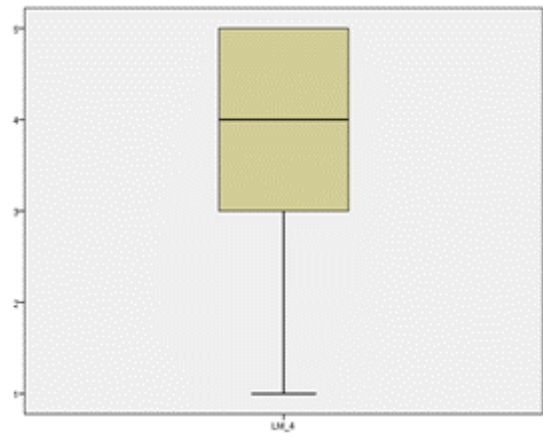
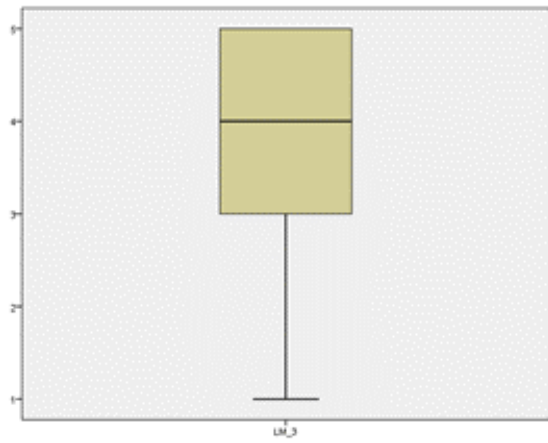
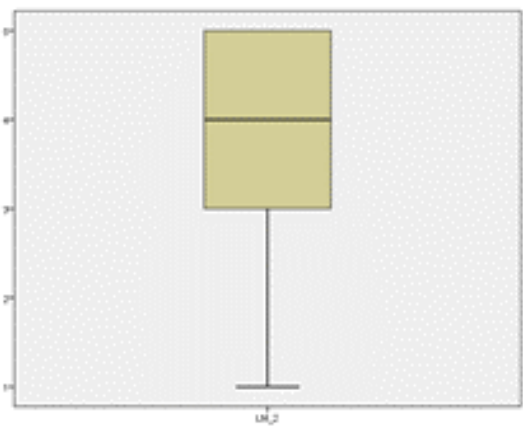
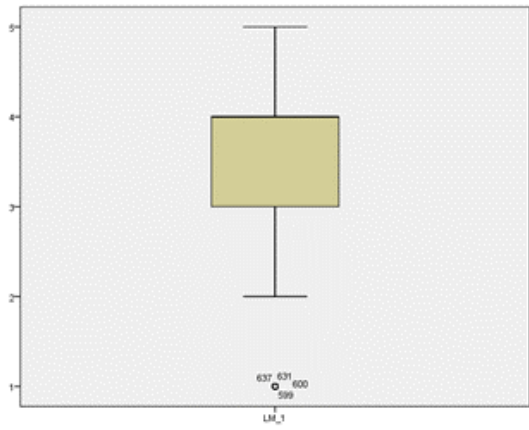
			<ol style="list-style-type: none"> 2. I understand how my work serves the organization's purpose 3. I think the organization does meaningful work 4. I think my work creates positive results 		
		Contextual-Safety: Psychological safety	<ol style="list-style-type: none"> 1. I am not afraid to be myself 2. I am not afraid to express my opinions at work 3. There is a threatening environment at work 	$\alpha = 0.71$	May et al., (2004)
		Contextual-Availability: Psychological availability	<ol style="list-style-type: none"> 1. I am confident in my ability to handle competing demands for work 2. I am confident in my ability to deal with problems that come up at work 3. I am confident in my ability to think clearly at work 4. I am confident in my ability to display the appropriate emotions at work 	$\alpha = 0.85$	May et al., (2004)
		Individual psychological experience- Core self-evaluations	<ol style="list-style-type: none"> 1. I am confident I get the success I deserve in life 2. Overall, I am satisfied with myself 3. I am filled with doubts about my competence 4. I determine what will happen in my life 5. I do NOT feel in control of my success in my career 6. I am capable of coping with most of my problems 	$\alpha = 0.82$	Lee (2012)
Employee Engagement		Cognitive engagement	<ol style="list-style-type: none"> 1. I am really focused on my job when I am working 	$\alpha = 0.94$	Shuck, Adelson,

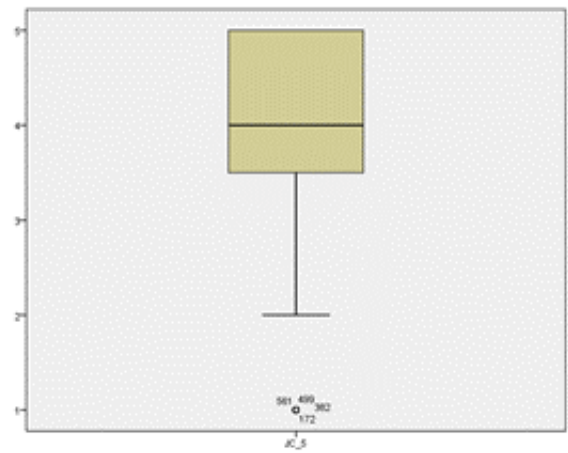
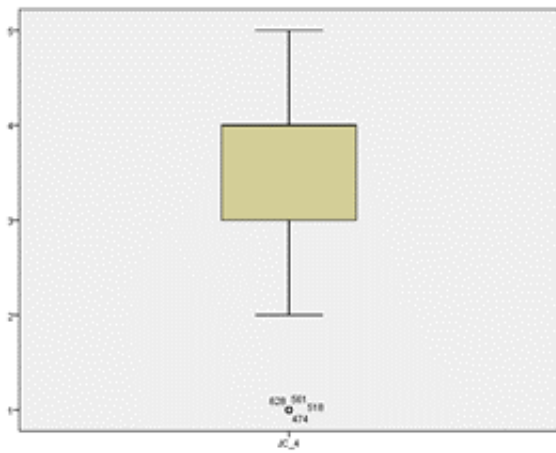
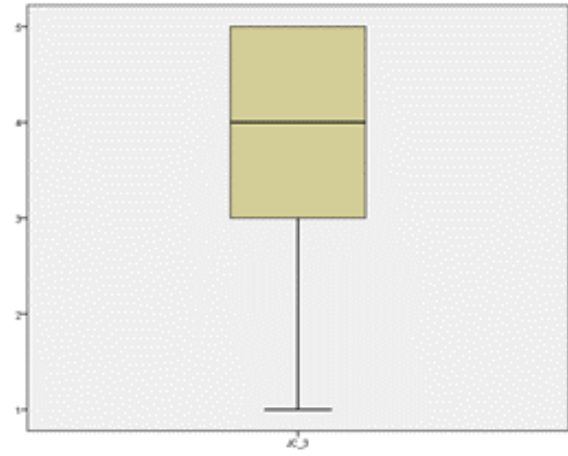
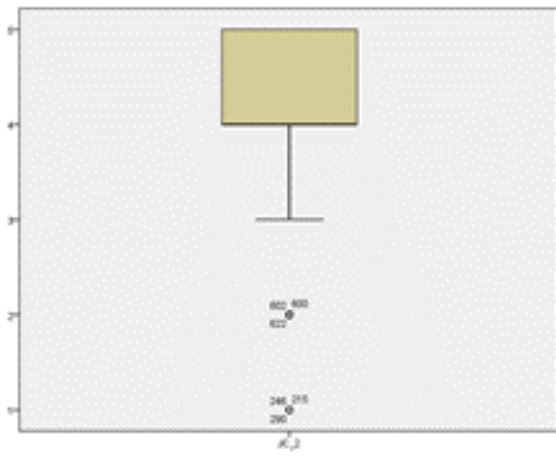
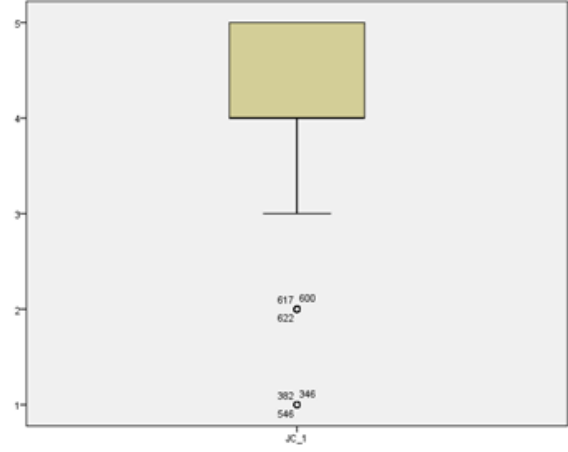
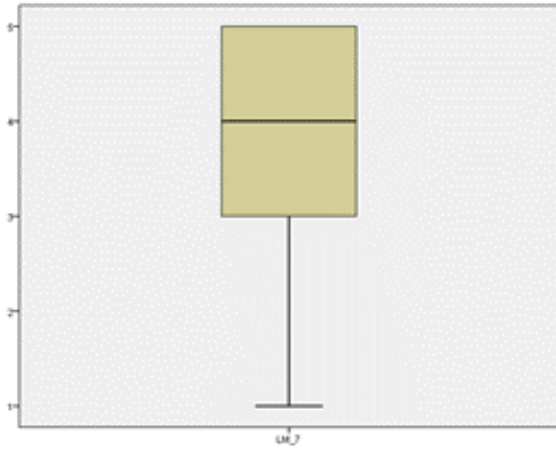
			<ol style="list-style-type: none"> 2. I concentrate on my job when I am at work 3. When working, I think a lot about how I can give my best 4. At work, I am focused on my job 5. When I am at work, I give my job a lot of attention 		and Reio (2016)
		Emotional engagement	<ol style="list-style-type: none"> 1. Working at my current organization has a great deal of personal meaning to me 2. I feel a strong sense of belonging to my job 3. I am proud to tell others that I work for my current organization 4. I believe in the mission and purpose of my company 5. I care about the future of my company 	$\alpha = 0.88$	Shuck, Adelson, and Reio (2016)
		Behavioral engagement	<ol style="list-style-type: none"> 1. I do more than is expected of me 2. I really push myself to work beyond what is expected of me 3. I am willing to put in extra effort without being asked 4. I often go above what is expected of me to help my team be successful 5. I work harder than expected to help my company be successful 	$\alpha = 0.91$	Shuck, Adelson, and Reio (2016)

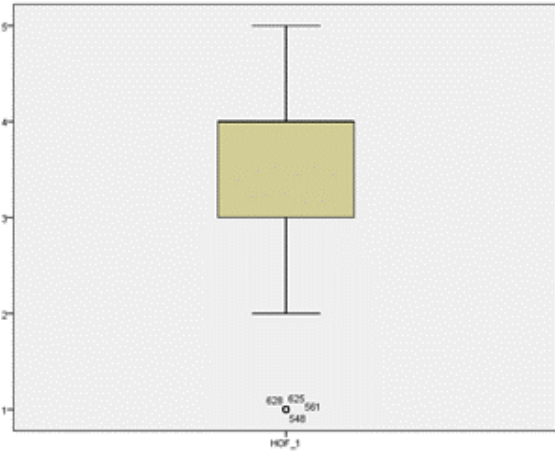
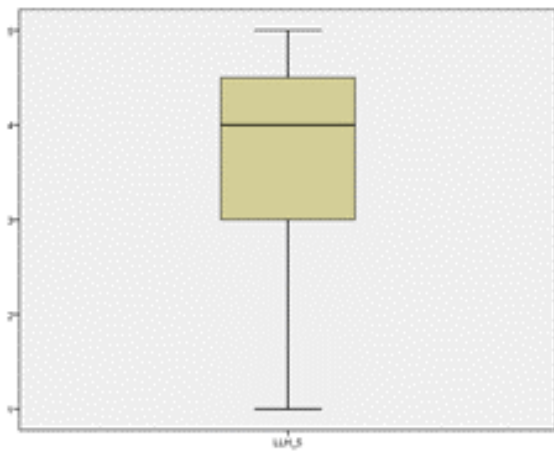
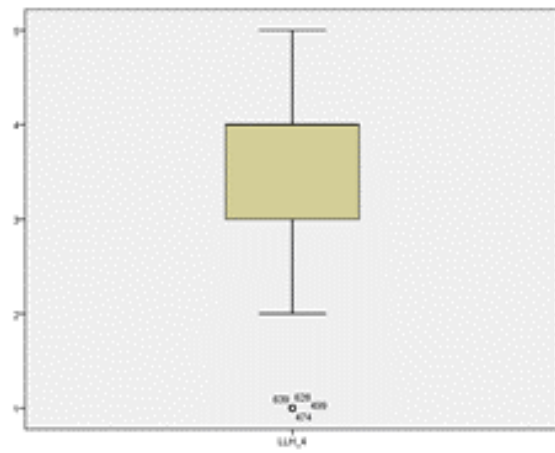
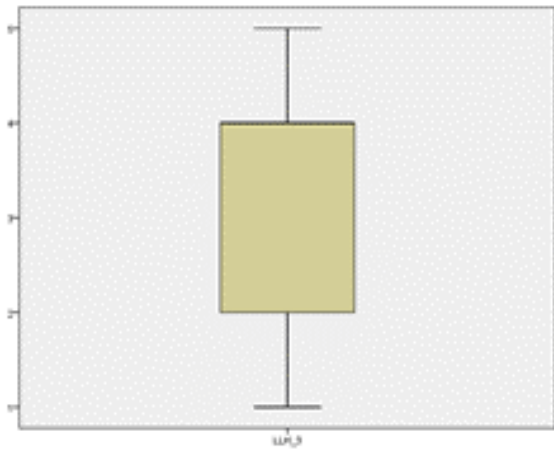
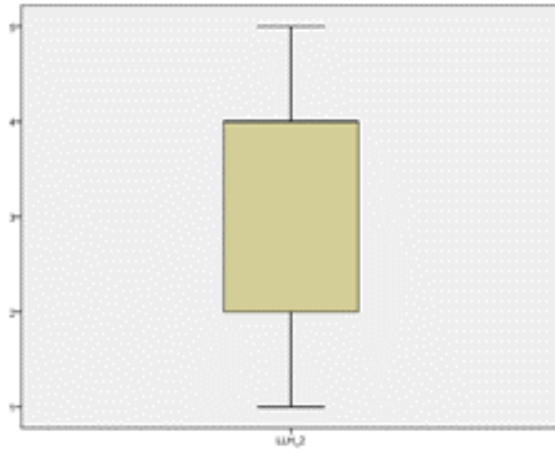
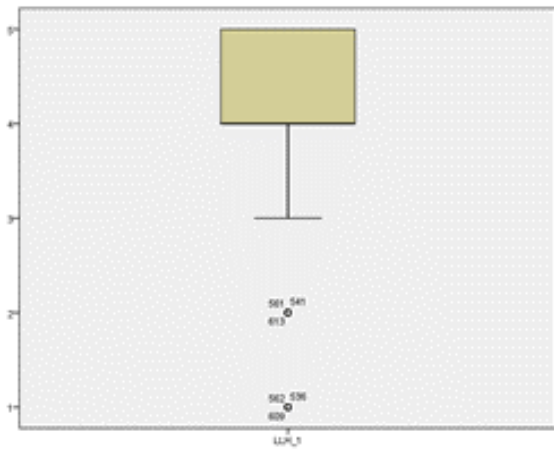
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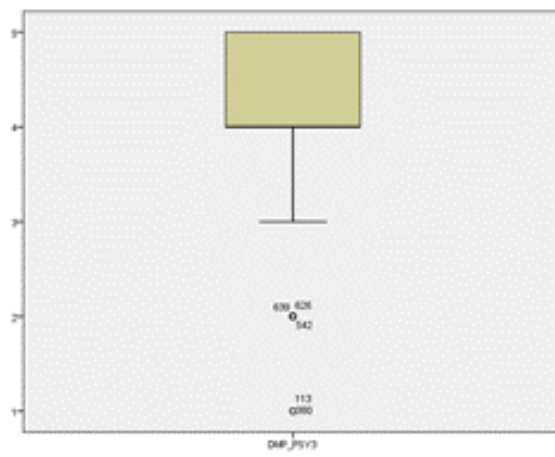
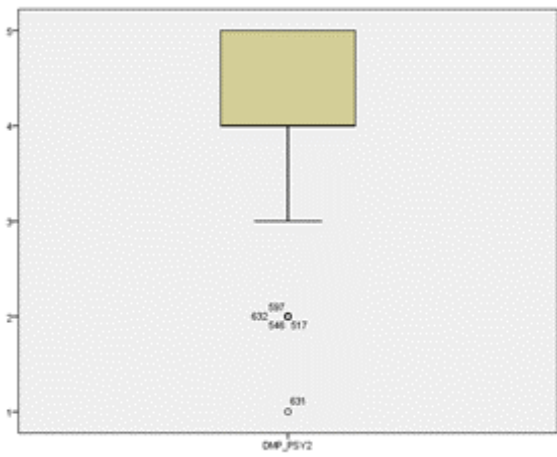
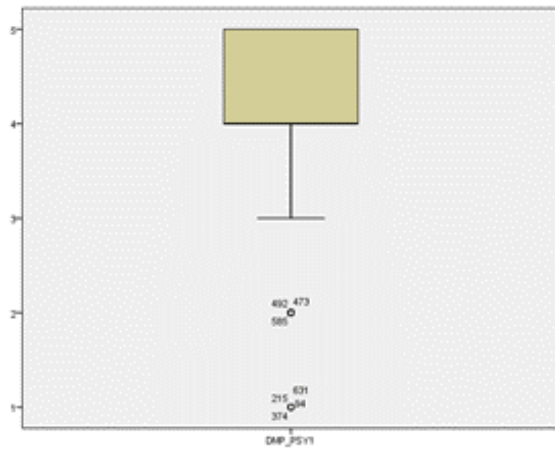
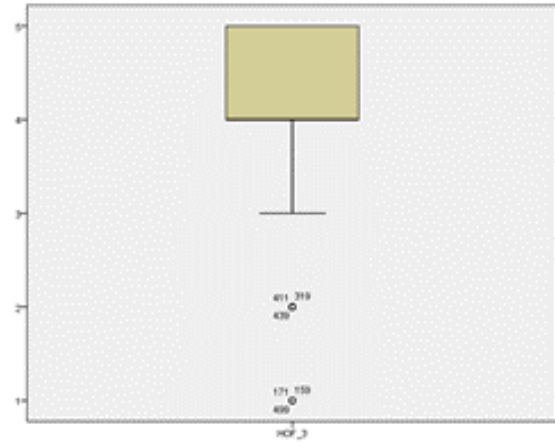
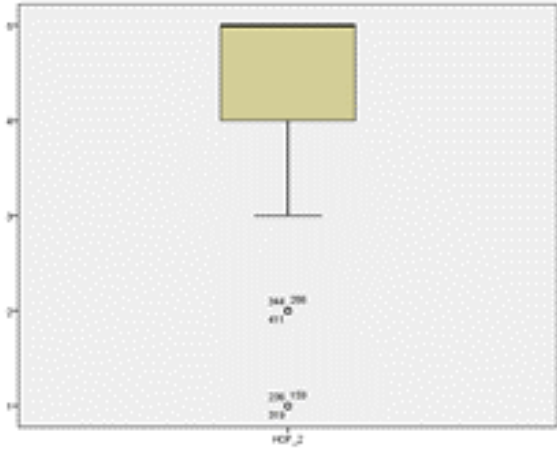
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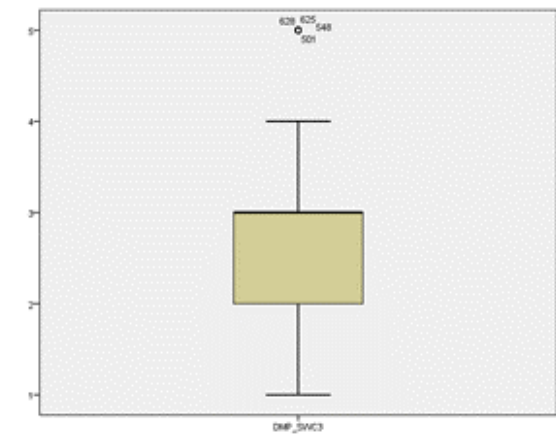
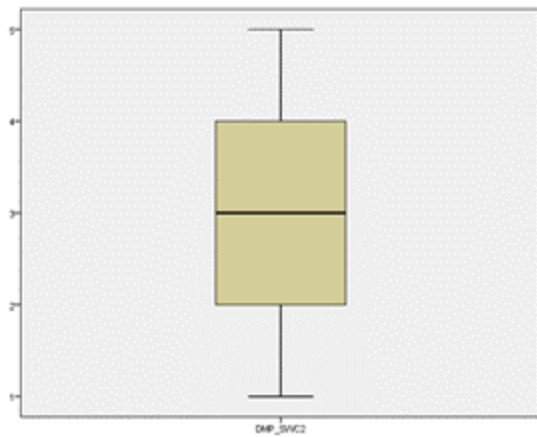
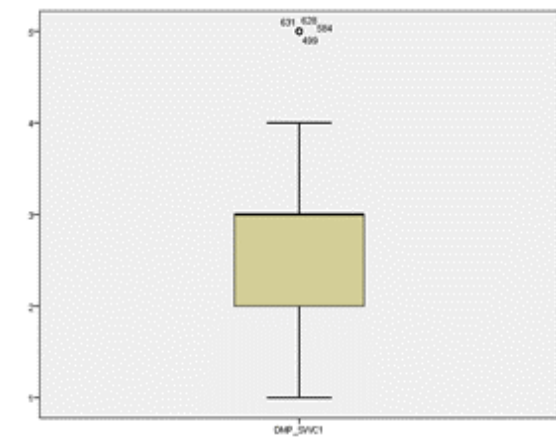
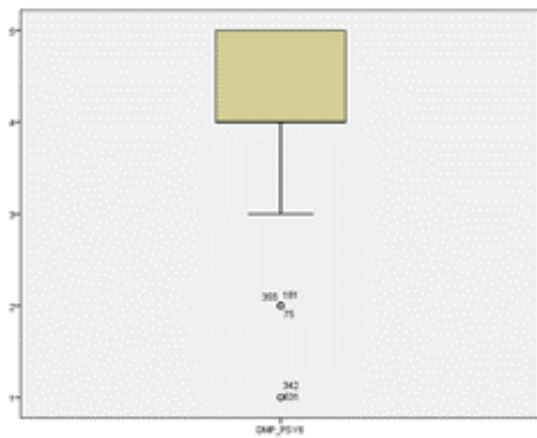
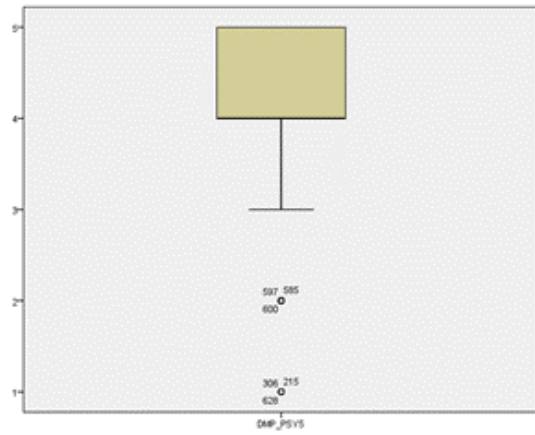
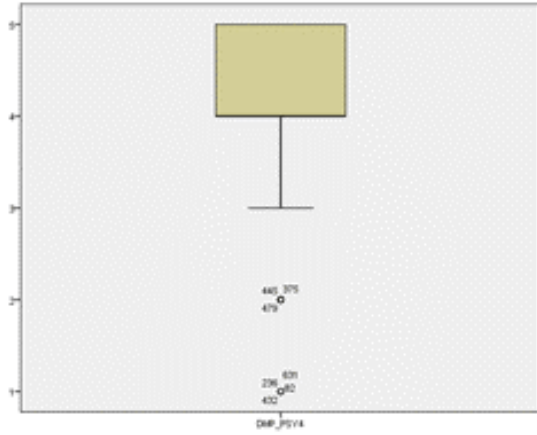


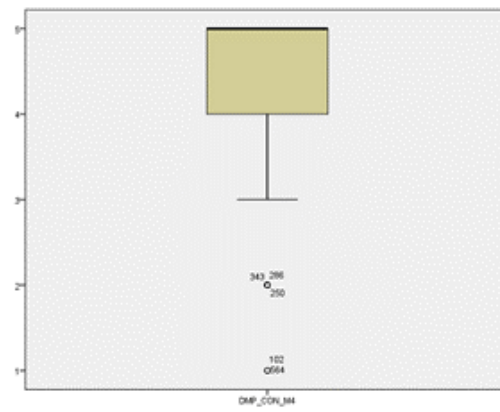
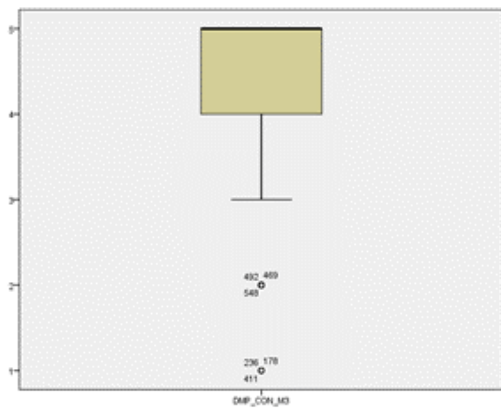
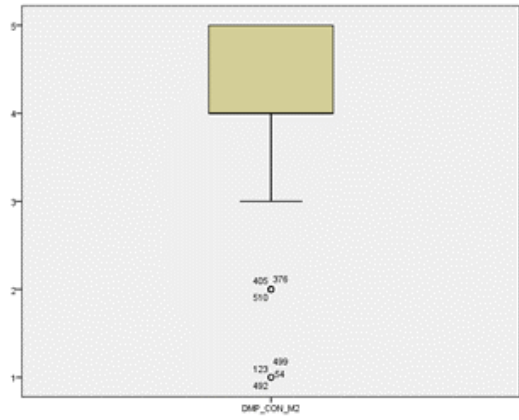
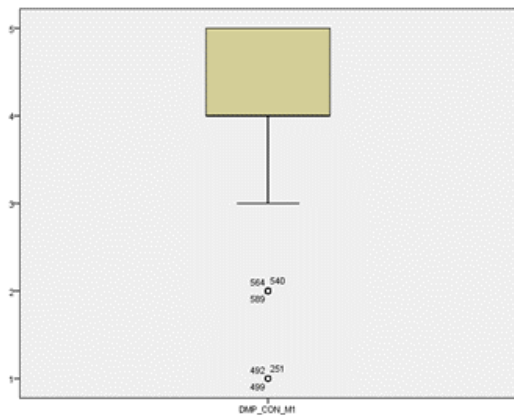
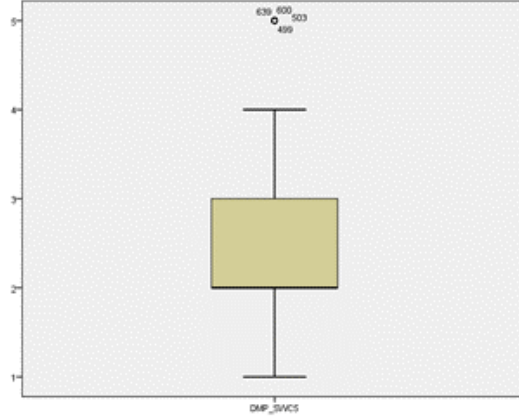
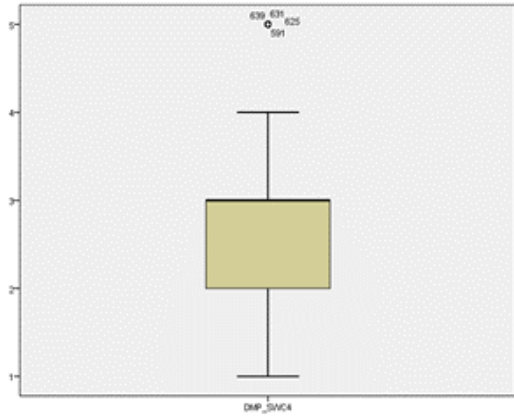


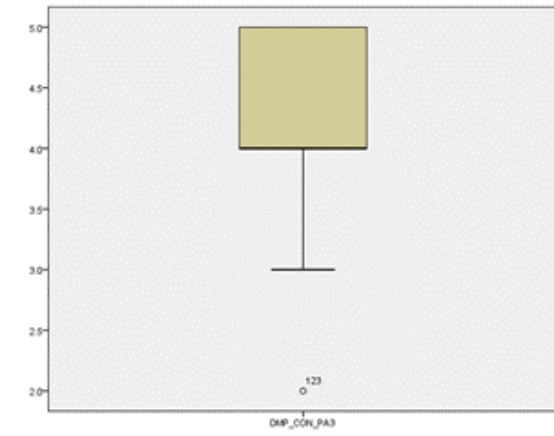
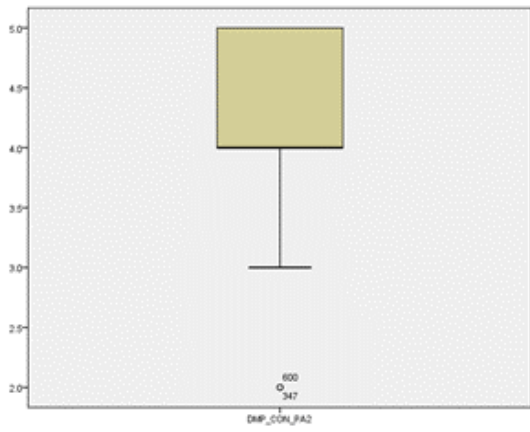
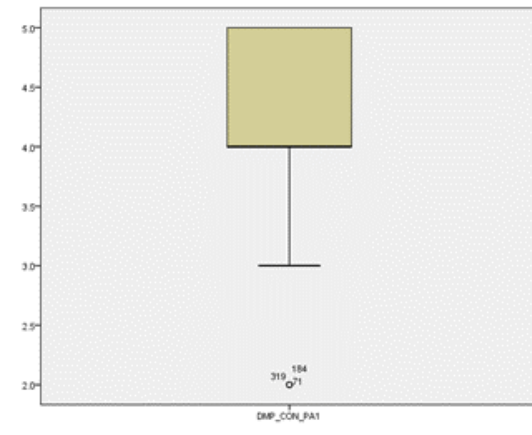
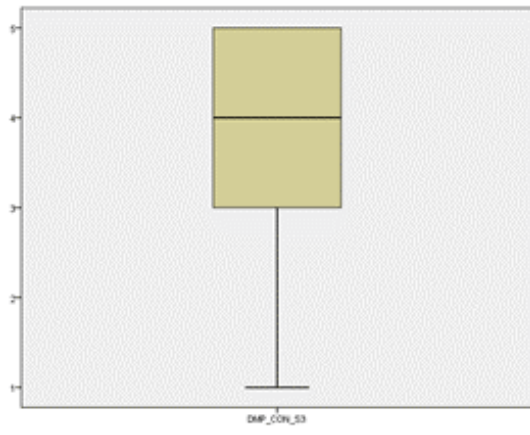
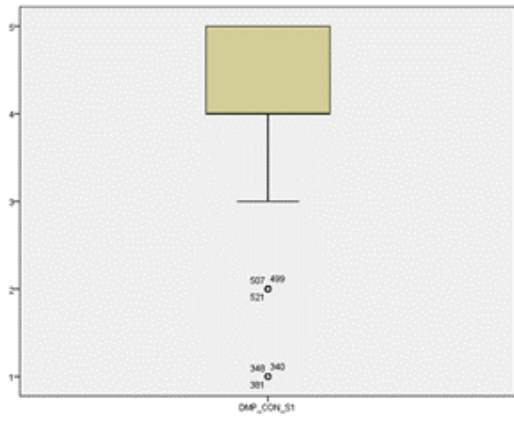


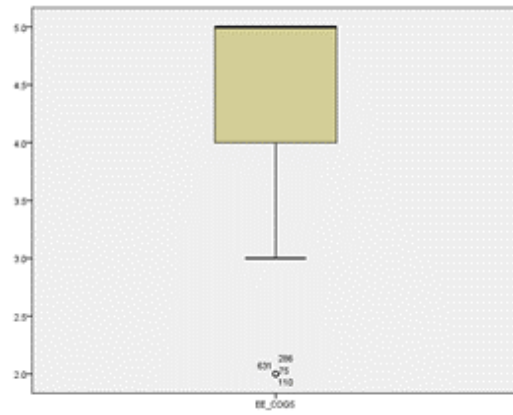
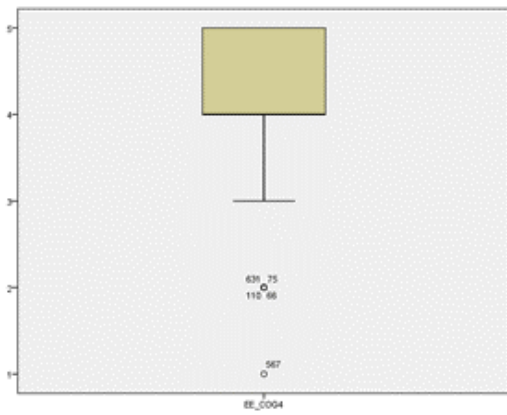
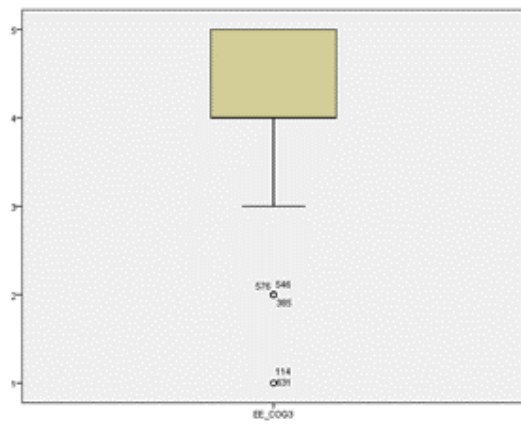
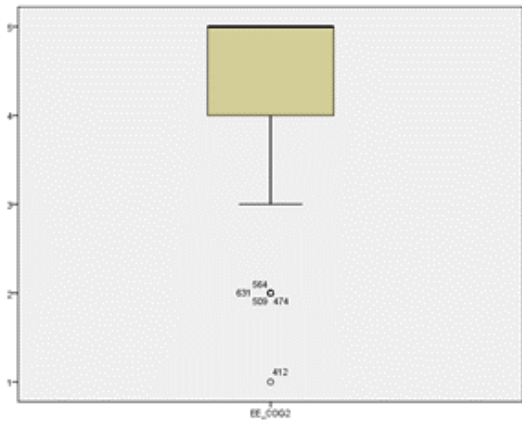
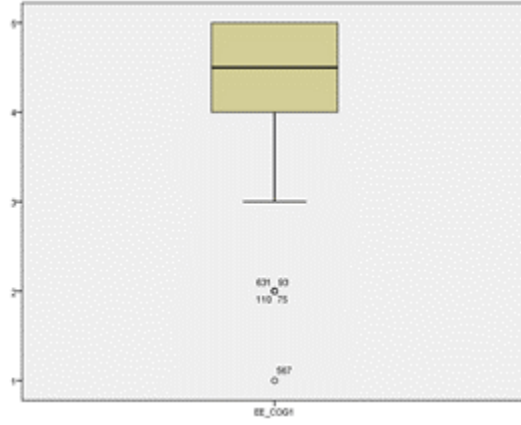
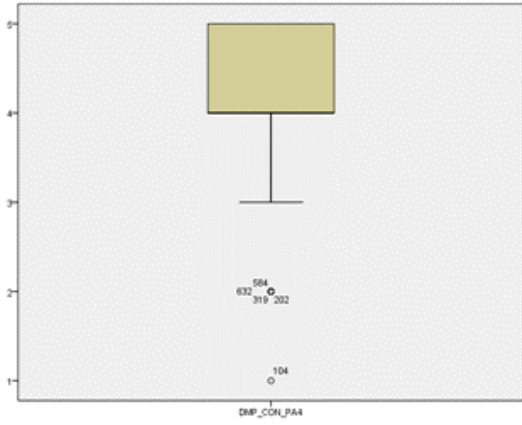


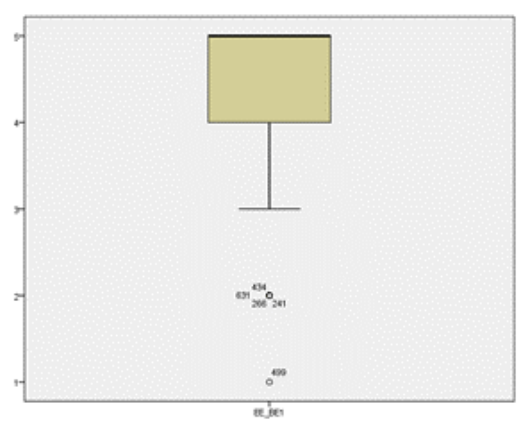
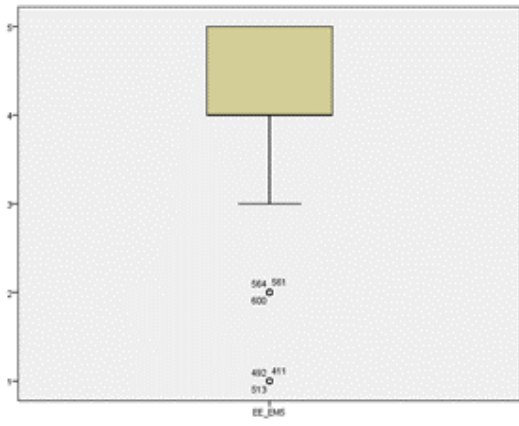
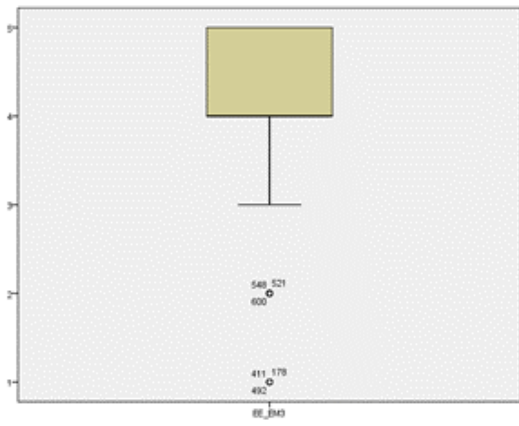
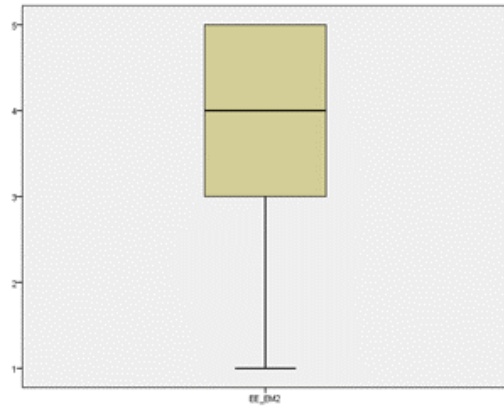
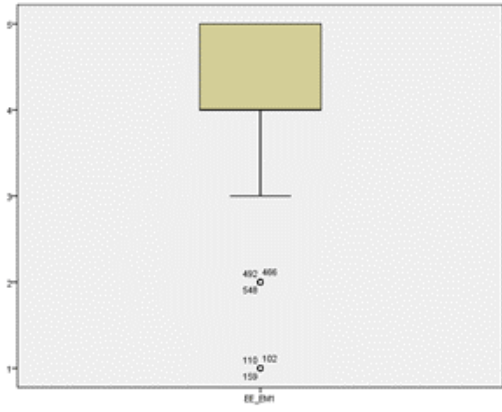


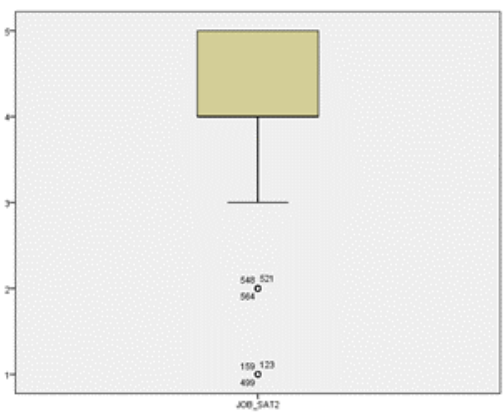
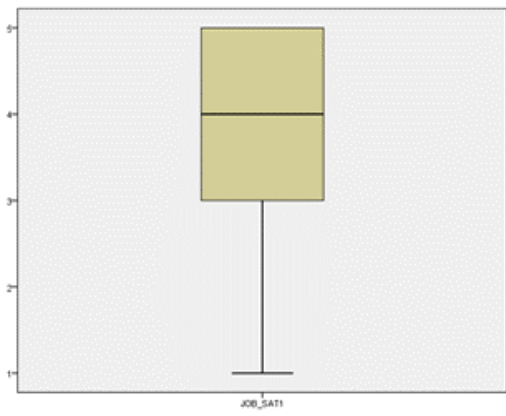
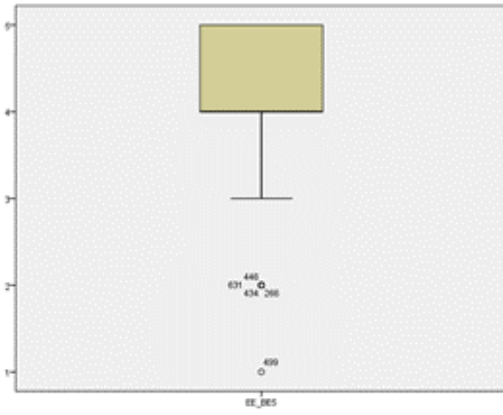
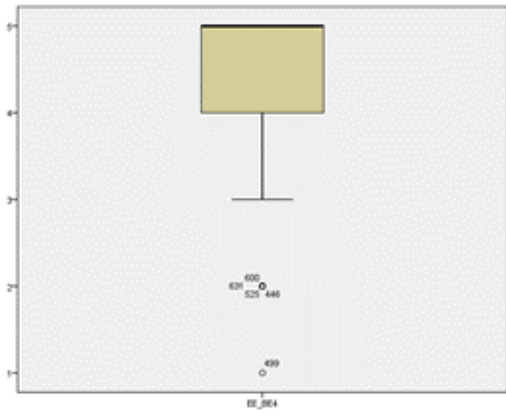
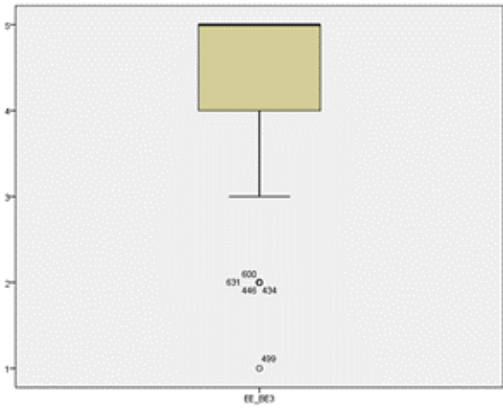
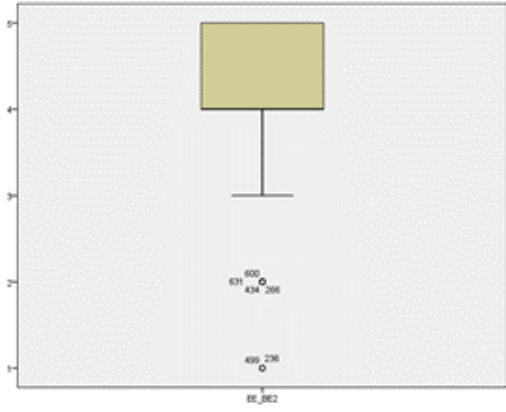


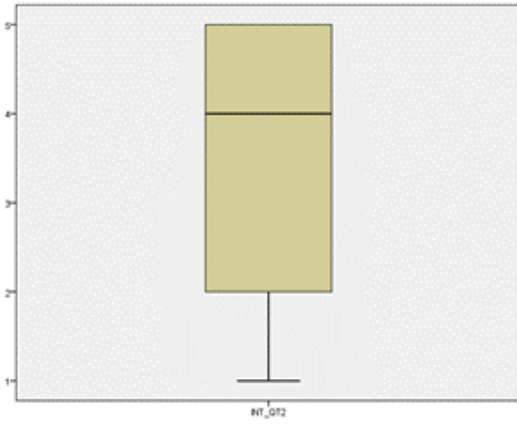
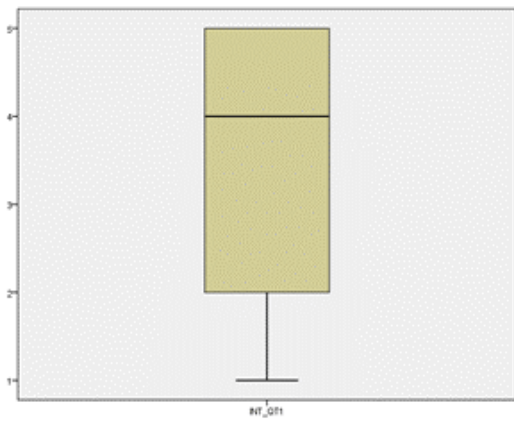
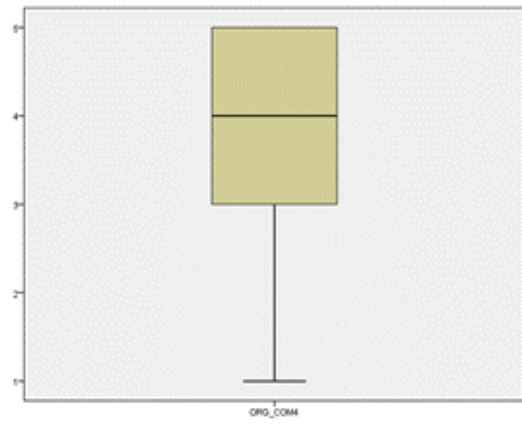
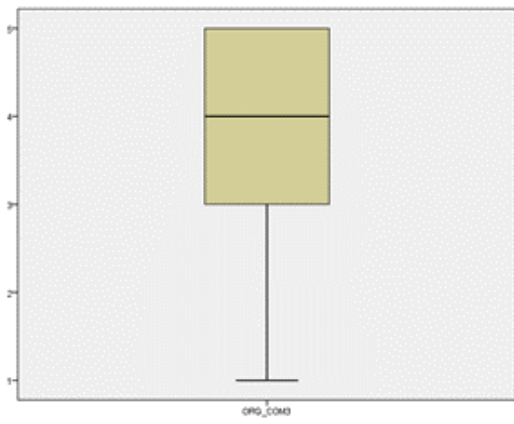
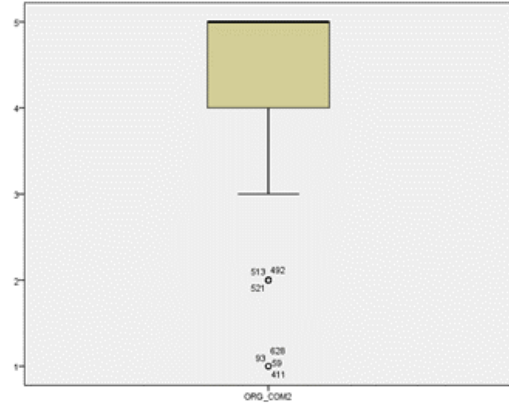
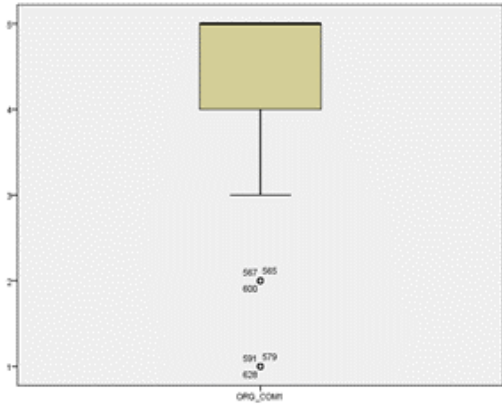


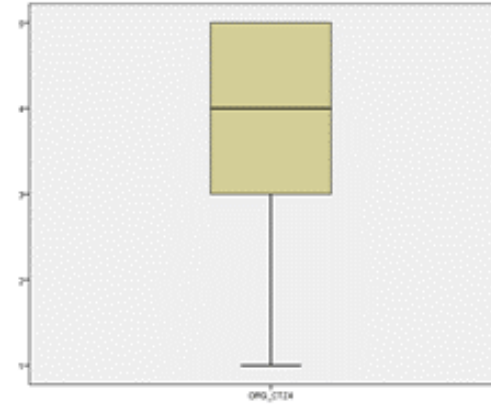
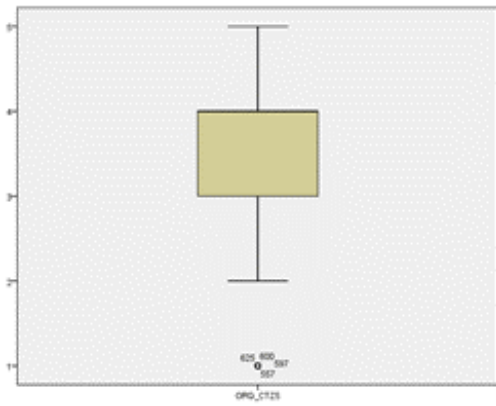
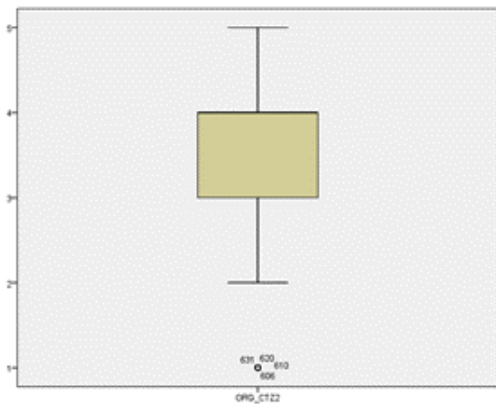
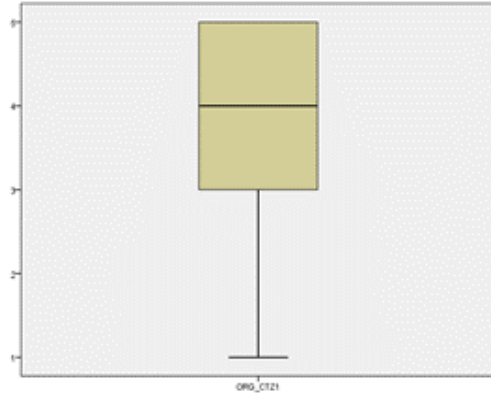
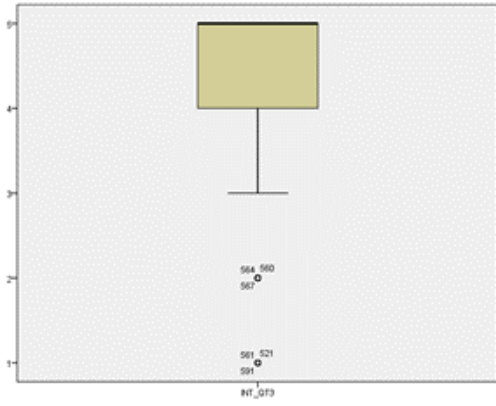


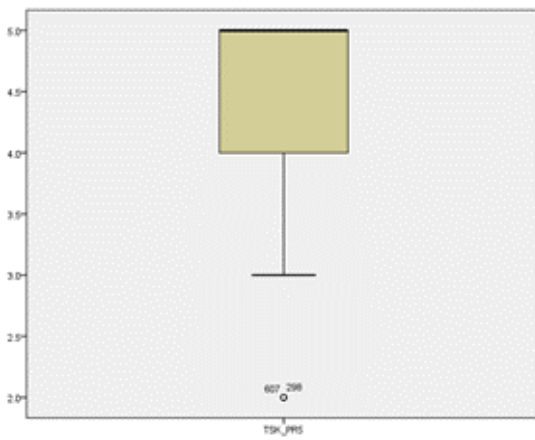
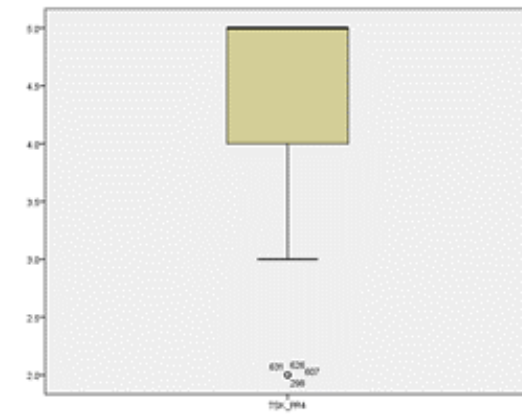
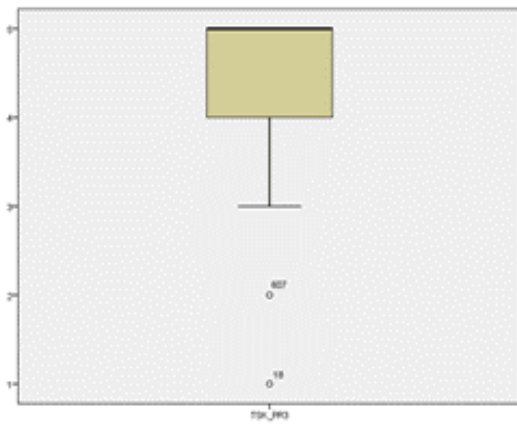
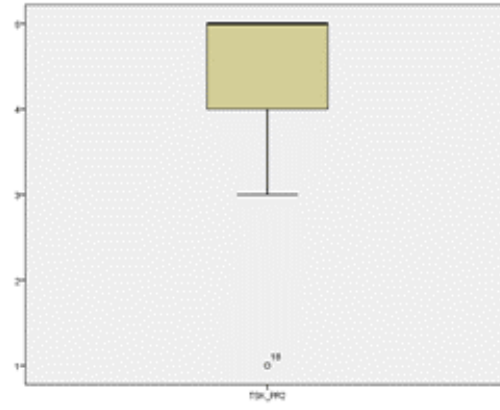
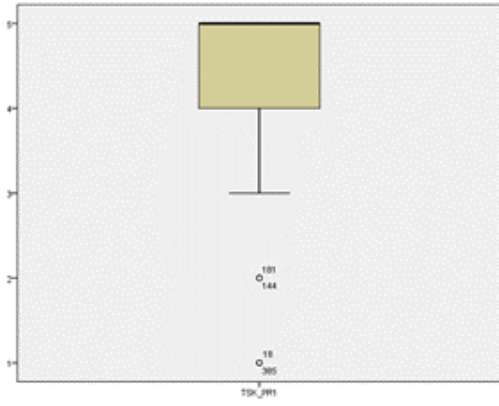












APPENDIX 8

UNI-VARIATE OUTLIERS

Factor	Items	Outlier Cases	% of outlier cases per variable
Internal / External Factors Discourse	Int_Ext1 I have a good understanding of the emotions of people	7	1.09%
	Int_Ext2 I do not have to worry about how people perceive me at work	5	0.78%
	Int_Ext3 I am enthusiastic about my work	6	0.93%
	Int_Ext4 My colleagues make an effort to build rapport with me	4	0.62%
	Int_Ext5 I am optimistic about my future	4	0.62%
Leader / Manager Discourse	LM_1 I receive enough feedback on my job performance to know how well I am doing	4	0.62%
	LM_2 My immediate supervisor sets realistic expectations for me	0	0.00%
	LM_3 My immediate supervisor's expectations are clear to me	0	0.00%
	LM_4 My immediate supervisor encourages me to do my best	0	0.00%
	LM_5 My immediate supervisor has aligned my goals with the vision and mission of the organization	0	0.00%
	LM_6 My immediate supervisor is committed to protecting my interests	0	0.00%
	LM_7 My immediate supervisor makes an effort to build rapport with me	0	0.00%
Job Characteristics Discourse	JC_1 To what extent does the job require you to do many different things at work, using a variety of your skills and talents	6	0.93%
	JC_2 My job "fits" how I see myself	6	0.93%
	JC_3 My job challenges me	0	0.00%
	JC_4 My job allows me to link my individual goals to the organizational goals	4	0.62%
	JC_5 My organization provides me the resources I need to meet the demands of my job	4	0.62%
Lower Level Hygiene Factor Discourse	LLH_1 I'm not afraid to be myself at work	6	0.93%
	LLH_2 My organization really cares about my well-being	0	0.00%
	LLH_3 My organization is very supportive	0	0.00%
	LLH_4 Decisions, policies, and procedures are fairly and consistently applied to all employees	4	0.62%
	LLH_5 I feel emotionally healthy at the end of my workday	0	0.00%
Higher Order Factor Discourse	HOF_1 This organization ensures that my strengths are aligned with my job tasks	4	0.62%
	HOF_2 My job activities are significant to me	6	0.93%
	HOF_3 I think this organization does meaningful work	6	0.93%
Decision Making Process - Individual	DMP_PSY1 I am confident I get the success I deserve in life	7	1.09%
	DMP_PSY2 Overall, I am satisfied with myself	5	0.78%
	DMP_PSY3 I have no doubts about my competence	5	0.78%

Psychological Experiences	DMP_PSY4 I determine what will happen in my life	7	1.09%
	DMP_PSY6 I am capable of coping with most of my problems	5	0.78%
Decision Making Process - Social Work Contexts	DMP_SWC1 Top management in my organization commit resources to maintain and improve the quality of our work	4	0.62%
	DMP_SWC2 Top management in my organization have a plan to improve the quality of our work and service	0	0.00%
	DMP_SWC3 Managers in my organization recognize and appreciate high quality work and service	4	0.62%
	DMP_SWC4 People in my work department are adequately trained to handle the introduction of new products and services	4	0.62%
	DMP_SWC5 I understand the management vision of our organization	4	0.62%
Decision Making Process - Contextual: Meaningfulness	DMP_CON_M1 I believe that I am working on projects that matter	6	0.93%
	DMP_CON_M2 I understand how my work serves the organizations purpose	7	1.09%
	DMP_CON_M3 I think the organization does meaningful work	6	0.93%
	DMP_CON_M4 I think my work creates positive results	5	0.78%
Decision Making Process - Contextual: Safety	DMP_CON_S1 I am not afraid to be myself at work	6	0.93%
	DMP_CON_S2 I am not afraid to express my opinions at work	0	0.00%
	DMP_CON_S3 I do not have to worry about a threatening environment at work	0	0.00%
Decision Making Process - Contextual: Psychological Availability	DMP_CON_PA1 I am confident in my ability to handle competing demands for work	3	0.47%
	DMP_CON_PA2 I am confident in my ability to deal with problems that come up at work	2	0.31%
	DMP_CON_PA3 I am confident in my ability to think clearly at work	1	0.16%
	DMP_CON_PA4 I am confident in my ability to display the appropriate emotions at work	5	0.78%
Employee Engagement: Cognitive Engagement	EE_COG1 I am really focused on my job when I am working	5	0.78%
	EE_COG2 I concentrate on my job when I am at work	5	0.78%
	EE_COG3 When working, I think a lot about how I can give my best	5	0.78%
	EE_COG4 At work, I am focused on my job	5	0.78%
	EE_COG5 When I am at work, I give my job a lot of attention	4	0.62%
Employee Engagement: Emotional Engagement	EE_EM1 Working at my current organization has a great deal of personal meaning	6	0.93%
	EE_EM2 I feel a strong sense of belonging to my organization	0	0.00%
	EE_EM3 I am proud to tell others that I work for my organization	6	0.93%
	EE_EM4 I believe in the mission and purpose of my organization	6	0.93%
	EE_EM5 I care about the future of my organization	6	0.93%
Employee Engagement: Behavioral Engagement	EE_BE1 I do more than is expected of me	5	0.78%
	EE_BE2 I really push myself to work beyond what is expected of me	6	0.93%
	EE_BE3 I am willing to put in extra effort without being asked	5	0.78%
	EE_BE4 I often go above what is expected of me to help my team be successful	5	0.78%
	EE_BE5 I work harder than expected to help my company be successful	5	0.78%

Job Satisfaction	JOB_SAT1 All in all, I am satisfied with my job	0	0.00%
	JOB_SAT2 In general, I like working here	6	0.93%
Organizational Commitment	ORG_COM1 I would be happy to work at my organization until I retire	6	0.93%
	ORG_COM2 Working at my organization has a great deal of personal meaning to me	7	1.09%
	ORG_COM3 I really feel that problems faced by my organization are also my problems	0	0.00%
	ORG_COM4 I feel a strong sense of belonging to my organization	0	0.00%
Intent to Quit	INT_QT1 I don't think about quitting my job	0	0.00%
	INT_QT2 I am not planning to search for a new job during the next twelve months	0	0.00%
	INT_QT3 If I have my own way, I will be working for this organization one year from now	6	0.93%
Organizational Citizenship	ORG_CTZ1 I adjust my work schedule to accommodate other employees request for time off	0	0.00%
	ORG_CTZ2 I attend functions that are not required but that help the organizations image	4	0.62%
	ORG_CTZ3 I offer ideas to improve the functions of the organization	0	0.00%
	ORG_CTZ4 I take action to protect the organization from potential problems	0	0.00%
	ORG_CTZ5 I defend the organization when other employees criticize it	4	0.62%
Task Performance	TSK_PR1 I always complete the duties specified in my job description	4	0.62%
	TSK_PR2 I meet all the formal performance requirements of the job	1	0.16%
	TSK_PR3 I fulfill all responsibilities required by my job	2	0.31%
	TSK_PR4 I never neglect aspects of the job that I am obligated to perform	4	0.62%
	TSK_PR5 I never fail to perform essential duties	2	0.31%

APPENDIX 9

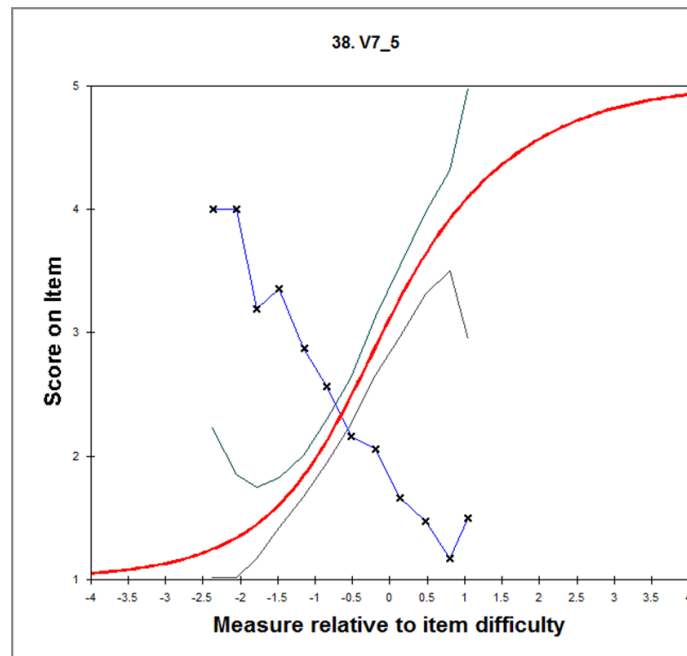
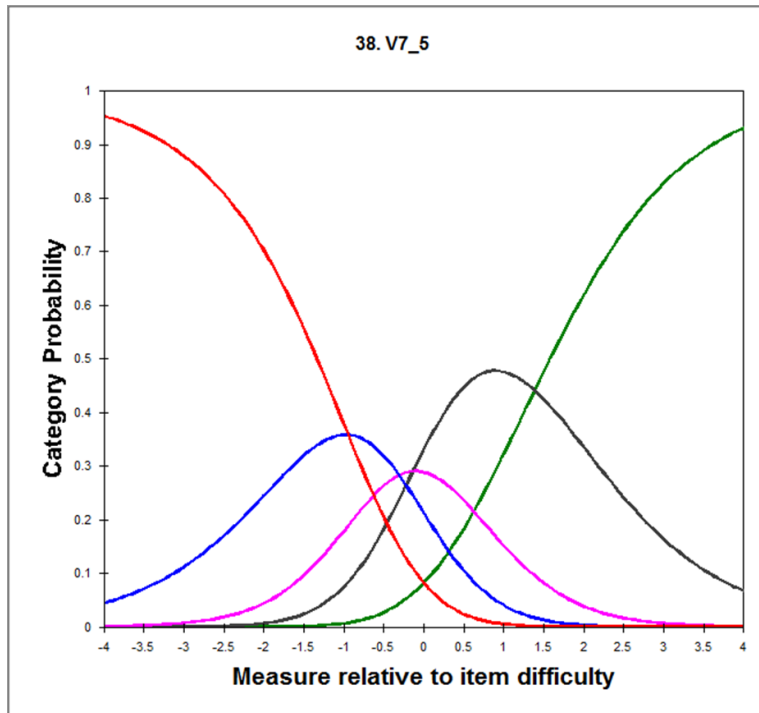
MAHALANOBIS DISTANCE STATISTICS

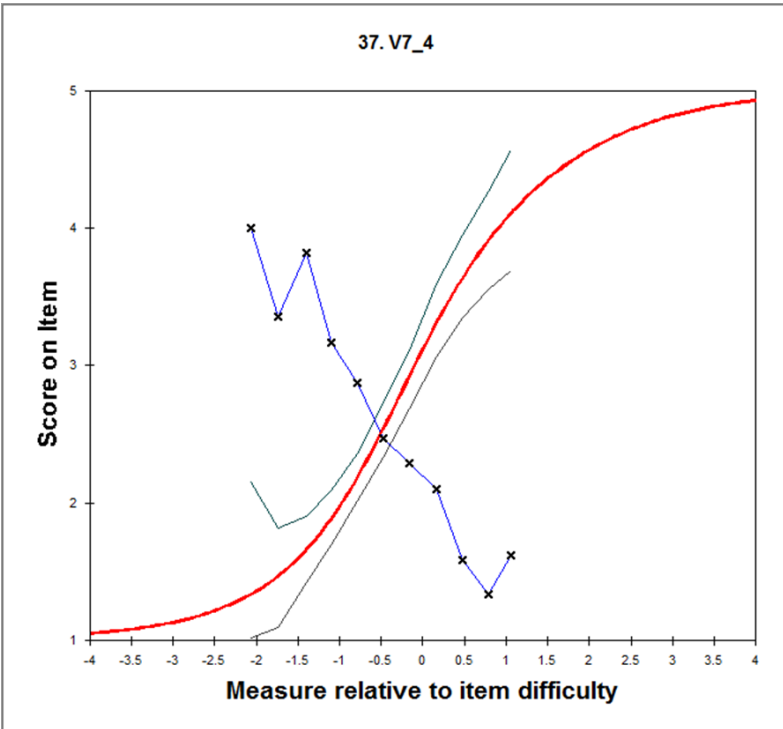
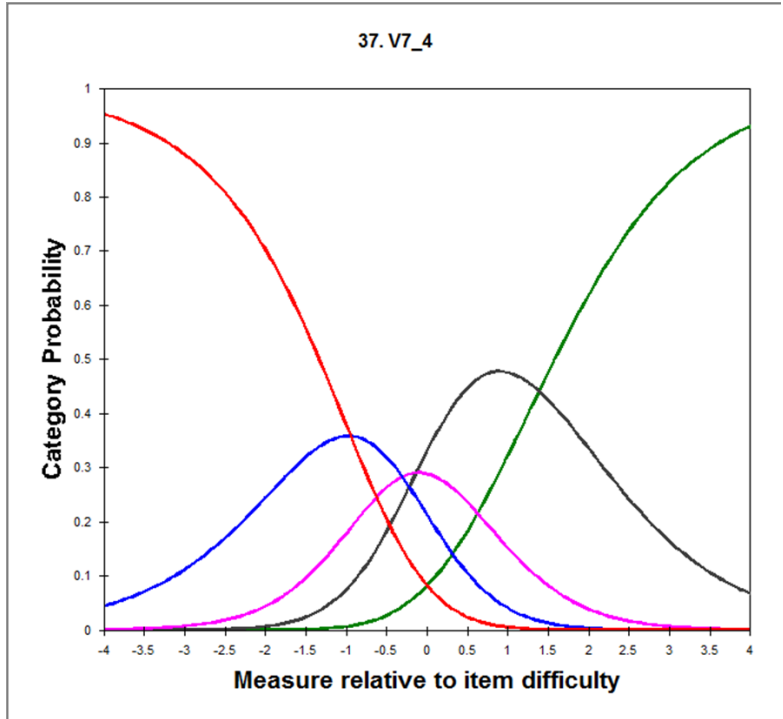
Mahalanobis Distance Statistic – Multivariate outliers

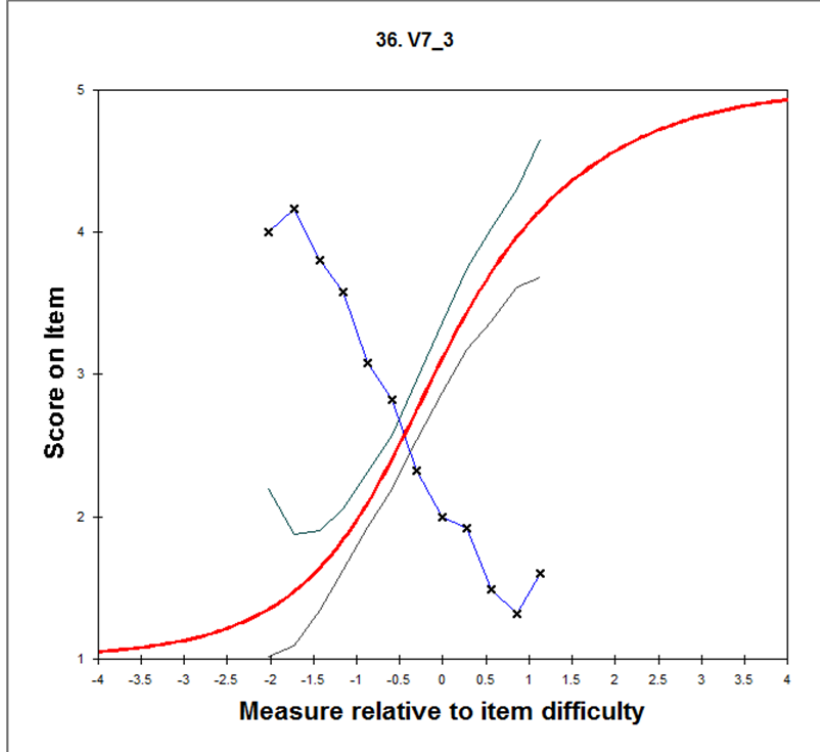
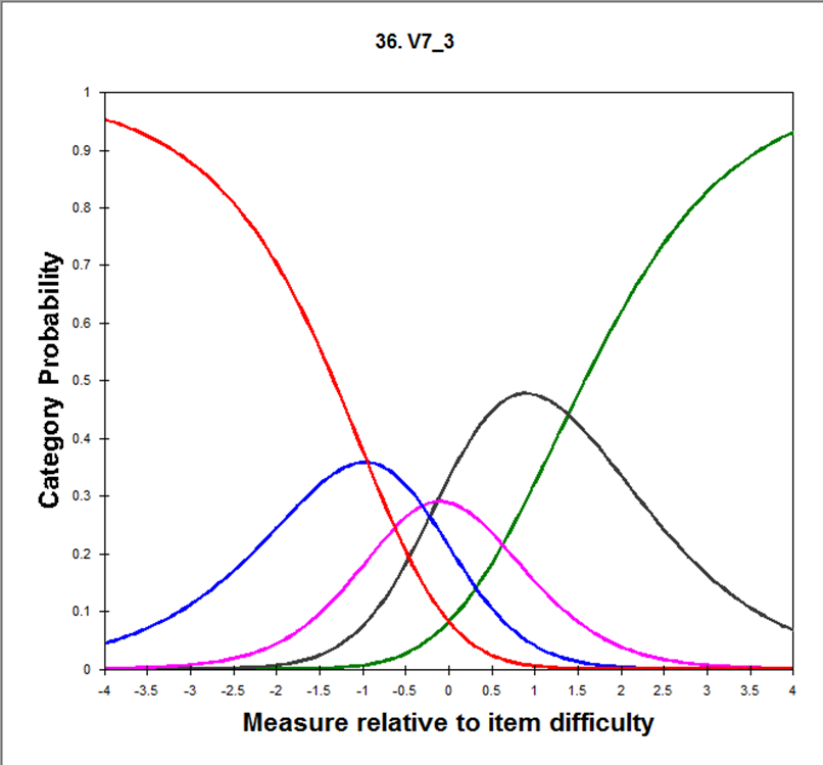
Observation Number	Mahalanobis d-squared	P-Value
499	73.2706	0.00000
159	59.6745	0.00000
246	58.4817	0.00000
319	53.9295	0.00000
197	48.3162	0.00001
631	46.9765	0.00001
66	45.8583	0.00002
323	43.3927	0.00004
102	42.579	0.00005
492	42.2561	0.00006
234	38.6489	0.00023
68	37.4874	0.00035
449	36.9886	0.00042
21	35.5398	0.00070
251	35.5056	0.00071
411	33.9352	0.00087
216	34.6514	0.00096
625	34.5976	0.00098

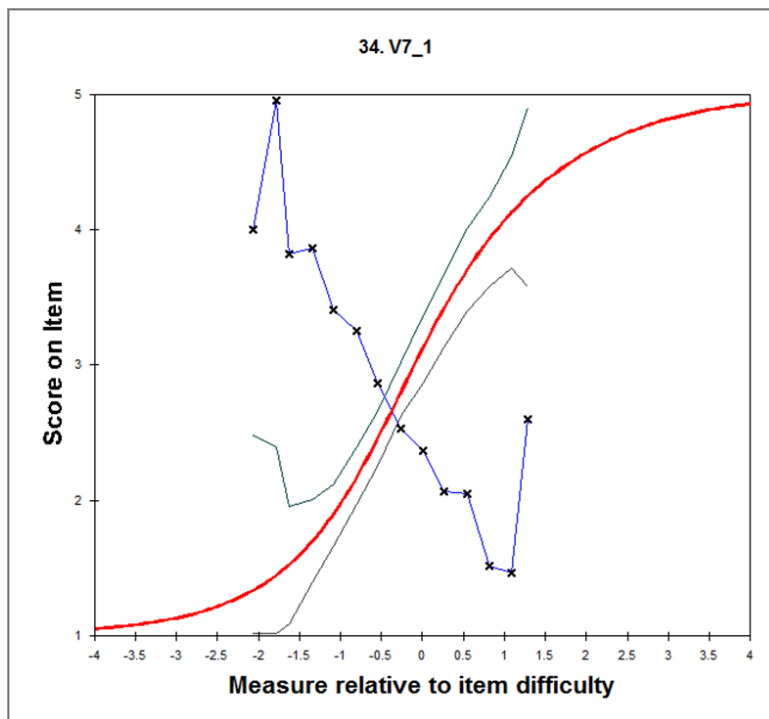
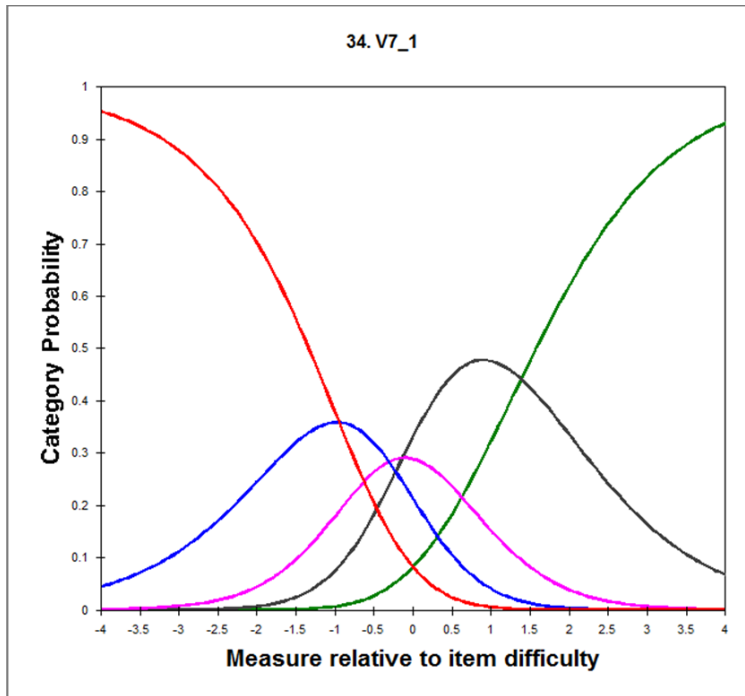
APPENDIX 10

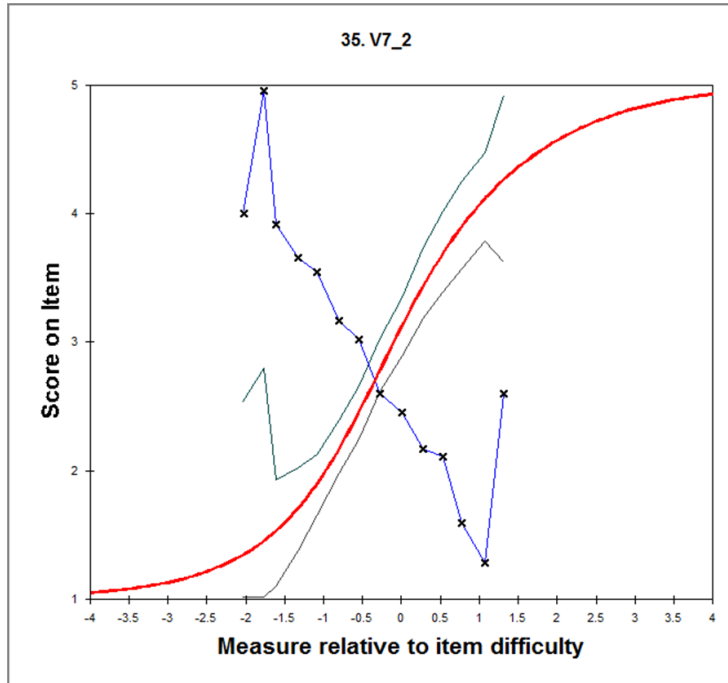
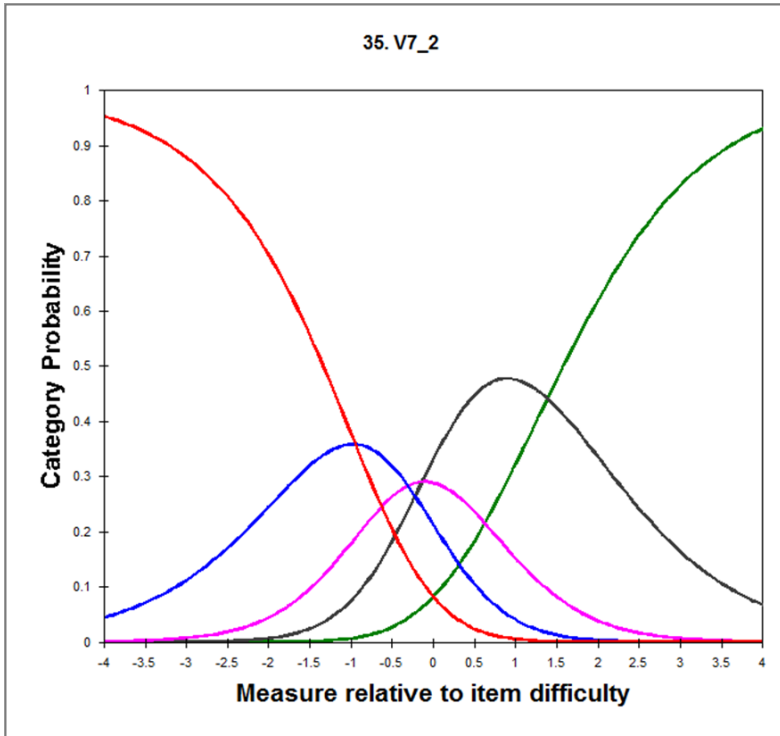
MODEL AND EMPIRICAL ITEM CHARACTERISTICS CURVE











APPENDIX 11

CURRICULUM VITA

Marie A. Valentin
312 Texas Mulberry
San Antonio, Texas 78253
(210) 269-8715

Education

- 2018 Doctorate of Philosophy, Human Resource Development
Texas A&M University, College Station, Texas
- 2011 Masters of Business Administration, Texas A&M University – San Antonio
- 2010 Bachelor of Applied Arts and Science, Texas A&M University – San Antonio
- 2009 Associate degree Managerial Science, Palo Alto College – San Antonio

Professional Experience

- 2017 – Present Faculty Fellow San Antonio College
Human Resource Faculty Development
Alamo Community College District, San Antonio, Texas
- 2015 – Present Adjunct Professor
Our Lady of the Lake University, San Antonio, Texas
- 2012 – Present Adjunct Professor
Palo Alto College, San Antonio, Texas
- 2013 – 2015 Graduate Teaching Assistant
Texas A&M University, College Station, Texas
- 2009 – 2012 Founder and CEO
Monte Cristo Center, Inc., San Antonio, Texas
- 2001 – 2009 Real Estate Broker and Mortgage Broker /Owner
American Dream Real Estate and All City Mortgage, San Antonio, Texas
- 1999- 2001 Real Estate Agent
Alamo Real Estate Brokers, San Antonio