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Examining Generational Differences in the Workplace: Work Centrality, Narcissism, and Their Relation to Employee Work Engagement

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EXAMINING GENERATIONAL DIFFERENCES IN THE WORKPLACE:
WORK CENTRALITY, NARCISSISM, AND THEIR RELATION TO
EMPLOYEE WORK ENGAGEMENT

by

Judith Lanser Fenzel

A Dissertation Submitted in
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ABSTRACT
EXAMINING GENERATIONAL DIFFERENCES IN THE WORKPLACE:
WORK CENTRALITY, NARCISSISM, AND THEIR RELATION TO
EMPLOYEE WORK ENGAGEMENT

by
Judith Lanser Fenzel

The University of Wisconsin-Milwaukee, 2013
Under the Supervision of Professor Barbara Daley

In the workplace of today, an unprecedented four generations of workers work side by side. While this blend of generations adds valuable diversity to the workforce, it also adds complexity.

Despite popular interest in the subject of generations in the workplace, systematic research of the specific generational differences of work centrality, narcissism, and their relation to employee engagement is limited. It is vital to examine the possibility of significant generational differences in order for HRD practitioners and scholars to understand the focus and direction of strategies intended to improve individual and organizational performance. Using a quantitative research methodology, an online survey was conducted with of Baby Boomer, Generation X and Millennial generation employees ages 18 – 69 in small to mid-size organizations from fourteen different industry sectors in Midwestern United States (N=405).

The study did not find statistically significant generational differences regarding work centrality and narcissism among the Baby Boomer, Generation X, and Millennial generations, yet did determine significant generational differences regarding employee engagement among the Baby Boomer and Millennial cohorts.
Two noteworthy findings of the study have the most significant implications for HRD: decreasing employee engagement for the Millennial generation and, that work centrality can predict employee engagement. These findings extend the current knowledge regarding work centrality and employee engagement and suggest HRD practitioners and scholars can best manage the different generations by developing and implementing strategies that increase and sustain high levels of work centrality and foster employee engagement to ensure optimum workforce performance.
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“I know in my heart that man is good. That what is right will always eventually triumph. And there’s purpose and worth to each and every life.”

---R. Reagan

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Chapter 1 – Introduction

Generational differences exist among workers (Alsop, 2008; Twenge, 2010; Smola & Sutton, 2002). In the current day workplace, an unprecedented four generations of workers labor side by side. While this blend of generations adds valuable diversity to the workforce, it also adds complexity. Each generation is defined by its shared collection of beliefs, values and norms shaped by the historical and significant events that dominated society during their formative years (Giancolo, 2006, McNamara, 2005; Arsenault, 2004). The Society of Human Resources Management (Survey Program, 2004) found 40% of HR professionals observed conflict among employees due to generational differences. This observation prompted organizations to recognize that generational differences may affect the workplace in terms of individual and organizational performance. Despite popular and plentiful interest in the subject of generations in the workplace, systematic research of the specific generational differences of work centrality, narcissism, and their relation to employee engagement is limited.

Most notable of the generational differences and the focus of this research study, are the generational differences found in the time-lag studies of Twenge (2010), Smola and Sutton (2002) and Kowske et al (2010). Two of the most compelling generational differences identified in their studies were: 1) the decline in work centrality with preference for more leisure time and, 2) the increase in narcissism of the youngest generation in the workforce, named Millennials. Millennials are members of the generation born during the years of 1982-2002. Studies suggest that declining work centrality will negatively influence employee engagement (Sharabi & Harpaz, 2010; Carr, Boyar & Gregory, 2008). Narcissism research indicates that employees who
display subclinical narcissistic tendencies (non Narcissism Personality Disorder) are often less engaged in their work (Campbell et al., 2011; Twenge & Campbell, 2009). It appears that both the declining work centrality and the increasing narcissism, especially apparent in the youngest and largest generation entering the workplace, influences employee engagement. The critical issue is the association between lower employee engagement and workplace related matters such as: job satisfaction and turnover intention (Park & Gursoy, 2011), employee performance and productivity (Bakker, 2011; Campbell et al., 2011; Wallace & Baumeister, 2002; Schaufeli, Bakker & Van Rhenen, 2009) and organizational behavior and performance (Campbell et al., 2011). The generational differences of work centrality and narcissism and their relation with employee engagement could present workforce management challenges along with implications for the field of Human Resource Development (HRD). High work centrality and high employee engagement are the outcomes HRD professionals are seeking. The possibility of significant differences among the generations is important to HRD practitioners because their objective is to develop employees who are productive, profitable, innovative, less likely to turnover, less likely to be absent and more willing to engage in discretionary efforts. This objective would be more challenging to execute if the generational differences of declining work centrality and increasing narcissism are present in the workforce because they may influence employee engagement.

The employee engagement construct is situated within the HRD field (Shuck & Wollard, 2010). While of considerable interest for the past two decades, employee engagement remains inconsistently addressed and deserving of further academic research. Employee engagement is intensifying as a critical organizational concern particularly as
businesses are struggling from the distress of the global recession. In order to compete in the global marketplace, HRD professionals and organizations will need to understand how they can best manage the different generations and foster employee work engagement to ensure all employees are maximally productive.

**Work Centrality.** The concept of work centrality is derived from basic values. It is a normative belief about the value and importance of work in the configuration of one’s life (Kanungo, 1982). Work centrality is the degree of general importance that work holds in an individual’s life at any given time (Paullay, et al., 1994; MOW, 1987). It determines how one functions in the workplace and outside of it (Alvesson, Ashcraft, & Thomas, 2008). High work centrality indicates that one identifies with one’s work role and views work as an important aspect of one’s life (Diefendorff, Brown, Kamin, & Lord, 2002). High work centrality leads to engagement in work and positive job performance (Hirschfeld & Field, 2000; Ng, Sorensen, & Feldman, 2007).

While high work centrality is the optimum, recent empirical research has discovered work centrality is declining as new generations enter the workforce. Work centrality is a function of one’s past cultural conditioning or socialization (Kanungo, 1982). This is a process by which an individual acquires knowledge, social skills, and values to conform to the norms and roles needed for integration into a group such as a generational cohort. In addition, work centrality is a relatively stable belief that is not extremely sensitive to conditions of a particular work setting (Hirschfeld & Field, 2000). The gradual decline in work centrality became evident with Generation X members who were born between 1961 and 1981. Now Generation Y, also known as Millennials, born between 1982 and 2002, are entering or have recently entered the workforce, have further
declining work centrality (Twenge, 2010; Smola & Sutton, 2002; Kowske, et al, 2010). Lower work centrality can lead to declining job satisfaction, lower employee engagement and higher turnover intention, thus affecting organizational performance. This has significant implications for HRD professionals, as they will need to develop and implement strategies, which increase and sustain high levels of work centrality.

**Narcissism.** In addition to the declining work centrality of the Millennial generations as compared to preceding generations, the second identifiable and documented generational difference is the rise in narcissistic and entitled attitudes when compared with Baby Boomers (born between 1944-1960) and Generation X employees in the work force (Alsop, 2008; Twenge and Campbell 2008; Twenge, 2010). Research supports the often-made assertion that the Millennials are more narcissistic than previous generations (Twenge, Konrath, Foster, Campbell, & Bushman, 2008a, 2008b). Narcissism is defined as an inflated sense of self. It is strongly linked to overconfidence and can be associated with entitlement (Twenge & Campbell, 2009). Narcissism has risen steadily over the past twenty-five years. This generational shift in narcissism reflects broader cultural trends that encourage individualism. The increase in narcissism has the potential to cause conflict in the workplace. Society has raised the expectations of young adults but reality has not kept up (Reynolds, et al 2006). The young workers entering the workplace are expecting a different workplace than their parents, especially regarding salary. Frequently, team collaboration is required by employers but narcissists often blame others for failure, can be competitive with colleagues and are motivated to achieve victory individually rather than for the group. A narcissist is likely to show a sense of entitlement which makes for a poor team player (Campbell & Campbell, 2009).
Perhaps the present economy temporarily blocks some narcissistic behavior from showcasing yet, managers report Millennials feel entitled to greater rewards for less work (Twenge & Campbell, 2009). One could surmise highly narcissistic workers may not be satisfied in the workplace, thus influencing employee engagement. Considering the expected influx of Millennial workers entering the workforce, almost 80 million strong (Raines, 2003), the potential impact of increasing narcissism in the workplace becomes more evident. With research evidence to confirm this increase in narcissism, HRD professionals will need to devise methods that will effectively socialize Millennials into established organizational and productive practices.

**Employee Engagement.** Because it appears that levels of work centrality are declining and narcissism levels are increasing, it follows that employee engagement will be influenced. This may be most apparent with the youngest generation entering the workplace. High levels of employee engagement are desirable. Employee engagement is a state of mind that is characterized by vigor, dedication and absorption (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002). Engagement is an advantageous condition in which an employee exhibits high levels of involvement, commitment, passion, enthusiasm, focused effort and energy (Macey & Schneider, 2008).

Employee engagement is related to positive employee performance and productivity (Bakker & Demerouti, 2008; Halbesleben, 2010; Schaufeli, Taris, & Bakker, 2006), positive organizational performance (Harter, Schmidt, & Hayes, 2002; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009) and employee retention and well-being (Halbesleben, 2010; Saks, 2006). An engaged employee shows higher levels of discretionary effort, thus increasing both overall individual and collective performance
(Harter, Schmidt, & Keyes, 2003). If work is not a high priority, meaning it is not central to one’s life (work centrality), it will be more difficult to be highly involved, committed and passionate about one’s performance and productivity. It is this researcher’s belief that employee engagement is affected by the antecedents of work centrality and narcissism.

Due to the turbulent economic environment of the last five years, organizations are struggling to build a sense of security for their shareholders and customers. In addition to implementing strategies to improve organizational performance and outcomes during these fiscally difficult times, the generational differences of declining work centrality and increasing narcissism can further challenge management of the workforce due to its potential affect on employee engagement.

**Purpose of the Study**

The workplace is changing. Not only by the anticipated exodus of Baby Boomers, as the oldest Baby Boomers turned 65 years old in 2011 (Stendardi, 2005) but also by the influx of younger workers entering the workplace. More importantly, though is the changing of how central the role of work is to an individual worker. Recent literature has identified negative work performance associated with lower work centrality and higher narcissism which are two generational differences detected in the youngest generation entering the workforce. However, not found is research with a quantitative approach that examines work centrality, narcissism, and their relation to employee engagement. It is important to recognize that engagement is a desirable condition in which an employee exhibits high levels of involvement, commitment, passion, enthusiasm, focused effort and energy (Macey & Schneider, 2008). Both HRD scholars
and practitioners will be called upon if employee engagement is negatively impacted by declining work centrality and increasing narcissism. With advancing technology and ever-increasing global trade driving striking changes in the 21st century workforce, HRD’s role in preparing the workforce to achieve future sustainable economic growth is crucial. A HRD goal is to improve the performance of an organization by maximizing the efficiency and performance of its employees. As Swanson and Arnold (1996) state, “the purpose of HRD should be to improve individual performance so it contributes directly to organizational performance goals”. The problem is the uncertain existence of work centrality and narcissism differences among the generations currently in the workforce, and how their influence on employee engagement can potentially impede optimum workforce performance. HRD’s task to improve individual performance is more difficult when the factors that negatively affect performance are not known or understood.

This study addresses whether generational differences of work centrality and narcissism exist and if so, do they vary among the Baby Boomer, Generation X, and Millennial generations in the workplace? It considers whether there is a relationship between work centrality and narcissism because the simultaneous rise of narcissism and decline of work centrality raises the question: is there a relationship between the two? Finally, the study examines work centrality, narcissism, and their influence on employee engagement. The purpose is to understand the generational differences of work centrality and narcissism among the generations in the workforce, with a particular attention given to the youngest and burgeoning generation, Millennials, who are replacing the retiring Baby Boomers. It is important to pay attention to the Millennials because by 2014, 36%
of the U.S. workforce will be comprised of Millennials and by 2020, 46 % (almost half) of U.S. workers will be Millennials (Bureau of Labor Statistics, 2007). The Millennials will be a major future force in the workplace. An additional purpose of the study is to determine the possible influence of these two generational differences on employee engagement, which may provide insight for HRD development of strategies for sustaining and improving workforce performance.

**Research Questions**

This research study contributes to existing HRD research by examining the generational differences of work centrality and narcissism, the relationship between work centrality and narcissism and whether work centrality and narcissism influence employee engagement.

Specifically, the study answers:

1) Do generational differences in work centrality and narcissism exist?
   a) If so, how does work centrality and narcissism differ by generational cohort?
      i) Do Millennials have lower work centrality and higher narcissism as compared to Baby Boomers and Generation X workers as previous research has determined?

2) Is there a correlation between the constructs of work centrality and narcissism?

3) Does work centrality and/or narcissism influence employee engagement?

**Need for the Study**

Engaged workers demonstrate higher levels of satisfaction, performance and productivity (Harter et al., 2003; Macey & Schneider, 2008). Lower work centrality and higher narcissism suggest an adverse impact on employee work engagement. This has
implications for HRD because the youngest and fastest growing generation presently in
the workplace has received little empirical examination regarding their levels of work
centrality and narcissism. Insufficient statistical data was collected during the
Millennials’ secondary education years as full-time employment was still on the horizon.
This research surveys only participants currently working full-time in the workplace.
Due to the Millennial generation’s large membership, this knowledge will be useful for
future HRD strategies.

Recent research indicates that Millennials have lower work centrality and higher
narcissism than the preceding generations of the Baby Boomers and Generation X who
are presently in the workforce. This could be a significant worker management issue
necessitating attention for HRD. Because it has only been a recent revelation that there
are definable generational differences with the Millennials, not related to age or career
stage differences, it is necessary to investigate if these differences in work centrality and
narcissism do exist. It is essential to discern if prior research results regarding
Millennials, as students, are also applicable to the Millennials employed in the workplace
of today. Most previous generational research related to this topic has involved high
school and higher education students as research subjects. Hansen and Dik (2005) found
that values learned in one’s youth usually hold true into early adulthood. Even with
assuming the Millennials’ earlier work values will remain stable, there is the concern
related to the uncertainty if the current Millennials will remain steadfast to their declining
work centrality and increasing narcissism when they become fully entrenched in the
workforce. This study surveys the three largest generations actively working in the
workplace (Baby Boomers, Generation X and Millennials.)
HRD consist of two paradigms for research and practice: learning paradigm and performance paradigm (Swanson & Holton, 2001). This study looks at the problem through the lens of HRD’s performance paradigm. The outcome focus is on total performance that includes both the individual performance improvement approach and whole systems performance improvement approach. Swanson and Holton (2001) state, “the purpose of HRD is to advance the mission of the performance system that sponsors the HRD efforts by improving the capabilities of individuals working in the system and improving the systems in which they work” (p. 137). This study is needed because organizational performance and growth are dependent on successful HRD practices (Aggarwal & Bhargave, 2009). HRD practitioners and scholars need to understand generational differences and engagement in order to improve the capabilities of employees, which should have positive results on both individual and organizational performance.

Significance of the Study

Few topics in the popular business press over the past few decades have captured as much attention as the changing nature of work and its effects on organizations, families and individuals. How individuals view work is critical in this swiftly moving global economy. HRD is a continuous process of identifying, maintaining and promoting the individual performance and learning potential of any worker.

This study contributes to both HRD research and practice in a number of ways. First, this study adds to the presently limited empirical research data on generational differences in the workplace, as much of the generational information is anecdotal or derived from qualitative methods. Second, it contributes to the body of research on
work-related values specifically confirming the level that work is of central importance (work centrality) to the generational cohorts of Baby Boomers, Generation X and Millennials. The study posits that the value a person attaches to work itself differs for each employee; however, workers from the same generational cohort will share similar values, thus, similar views on how central work is to their lives. Third, the study contributes to further understanding of the effect of narcissism and its role in the workplace as preliminary evidence points to a pervasive influence of narcissism on organizational processes (Campbell, et al., 2011). Fourth, this study increases knowledge about the relationship between work centrality and narcissism. Individual work performance is a critical factor in organizational performance and understanding the relationship between these two distinct generational differences provides HRD practitioners the evidence needed to direct efforts toward this subject. Finally, this study brings together two different streams of research: generational differences and employee engagement. It provides quantitative evidence of work centrality and narcissism’s influence on employee engagement and offers HRD practitioners the insight to develop appropriate strategies to foster and increase employee engagement.

Operational Definitions

*Generations* - Each time a rising generation comes of age, it is assumed that their perspectives influence change in society’s social mood and direction. Historians, Howe and Strauss (2000) state, “generations are a great key for unlocking the history of any society that believes in progress” (p. 363). Recognizing and understanding the affect of each generation and how they influence change can be both enlightening and beneficial for employers (Twenge, 2006). There are currently four generations
represented in the workforce. Because the oldest generation, called the Traditionalists or Silent Generation (born between 1922 and 1943) are dwindling in number, only survey data from the three largest generations are included in the research study. While generation names abound, this researcher has chosen the following names to consistently identify the three largest generations, which are the focus of this study:

1. *Baby Boomers*- (Born 1944-1960)

*Generation* - is a group of people who are programmed in the same time period (Raines, 2003; Howe and Strauss, 2000). They are defined by both key life events and demographics that they experience together (Zemke, 2001). The time period in which individuals are born, will dictate the culture they will experience. The culture is determined by a multiplicity of time period measures such as media messages, world news events, social trends, economic realities, national disasters and successes, music, technology, behavioral norms, school values, national mood, and ways in viewing the world (Twenge, 2006). Members of a generation are bound by the mainstream culture of the time that formed them. These shared experiences during their formative years, which are approximately the first twenty years of their lives, gives each generation their distinctive character (Lancaster and Stillman, 2002). Howe and Strauss (2000) determined that each generation has a “peer personality” because individuals share an “age location in history” that lends itself to a collective mind-set. Because generations hold a specific place in history, they have a way of viewing the world in a way different from the generation before or after them.
Work Centrality refers to the degree of general importance that work has in an individual’s life at any given time (MOW, 1987). It is a normative belief about the value and importance of work in the configuration of one’s life, and it is a function of one’s past cultural condition or socialization (Kanungo, 1982). This study assesses work centrality of its research participants by using Paullay et al.’s (1994) 12-item measure of work centrality.

Narcissism is an inflated view of oneself. It is a belief that one is special and unique and expects special treatment from others while believing one owes little or nothing in return (American Psychiatric Association, 2000; Millon, 1996). Narcissism is a set of attitudes a person has toward oneself, including self-love, self-admiration and self-aggrandizement (Freud, 1957). Narcissists lack empathy for others yet desire social contact because others serve as their primary source of attention and admiration (Morf & Rhodewalt, 2001). This study assesses narcissism using the shorter 16-item version by Ames, Rose, & Anderson (2006) of the Narcissism Personality Inventory (NPI) developed by Raskin & Terry (1988) which in its complete state contains 40-paired statements.

Engagement refers to the relative strength of an individual’s identification and involvement in a particular organization (Mowday et al., 1982). An engaged employee is fully involved in and enthusiastic about his/her work and will perform in a way that furthers the organization’s interest. Employee engagement is a positive, fulfilling, work-related state of mind that characterized by vigor, dedication, and absorption (Schaufeli et al., 2002):

Vigor – Energy, mental resilience, invested effort, and persistence
(Schaufeli et al., 2002);

*Dedication* - Feelings of significance, enthusiasm, inspiration, pride, and challenge (Schaufeli et al., 2002); and

*Absorption* – Being engrossed in work, a persistent state where it is hard to break away (Schaufeli et al., 2002).

This study uses the shortened Utrecht Work Engagement Scale (UWES) now composed of 17 items (Schaufeli & Bakker, 2003). From Schaufeli, Salanova, Gonzalez-Roma, & Bakker’s (2002) definition that employee engagement is characterized by vigor, dedication and absorption, the survey will include 6, 5, and 6 items respectively for the vigor, dedication and absorption variables.

**Organization of Study**

Chapter 1 includes an introduction, purpose of the study, research questions, need for the study, significance of the study, operational definitions, and the summary below. Chapter 2 provides a comprehensive literature review covering work centrality, narcissism, employee engagement, generations and descriptions, generational theory/social identity and HRD theoretical framework. The methodology of the study is described in Chapter 3. This includes the philosophical framework for the research, design considerations, sampling rationale, data collection, and analysis details. Chapter 4 presents the results of the online survey data and statistical analysis. Chapter 5 provides the discussion, limitations, implications, direction for future research and conclusion.
Summary

The workplace is complex and changing. As organizations pay more attention to generational differences and employee engagement, HRD practitioners and scholars are increasingly asked to play a larger role in the development of strategies yet sufficient research eludes HRD professionals. Organizational performance and outcomes are dependent on successful Human Resource Development strategies which enhance engagement related traits of motivation, performance, loyalty and commitment (Aggarwal and Bhargave, 2009; Sharabi, 2008). Declining work centrality and increasing narcissism may have an adverse effect on employee engagement, thus negatively affecting individual and organizational performance. This study examines whether generational differences of work centrality and narcissism do exist, and if so, do they vary among the Baby Boomers, Generation X and Millennial workers? The study also examines if there is a relationship between work centrality and narcissism and whether work centrality and narcissism influence employee engagement.

As Rendell (2007) comments, “It is said that the future is not a place we go to, but one which we create” (p. 1). The success stories of tomorrow will be the organizations that address their long-term human capital needs today by understanding and engaging all generations of workers.
Chapter 2 - Literature Review

This literature review provides a historical synopsis of the subjects, shares results from related studies, demonstrates how this research study extends prior studies, and supplies the framework for the significance of the study. Chapter 2 covers generations, generational theory, HRD paradigm, work centrality, narcissism, employee engagement and current empirical research.

Summarizing from Chapter 1, this study examines whether generational differences in work centrality and narcissism do exist, and if so, do they vary among the Baby Boomer, Generation X, and Millennial generations in the workplace? It determines if there is a correlation between work centrality and narcissism and examines the relation of work centrality and narcissism on employee engagement. Even though generational differences have received much attention by the media, popular press, authors and scholars, the idea that generational differences exist has drawn mixed support. Furthermore, to a large extent, prior generational research is based on samples limited to high school students and higher education students. This study, however, surveys Baby Boomer, Generation X and Millennial generation employees in the present day workplace.

There are challenges associated with effectively managing our present day multi-generational workforce. Although this blend of generations adds valuable diversity to the workforce, it also adds complexity. The generational differences can result in conflict and misunderstandings in the workplace. Continued economic uncertainty will force organizations to depend more heavily on the commitment, dedication and hard work of their workers in order to build a high-performing organization (Lieber, 2010). It is
imperative for organizations, guided by Human Resource Development (HRD) scholars and practitioners to capitalize on each generation’s strengths to achieve success.

Researchers and historians reveal that each generation differs in their values and behaviors. These differences developed because of the historical context in which its members were born. In recent years, generational differences in the workplace have become increasingly scrutinized by researchers because these differences can present managerial challenges and ultimately influence performance. While there are four generations in the present day workplace (Traditionalists, Baby Boomers, Generation X and Millennials), the Millennials, the largest and youngest generation now entering the workplace, are of particular interest. Perhaps due to their size, eighty million strong, or the impending urgency to replace the rapid exodus of Baby Boomers, or simply knowing they will dominate the future workforce and in the process reshape the work experience of all employees, Millennials appear to hold several different and more conspicuous work attitudes than in preceding generations.

The topics capturing most popular press are the Millennial generation’s values, attitudes, motivations, characteristics and future workforce impact. This is easily evidenced by articles such as, “Managing Different Generations at Work” (Marshall, 2004), “The Multi-Generational Workplace” (Chiles, 2005), and “The New Melting Pot” (Houlihan, 2008). The marketplace also overflows with generation-related books. For example, Zemke, Raines & Filipczak (2000), in their book, Generations at Work, explain:

At no previous time in our history have so many and such different generations with such diversity been asked to work together . . . and the
unfortunate outcome . . . is intergenerational conflict: differences in values and views, and ways of working, talking and thinking, that set people in opposition to one another and change organizational best interests. (p. 9)

Interest in this generation has now substantially extended from the business press to the academic world, leading researchers to investigate empirically if the Millennial generation is indeed different than previous generations and how the Millennials will influence the workplace of tomorrow (Macky, et al, 2008). The implications of these possible differences have yet to be validated with steadfast consistency. The time-lag studies of Twenge (2010), Smola and Sutton (2002) and Kowske et al. (2010) found two notable generational differences which are the decline in work centrality with preference for more leisure time and increase in narcissism of the youngest generation in the workforce called Millennials, who were born during the years of 1982 – 2002. Although the literature confirms generational differences exist in respect to work values and attitudes, limited attention has been given to the relations of work centrality, narcissism and employee engagement and their impact on the workplace.

To set the stage for the research study, the first challenge is determining whether the generational differences of work centrality and narcissism are “real”. Are there varying levels of work centrality and narcissism among the generations in the present-day workforce as Twenge (2010) and others suggest or are the substantive differences between the Millennials and their predecessors more perceived than “real”? If the differences are “real”, then will the Millennials’ employee engagement be affected? The subject of employee engagement has spawned considerable interest since its inception in
the organizational behavior literature (Kahn, 1990). Will Millennials have difficulty acculturating into organizations where the power is held by the Baby Boomers and Generation X? The real crux of this issue is related to economics. It is the potential impact of the generational differences on performance and productivity. Knowing if the generational differences translate into behavioral differences, which could then lead to substantially different work outcomes, is critical.

**Generation**

In order to understand generational differences, the definition of generation is needed. Mannheim (1953) describes a generation as a group of people who were born and raised in a similar social and historical atmosphere. Kupperschmidt (2000) recognizes a generation as an identifiable group that shares years of birth and significant life events that occurred in critical stages of their lives. They are defined by both key life events and demographics that they experience together (Zemke, 2001; Raines, 2003; Howe & Strauss, 2000). This “age location in history” results in a collective mind-set. The time period in which individuals are born, will dictate the culture they will experience (Twenge, 2006). These shared experiences during their formative years (Strauss & Howe, 1991), gives each generation their distinctive character (Lancaster & Stillman, 2002).

A generation is viewed as an approximate twenty-year span from birth to early parenthood. Development of values is strongest during childhood and adolescence (Twenge et al., 2010). Each time a rising generation comes of age, it is assumed that their perspectives influence change in society’s social mood and direction. The concept of generation is important because the ebb and flow of new and old generations combined
with social and historical events drives social change. Ryder (1965) calls the process “demographic metabolism”. Historians Howe and Strauss (2000) state, “generations are a great key for unlocking the history of any society that believes in progress” (p. 363). Recognizing and understanding each generation and how they influence change can be both enlightening and beneficial for employers (Twenge, 2006).

A generational taxonomy is needed in order to examine generational effects. The researcher of this study uses the taxonomy developed by Strauss and Howe (1991) because it is currently the most comprehensive and utilizes historical data to define generations back to the sixteenth century. Because of the journalistic tendency to create appealing generational names and then proceed to over-hype them, naming the specific generations has received substantial interest and visibility. Historians, sociologists, educators and others have assigned an assortment of names for each of the four generations currently in the workplace. For purposes of this study, the names used for the four generations currently in the workplace are: Traditionalists, Baby Boomers, Generation X and Millennials. While birth years assigned for each generation may vary, based on the literature and year ranges most commonly used, this research utilizes the following birth year ranges: Traditionalists born during years 1922 through 1943, Baby Boomers born during years 1944 through 1960, Generation X born during years 1961 through 1981 and Millennials born during years 1982 through 2002 (Alsop, 2008; Clausing, et al., 2003; Crampton and Hodge, 2007; Hart, 2006; Lancaster and Stillman, 2002; Raines, 2003). The specific year ranges can vary for each generation grouping depending on the source.
A concern with any classification such as this listing of *birth year ranges* is the lack of mutual exclusiveness between the generations. Some members (known as “cuspers” or “tweeners”) who were born at the beginning of one generation may have experienced similar formative events as those born at the end of the previous generation (Arsenault, 2004). However, the inclusion of “cuspers” in the study makes the analysis more rigorous, because the probability of finding generational differences between the three major generational groups will be lower and the results more conservative.

Even though four generations are represented in the present-day workforce, due to their diminishing numbers in the workplace and the additional statistical analysis required for a fourth generational cohort, Traditionalists (now 70-91 years old), are not considered for participation in this study. This study includes Baby Boomers, Generation X and Millennials.

**Work Values**

Values are beliefs and ideas that are acquired throughout one’s life and guide an individual’s life and actions (Ryan, 2002). Schwartz & Bilisky (1987) define values as: “(a) concepts or beliefs, (b) pertain to desirable ends states or behaviors, (c) transcend specific situations, (d) guide selection or evaluation of behavior and events, and (e) are ordered by relative importance” (p. 551). When Hofstede (1980) describes the dimensions of culture, he suggests that culture impacts the unconscious values that a majority of the population of that nation holds. More precisely, Dose (1997) defines values as developing through the influences of culture, society and personality. This leads into the subject of generations as each generation group is exposed to the same historical events and social trends which are thought to create common, shared values.
(Sess et al., 2007). Arsenault (2004) interviewed members of four different generational groups. After analyzing responses, distinct collective memories for each generation were found. In addition, he found that each generation had a unique shared field of preferences. General values within the context of work are called “work values” and they can be prioritized by importance. Work values are often the underlying criteria when evaluating work outcomes (Chen & Choi, 2008). Examples of work values are: autonomy, recognition, compensation, challenge, variety, leisure, achievement and job security. Often in the literature, one will read of work attitudes. Attitudes are not synonymous with values. Values are the umbrella. Values are not situation specific, while attitudes are focused on specific situations or objects (Dose, 1997). Values influence attitudes.

**Generational Groups and Work Values**

Four generations are described by their views and values of work ethic, outlook, personality, career goals, parenting, relationships, and other categories in Table 1.

**Table 1**

*Generations and their Characteristics*

<table>
<thead>
<tr>
<th>Generation</th>
<th>Traditionalist</th>
<th>Baby Boomer</th>
<th>Generation X</th>
<th>Millennial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>52+ million</td>
<td>76+ million</td>
<td>46+ million</td>
<td>80+ million</td>
</tr>
<tr>
<td>Other Names</td>
<td>Silent generation (born between the wars) Matures</td>
<td>Boomers</td>
<td>Baby Bust generation (fewer children born per family)</td>
<td>Gen Y; Nexters; Net Generation; Nintendo Generation;</td>
</tr>
<tr>
<td>Outlook</td>
<td>Practical</td>
<td>Optimistic</td>
<td>Skeptical</td>
<td>Hopeful</td>
</tr>
<tr>
<td>Work Ethic</td>
<td>Dedicated</td>
<td>Driven</td>
<td>Balanced</td>
<td>Ambitious</td>
</tr>
<tr>
<td>Leadership by:</td>
<td>Hierarchy</td>
<td>Consensus</td>
<td>Competence</td>
<td>Achievers</td>
</tr>
<tr>
<td>Perspective</td>
<td>Civic</td>
<td>Team</td>
<td>Self</td>
<td>Civic</td>
</tr>
</tbody>
</table>
Note: The specific year ranges and the population sizes for each generation grouping vary depending on the source.

The generalizations listed for each generation are just that, generalizations. The descriptors are used to portray people located in the middle of the bell curve. The differences in the generations are not meant to stereotype individuals. Generalizing, not
stereotyping about a grouping of people, offers insights and awareness that can be helpful in understanding people and becoming better observers of the human condition. Along similar lines, even though a generational cohort is an efficient and useful social categorization, one must be careful not to paint the entire generation with the “same brush” (Ng, et al., 2010). The generation an individual is a part of is not the only factor influencing one’s behavior. Factors such as social economic status, living in different regions of a country and ethnicity can also influence an individual’s perspectives.

It is widely postulated that generational cohorts develop similarities in their beliefs and attitudes based on shared life experiences. This results in having identifiable characteristics in which the generational cohorts differ (Kupperschmidt, 2000). The following paragraphs discuss the work-related characteristics of the three generations represented in the research study. The Baby Boomer, Generation X and Millennial generations’ work-related values and attitudes have been determined by previous research.

**Baby boomers.** Currently the largest cohort in the workplace and born from 1944-1960, Baby Boomers hold the majority of leadership positions and senior positions in organizations. They wield considerable power in the workplace. Values of a firm’s most influential members tend to represent the culture of the organization (Schein, 1992). This naturally introduces the potential for young Millennial employees to experience less fit and more conflict if they hold values different from the dominant force. Boomers are found to be loyal and committed to their organizations and expect a corresponding reward because they believe hard work pays off (Gursoy, Maier & Chi, 2008).
Baby Boomers are competitive because they have had to compete for jobs, attention and promotions throughout their work life, partially due to the large size of their cohort (Chen & Choi, 2008). Many are described as workaholics with a serious, dedicated attitude about work. They “live to work” (Gibson et al., 2009; Lieber, 2010) and value leisure time less than subsequent generations. Career is a central focus in their lives (Chen & Choi, 2008). Baby Boomers began participative management, teamwork and consensus building in the workplace. They are people-oriented and still find merit in face-to-face interactions (Smola & Sutton, 2002).

**Generation X.** Chen and Choi (2008) describe Generation X as self-reliant, fun-loving and independent. They are also called Gen Xers. The range of birth years for Generation X is 1961-1981. They are cynical and skeptical toward corporate organizations (Crampton & Hodge, 2007). They witnessed high unemployment and family relocations due to the economy and as a result are more independent (Beutell & Wittig-Berman, 2008). Gen Xers are not as loyal as Baby Boomers to organizations and do not expect loyalty in return (Chen & Choi, 2008). Generation X “works to live” and places a higher priority on work-life balance than the Baby Boomers (Crampton & Hodge, 2007). They prefer consistent, ongoing feedback and desire empowerment. Generation X favors a workplace with limited supervision, few rules and informal work environment (Lieber, 2010). They would choose rapid advancement in the organization and recognition of skills over tenure (Smola & Sutton, 2002).

**Millennials.** The Millennials, also commonly called Generation Y, Echo Boomers, NetGen, GenMe, were born approximately between 1982 and 2002. Eventually, they will be the largest generation in the workforce (Twenge, 2010). The
Millennials possess a strong dose of positive self-esteem (Twenge, 2006). If they work within the structure and rules set forth by authority figures, success will find them. Millennials are “outward” directed, civic-minded and espouse conservative positions on the larger issues (Raines, 2003). The Millennials consider themselves “tech-savvy”, often labeled, Digital Natives, and have fueled the demand for the latest in communication and information processing capabilities (Shaw & Fairhurst, 2008). The next new technological advance will seamlessly be incorporated into their lives. While anxious to make an impact, they have been portrayed as lacking in loyalty and work ethic (Marston, 2007). Working in groups is their preference perhaps because their education was steeped in group work. They are team players (Howe and Strauss, 2000; Zemke, 2000). In a sense, Millennials are a logical extension of Baby Boomers.

As a group, Millennials are the most educated generation to enter the workforce. They are more connected than previous generations yet challenged by face-to-face conflict. They are high performing but come with bouts of high maintenance and emotional neediness perhaps because they constantly seek approval, praise and validation in the workplace (Herbison and Boseman, 2009; Crumpacker & Crumpacker, 2007). Despite their lower work centrality, Millennials expect promotions and pay raises early and often (Ng et al., 2010). Millennials search for flexibility. They desire freedom yet want more supervisory input and clear directions. They are loyal but still “want a life”.

The Millennials have a high external locus of control and therefore, like to blame their failures on forces beyond their control (Twenge et al., 2004; Shaw & Fairhurst, 2008). Even if rejection or failure is forthcoming, Millennials will maintain an inflated self-image (Leiber, 2010). Of interest for HRD practitioners, Millennials value continuous
learning, personal development and skill development. They are aware they need to keep updating to build a portable career (Shaw & Fairhurst, 2008) and strongly aspire to move rapidly out of an entry level position and advance vertically up the corporate ladder (Wallace, 2001).

Like others before them, the Millennials desire stability, job security and work environment opportunities. They would like to be proud of and loyal to the organization that reflects their own values (Howe & Strauss, 2000; Raines, 2003). Considering the descriptions of work-related behaviors and attitudes listed above for the Millennials, some not exceedingly positive, the research findings (decline of work centrality with preferences for more leisure time and increase in narcissism of Millennials) by Twenge (2010), Smola and Sutton (2002) and Kowske, et al (2010) become a more urgent issue requiring further examination.

**Obstacles Inherent in Generational Research**

**Life cycle stages, period effect or age-related differences.** Often questioned and for good reason is: what are the true sources of the work-related differences among employees? Research regarding generational differences would be incomplete without addressing other reasons for differences in work values, attitudes and behaviors. Research on generational differences has been afflicted for decades with an identification problem. Because of the linear relationship between age, period and generation, research results in variables that are inherently intertwined (Yang & Land, 2008). Isolating the effect of a single variable such as generation is difficult due to the relationship between age, period and generation.
Most all workers pass through a natural life cycle evolution in their attitudes and decisions about work. Young employees are different from more seasoned workers due to adjustments to a first-time full-time job, possible unrealistic expectations, high learning curve stressors and issues related to inexperience and naiveté. Middle age workers face challenges of raising families, being single working parents or balancing both parents working and day care complexities. Older workers may be challenged by choosing the best timing of their retirement, how they view their working career as they near the end and if expectations have been met, motivation changes, health issues and caring for elderly parents. It could be easy to mistake life cycle differences for generational differences (Levenson, 2010).

Not only are these different age workers experiencing different life cycle stages, these stages can color how generations view each other in the workplace which could be mistaken as a generational difference. For example, Generation X’s desire for economic security as they face mortgages and expanding family expenses may affect their view of Millennials who choose to move freely from job to job in search of higher pay, a different work environment or hours that are more flexible. These views can also influence behaviors. The significant challenge for researchers is to be able to decipher life cycle stages or age-related attitudes and decisions about work, which are usually similar for each generation as they pass through the stages from those that are meaningfully different for a specific generation.

The data for quantitative research is usually sourced from extant data sets or the data from research surveys/questionnaires. Most large-scale data sets used for research are data derived from cross-sectional studies (Levenson, 2010). A majority of research
studies are cross-sectional in design, meaning data is collected from workers of different ages all at the same point in time. The disadvantage of this design is that any differences due to age, life cycle stage or generation may be difficult to separate out. The weakness is caused by not taking into account the confounding variables and not trying to eliminate or control other factors. The difficulty in generation related research is isolating the effect of a single variable. There are several variables in the relationship to consider: age, period and generation. An age effect is variation because of physiological growth and movement through developmental stages. The period effect’s variation is due to historical events that happen at a specific point in time and effect all generations similarly, i.e., 911 Terrorists attacks, Kennedy assassination. Variation due to the shared experiences of the same age group at the same period is the generational effect. The generational differences are a result of generational succession. Separating out the effect of generation or controlling the effects of age and period requires specific sampling methods and research design (Kowske, Rasch and Wiley, 2010).

**Cross-sectional, longitudinal and time lag designs.** There are current cross-sectional research studies evaluating the generational differences in work values by Meriac, Woehr and Baister (2010), Hauw and De Vos (2010) and others but a recent study by Twenge (2010) which used the “time-lag” design method warrants discussion. Two other design methods in addition to the cross-sectional design can be used for research. The two methods are longitudinal and time lag. Longitudinal design examines the same participants several times throughout the years as they continue to age and is often used for medical studies (Lerner, 2002). Twenge (2010) states the best design for determining generational differences is the time-lag study. This design examines
individuals of the same age at different points in time. This time-lag design has advantages as it is able to isolate generational differences because with age held constant, differences can then be due to either generation (based on birth cohort) or time period. An example of a time-lag study is when Twenge analyzed the work values of a representative sample of U.S. high school seniors in 1976, 1991 and 2006. The research subjects were different same-aged students studied in different generational timeframes. Along similar lines, other researchers have completed time-lag studies regarding generational differences in attitudes about work. Smola and Sutton (2002) compared work attitudes from samples taken in 1974 and 1999. Galinsky, et al. (2009) examined attitudes about work from 1992-2008. Unfortunately, time-lag studies are less common because they necessitate similar samples of the same age being asked the identical questions in different years, which is time consuming, expensive, and extends the research study for decades. In order to isolate the effect of generation, or control the effects of age and period, particular design and sampling methods are required and will be further discussed in Chapter 3.

Though not the ideal choice, a cross-sectional design that is the most widely used method for data collection, is used for this study. Different groups of workers will be studied at one point in time so that all observations can be completed with less expense and in a shorter time frame than a longitudinal or time-lag study.

**Paradigm, Theory and Framework**

**HRD paradigm.** HRD consist of two major paradigms for research and practice: learning paradigm and performance paradigm (Swanson & Holton, 2001). While the learning paradigm has been the most common (enhancing individual learning), this study
is guided by the performance paradigm as the outcome focus is on total performance. When the outcome is on total performance then the intervention focus is on both the incorporation of non-learning components of performance as well as learning interventions. Learning interventions are the range of events or actions designed to help workers acquire new skills and knowledge. Examples of learning interventions are: experiential learning, on-the-job-training, simulation, role play, laboratory training, live or virtual training and self-study. Non-learning components of performance are events or actions designed to change conditions that facilitate attainment of desired performance. This could be removing obstacles/objects to adding facilitative elements to the performance system. Examples of non-learning interventions are: job aids, adjustments made within the work environment (eliminating barriers, increasing support mechanisms) and incentives/motivation (pay for performance system, realignment of commissions, impact of performance clear) (Ford & Weissbein, 1997).

This paradigm includes both the individual performance improvement approach and whole systems performance improvement approach. Swanson and Holton (2001) state:

The purpose of HRD is to advance the mission of the performance system that sponsors the HRD efforts by improving the capabilities of individuals working in the system and improving the systems in which they work. (p. 137)

This research study is needed because personal and organizational performance and growth are dependent on successful HRD practices (Aggarwal & Bhargave, 2009). HRD practitioners and scholars need to not only understand the impact of generational
differences but also devise strategies to foster employee engagement that will strengthen both individual and organizational performance.

The following theory and framework grounds the study. Dublin (1976) states that theory is “the attempt . . . to model some aspect of the empirical world” (p. 26). If the theory is accurate, it will provide knowledge of the outcome and knowledge of the process, with regard to the variables of interest. A good theory is able to both predict what will happen when given a set of values for specific variables and why this predicted value should result. As one would expect, HRD scholars and practitioners are concerned with the accurate prediction of the theory in order to guide their future decision making in the workplace.

**Generational theory.** Howe and Strauss and Howe’s (1991) generational theory, a subset of social identity theory, is the theoretical framework for this study. Originally developed by Henri Tajfel in 1979 and further expanded upon by John Turner, social identity theory’s basic premise is that people tend to categorize themselves and others into social categories (Tajfel & Turner, 1986). Each individual has a repertoire of social and personal identities and each identity informs the individual of who he/she is and what the identity entails. Social identities are associated with normative rights, obligations and sanctions, which form roles. Along with self-identities, individuals are prompted to adopt shared social attitudes from their membership in a social group category. A generational group such as the Millennials looks toward their generational group for their social identity.

Generational theory suggests that membership in a generation impacts a person’s values and beliefs across all stages of development (Mannheim, 1952, Strauss & Howe,
1991, Eyerman & Turner, 1998). The core tenets of generational theory that remain relevant even today were developed several decades ago by Mannheim (1952). The commonly cited theory of “generations” was further developed in the early 1990s by sociologist and historian, Neil Howe and William Strauss.

Generational theory is based on the premise that the major historical events and conditions a person experiences in the first approximately twenty years of one’s life (critical stage of development) creates a inimitable set of shared beliefs, attitudes and values similar to others in the same time period (Howe & Strauss 1991; Kupperschmidt, 2000). Variations do exist within each generation as factors such as race, ethnicity, gender and social class can have a significant influence on one’s perception of shared life experiences and can strongly influence identity. Generational theory supports the existence of the Millennial generation and the work-related value differences.

**Resource-based view of the firm.** The researcher is using the resource-based view of the firm framework because the competitive advantage of a firm lies primarily in the application of available, valuable resources, which are the employees (Coase, 1937; Wernerfeld, 1984). Human capital is the most valuable resource for organizations. Reinmoeller (2004) states, “the resource-based view, also called capabilities view of the firm considers a firm’s competitive advantage to stem from superior resources, core competencies or capabilities (p. 92). Researchers Nahapiet and Ghoshal (1998) and Wright and McMahan (1992) argue that strategically-managed human capital can provide sustainable competitive advantage. The resource-based view suggests that an organization should recognize its unique package of assets and generate superior capabilities from within the organization itself to gain competitive advantage (Wright,
Dunford & Snell, 2001). This resource-based view of the firm supports the primary role of the HRD practitioner, which is the learning and performance development of human capital (Swanson & Holton, 2001).

**Work Ethic**

Before addressing work centrality, one of the featured constructs of the study, it is important to understand how the construct of work centrality is related to work ethic. Work ethic is a set of beliefs and attitudes reflecting the fundamental value of work (Miller, Woehr & Hudspeth, 2002). The value of work is different from how central work is to one’s life. A person can believe that work is necessary and important but not have work be his/her top priority or central to his/her life. Miller et al (2002) states that work ethic is not a single construct but a grouping of attitudes and beliefs relating to work behavior. Miller, Woehr and Hudspeth (2002) suggest work ethic is: 1) multidimensional; 2) is related to work in general, not any specific job; 3) is learned; 4) is a motivational construct reflected in behavior and, 5) is secular—not tied to any specific relation. It is in the dimensions of work ethic where work centrality fits. Miller et al (2002) identifies seven dimensions of work ethic. They are: centrality of work, self-reliance, hard work, leisure, morality/ethics, delay of gratification and wasted time. The scale frequently used to examine work ethic is the Multidimensional Work Ethic Profile (MWEP). Work centrality is one of the dimensions measured with this scale. While there is much discussion of the generational differences with respect to work ethic, far fewer studies directly assess the potential generational differences of work centrality, which is a dimension of work ethic.
Work Centrality

Within the industrialized world, work is central to most people’s lives, providing meaning and a source of identity as well as resources for fulfilling basic needs (Sharabi & Harpaz, 2007). The concept of work centrality originates from Dubin’s (1956) formulation of “work as a central life interest” which is rooted in Weber’s (1930) Protestant work ethic theory. Work Centrality is a normative belief about the value and importance of work in the configuration of one’s life (Paullay et al., 1994), and it is a function of one’s past cultural condition or socialization (Kanungo, 1982). This implies that an individual’s work centrality is influenced by the generation in which they were born.

Work centrality has also been defined as the degree of general importance and significance that working has in one’s total life at any given time (MOW—International Research Team, 1987). It is not only about the importance of work but also about the importance of work relative to four other life areas: family, religion, leisure and community. Hirschfeld and Field (2000) state, “people who consider work as a central life interest have a strong identification with work in the sense that they believe the work role to be an important and central part of their lives” (p. 790). Work centrality has been heavily researched across a variety of cultural settings. The finding that work plays a fundamental and central role in the life of an individual has been supported empirically in most industrialized countries (Brief & Nord, 1990; England & Misumi, 1986; Mannheim, 1993; Mannheim, Baruch, & Tal, 1997). Additionally, work has been found to rank second in importance only to family and of relatively high importance compared with other important life areas such as religion, leisure and community (Harding & Hikspoors,
Of particular interest to this study is the research that has been conducted exploring the antecedents and consequences of work centrality, showing that work centrality is related to demographic, job, personal and organizational characteristics (Mannheim et al., 1997; Sverko & Vizek-Vidovic, 1995). This research supports the probability that work centrality and narcissism influence employee engagement.

For clarification purposes, the term *work involvement*, even though it sounds like it would mean being actively engaged in the work role, is another name for work centrality. Kanungo (1982a) defined work involvement as “a generalized cognitive (or belief) state of psychological identification with work (p. 341).” For the purposes of this research, the term work centrality will be used.

**Work centrality and generations.** This research study is built on the generational differences found because of the time-lag studies of Twenge (2010), Smola and Sutton (2002) and Kowske et al. (2010). Two of the most credible generational differences determined in their studies were the decline in work centrality with preference for more leisure time and increase in narcissism of the youngest generation in the workforce called Millennials, who were born during the years of 1982 – 2002. Twenge gathered data from *Monitoring the Future* (Johnson, et al., 2006) which has surveyed a national sample of high school students since 1976 using a multistage random sampling procedure. She examined differences in work values by isolating generational difference from age differences. The study looked at the work-related values of three generations of high school seniors at three different times (1976, 1991, and 2006).
There is a concern that a research study examining work-related values such as this one would build a study based on results from participants who are not yet in the workplace. Researchers are often questioned for utilizing opinions from the inexperienced research participant (limited, if any work experience), as a considerable volume of research on generations has involved high school and higher education participants (Example: Twenge’s research previously discussed). One could assume that the values a teenager holds about work will be different after he/she has been in the workforce for several years but that does not appear to be the norm. A meta-analysis by Low, et al., (2005) has shown that work attitudes are relatively stable from early adolescence to early adulthood. Hanson and Dik (2005) determined that the work interests of high school seniors “remained predictive of occupational membership as far as twelve years after graduation from high school” (p. 365). Schuman and Scott’s research (1989) uncovered generational identities through interviews by eliciting reactions to historical events that were important to the interviewees, and then they explained the rational for their choices among these events. Schuman and Scott found with these data, that different generational cohorts recall different events with formative experiences playing a key role in individuals’ collective memories. They concluded that whatever earlier experience is carried forward in the memory by a specific generational cohort is likely to influence future attitudes and behaviors. An example illustrating this finding is related to the value Millennials place on work-life balance. Millennials observed the balance sacrifices their Baby Boomer parents made to achieve financial success. Many Millennials spent ten to eleven hours in day care or aftercare programs at school so their parents could put many hours into work. As a result of this memory and
other factors, Millennials report a strong desire to achieve greater work-life balance. Twenge et al (2010) found that the development of values is strongest during childhood and adolescence. While these values may evolve over time, there is considerable evidence that Millennials are already more family-oriented than previous generations (Hershatter & Epstein, 2010). All of the above studies have determined that work values are relatively stable throughout early adulthood which means what an individual learns to value in his/her youth carries into early adulthood. With these early formed work values remaining stable into adulthood, this researcher believes Twenge (2010), Smola and Sutton (2002) and Kowske et al. (2010) findings regarding Millennials’ work centrality should be affirmed. Additional studies indicate that collective memories formed during early adulthood are likely to predict attitudes and behaviors relevant to the workplace in later years (Schuman & Rodgers, 2004; Smola & Sutton, 2002). Joshi, et al., (2010) state:

the set of experiences and attitudes that result from the successive entry into adulthood is unique to each generation and continues to shape work-related attitudes and expectations of a generational group in later years.

(p. 397)

Not only do the values, attitudes and behaviors learned during birth to early adulthood carry forward, attitudes gained in adulthood will also carry forward. Javidan, (2004) and Kuchinke et al. (2011) determined if a social group (generation) assigns high centrality to work, the group will also value and reward: 1) individual achievement; 2) performance appraisal systems that promote achievement of results; and, 3) value feedback as necessary for improvement. Work values are an important determinant of
work centrality. Changes in the degree of work centrality will affect attitudes and behaviors (MOW, 1987). The Meaning of Work International Research Team further states:

An employee, who attaches greater importance to working will show greater performance, be more committed to his/her organization and will exert greater job satisfactions than an employee who values working less.

(p.9)

High work centrality is related to organizational performance and growth (Aggarwal & Bhargava, 2009; Sharabi, 2008; Harpaz & Meshoulam, 2004). This is a desirable outcome, yet, there are indications the Millennials’ work centrality is declining. When work becomes less central to employees’ lives, they invest in it less. The Families and Work Institute (2005) has noticed a decline in the percentage of employees wanting to move into positions of greater authority. Having fewer applicants to choose from for leadership positions would complicate succession-planning efforts. While these generational differences in work centrality are significant, it is important to note that there are not sudden shifts in generations when a new birth cohort enters the workforce. Most trends build over time and often follow a linear pattern. Generations are part of social change, which occurs steadily over a number of years (Twenge, 2010). Although declining levels of work centrality negatively impact performance, perhaps the Millennials will bring about the needed social change of balance in work to non-work time.
Narcissism

In this study, narcissism is examined from a social-personality perspective. This is called subclinical narcissism and is a personality trait that is normally distributed in the population unlike the Narcissistic Personality Disorder (NPD), which is an uncommon psychopathology (Campbell, et al., 2011). NPD causes impairment and considerable distress in one’s life and often requires a psychiatric clinical approach for assistance. Some degree of narcissism may be considered as being both healthy and a prerequisite for self-confidence and self-assertion in the workplace but pathological narcissism may be destructive (Penney & Spector, 2002).

The type of narcissism organizations are likely to encounter with employees is subclinical narcissism. While similar to its clinical counterpart NPD, it simply appears to a lesser degree (Campbell, et al., 2011; Emmons, 1987; Rhodewalt & Morf, 1995). Subclinical narcissists (from this point will be referred to as “narcissists”) hold an inflated view of themselves, expect out of the ordinary treatment from others while believing they owe little in return. They think they are unique and special, requiring admiration (American Psychiatric Association, 2000; Millon, 1996). Narcissists have few close relationships but desire social contacts because these contacts serve as their sources of attention and admiration. External sources of affirmation are needed because they have difficulty regulating their own self-esteem (Campbell, Rudich & Sedikides, 2002; Morf & Rhodewalt, 2001).

Narcissism and generations. The second documented generational difference in Millennials is the rise in narcissistic and entitled attitudes. Millennials have been characterized as overconfident, absorbed and entitled meaning they possess enhanced
levels of narcissism. The assertion that narcissism is rising among the members of the Millennial generational cohort when compared to Generation X and Baby Boomers has been supported with recent research (Alsop, 2008; Twenge, Konrath, Foster, Campbell & Bushman, 2008a, 2008b; Twenge, 2010; Smola & Sutton, 2002; Kowske, et al., 2010). Millennials, when compared with previous generations at the same age, scored higher in the positive traits of assertiveness and self-esteem and as well as higher in the negative trait, narcissism (Twenge, et al., 2008). Research concludes that individuals who score higher in narcissism are generally more aggressive toward others when they feel rejected (Twenge & Campbell, 2003).

A few researchers argue narcissism is related to age and not generation. A recent meta-analysis by Roberts, Edmonds, & Grijalva (2010) indicated that when new data on narcissism are folded into pre-existing meta-analytic data, there is no increase in narcissism in higher education students during the past several decades. The data also indicated that age changes in narcissism are large in comparison to generational changes and replicable. Robert et al (2010) argues that meta-analyses are intrinsically more efficient because they use more data, which then can lead to stronger, more defensible conclusions. They also concluded that age is the main factor in determining narcissism. Younger adults are more narcissistic than older adults are because with youth comes exuberance, inexperience and naiveté. Then as one ages, meaning becomes an adult, he/she becomes responsible for others (significant other, family) and objects (job, car, house) and the focus on oneself diminishes.

Contrary to Roberts et al (2010) and in support of Twenge (2008) findings and other researchers, a recent study by Westerman, et al, (2012) reported that the current
generation of college students has significantly higher levels of narcissism than the
college students over the past twenty-five years. Westerman, et al., used a baseline from
ten different studies to represent historical narcissism level averages. Narcissism survey
scores from his 560 college students were all higher than the averages. They concluded
that significantly enhanced levels of narcissism among business students are likely to be
problematic for organizations.

This generational increase in narcissism reflects broad cultural trends that
encourage individualism (Twenge, Abebe & Campbell, 2010). It is likely that a
combination of cultural or societal conditioning and parenting is responsible for the
narcissism in the Millennials. From a social learning perspective, special treatment and
overindulgence by parents has resulted in children valuing themselves independent of
real attainments (Millon, 1996). Other reasons suggested for rising narcissism are the
self-esteem emphasis in schools, attention on celebrity, emergence of social networking
sites allowing to freely share one’s most favorable photos, accomplishments and other
self-promoting content, a shift in parenting away from valuing obedience and the ease of
using credit for immediate gratification (Buffardi & Campbell, 2008). Stone-Romero and
Stone (2002) found that educational systems have contributed to the increasing levels of
unrealistically positive views of self at least in the United States. Somewhat due to No
Child Left Behind Act, and other laws like IDEA and Section 504 of the 1973
Rehabilitation Act, Millennials have grown up in a world that tries to accommodate
everyone and it is all Millennials have ever known (Erickson, 2008).

It is well established that narcissism from a social-personality perspective is an
adult personality trait that is strongly influenced by childhood experiences and parenting
practices (Otway & Vignoles, 2006). Their research provides the link, which associates growing up in a specific generational cohort with shaping future behavior. Other researchers, such as Kernberg (1975) believe that parental rejection or abandonment is the origin of narcissism while Millon (1981) argues that narcissism is the consequence of parental “over evaluation” of their children. Historians Howe and Strauss (2000) suggest that Baby Boomers, the children of depression era parents, understood how difficult the times were for their parents (Depression Era), and were born into an era where it was learned that the harder one worked, the more one could provide for their family. The Baby Boomers were then able to give more to their Millennial children thus, according to some observers, spoiling them. Emmons (1987) states that because these children are led to believe they are perfect, treated as though they are special and showered with considerable attention, these illusions cannot be realized in the real world of work that results in personal conflict. Kernberg (1975) and Tracy, et al., (2009) deduced that because of this conflict, the child and/or adolescent begins to outwardly project a sense of superiority while his/her self-doubts and negative self-images turn inward. Because of denial and defensiveness, as time passes, an inflated and false view of self evolves into what is called the narcissistic personality (Tracy, et al., 2009).

Because of this potential problem of increasing narcissism in Millennials, examining if narcissism levels are indeed rising as new generations enter the workforce is needed. Considering the expected influx of Millennial workers having entered and will be entering the workforce (Raines, 2003), the potential impact of narcissism in the workplace becomes more evident. With research evidence to confirm this increase in
narcissism, HRD practitioners will have the information to devise methods that will effectively socialize Millennials into established organizational practices.

**Work Centrality and Narcissism**

Time-lag studies which separate generation from age and career stage differences consistently found that Millennials state work is less central to their lives (work-centrality), value leisure and want more freedom and work-life balance than Baby Boomers (Smola and Sutton, 2002; Twenge, 2010; Families and Work Institute, 2006). Interestingly, the Families and Work Institute (2006), after surveying several thousand workers in 1992 and 2002 found that the desire to move into a job with more responsibility is declining. Not wanting to work more hours was the reason given for not desiring advancement. This has strong implications regarding the future of leadership in organizations. The findings regarding Millennials’ work centrality is consistent as evidenced by Millennials expressing less interest in putting in overtime, less interest in taking pride in one’s work, and indicating they might not get the job because “they don’t want to work hard” (Twenge, 2010). Both Twenge and Campbell (2009) and Alsop (2008) offer an interesting observation to this decline in work centrality for Millennials. They suggest that the rise in narcissistic and entitled attitudes may be one of the reasons work centrality has declined even though the desire for materialistic values has increased. The simultaneous declining levels of work centrality and rising levels of narcissism raises the question: is there a relationship between the two? Utilizing statistically sound survey instruments that measure work centrality and narcissism, this research study examines the probable relationship between work centrality and narcissism.
Employee Engagement

Since books such as *The New Rules of Engagement* by Mike Johnson (2004), which discusses the ability to engage employees as a great organizational battle in the coming ten years, employee engagement has captured the attention of both management and HRD professionals. Only recently, has engagement been considered within the context of HRD (Shuck & Wollard, 2010). In 2009, the first article containing the term *employee engagement* appeared in an AHRD-sponsored journal (Chalofsky & Krishna, 2009). Most scholarly definitions of the employee engagement construct include the facets of cognitive engagement, emotional engagement and behavioral engagement. Kahn (1990) was one of the first to theorize about “work” engagement, which was its earlier name. He defines 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 performances” (p. 694). Macy et al (2009) state that engagement refers to focused energy that is directed toward organizational goals. Shuck and Wollard (2010) proposed for HRD scholars and practitioners their definition. They defined employee engagement as “an individual employee’s cognitive, emotional, and behavioral state directed toward desired organizational outcomes” (p. 103). This research paper aligns with Schaufeli et al. (2002) who define engagement “as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption (p.74). Vigor as it relates to employee engagement is energy, mental resilience, invested effort and persistence. Dedication refers to feelings of significance, enthusiasm, pride and challenge. Absorption means being fully concentrated and engrossed in work such that time passed quickly (Salanova, Agut & Peiro, 2005). Being
used for this study, the Utrecht Work Engagement Scale (UWES) designed by Schaufeli & Bakker (2004b) measures employee engagement as characterized by the dimensions of vigor, dedication and absorption.

Employee engagement is an individual-level construct. It is a personal choice, dependent upon what the employee considers worth investing oneself in (Harter, et al, 2002). Engagement is an advantageous condition in which an employee exhibits high levels of involvement, commitment, passion, enthusiasm, focused effort and energy (Macey & Schneider, 2008). An engaged employee shows higher levels of discretionary effort, thus increasing both overall individual and collective performance (Harter, Schmidt, & Keyes, 2003). An engaged employee works with passion and feels a profound connection to one’s organization. He/she drives innovation and moves the organization forward.

In academic literature, engagement is related to but distinct from other organizational behavior constructs. Organizational commitment refers to an employee’s attitude and attachment towards the organization while engagement is not an attitude but a degree to which an employee is absorbed in the performance of his/her role. Organizational citizenship behavior involves voluntary and informal behaviors while engagement is an employee’s formal role performance rather than extra or voluntary behavior. Job involvement also differs from employee engagement as it is tied to one’s self-image and is the result of a cognitive judgment about the need satisfying abilities of the job (May et al., 2004). However, engagement is how individuals employ themselves in the performance of their job.
With globalization, a volatile economic climate, progressively competitive markets, the challenges for business success are quite significant for organizations. There is increasing awareness that employee engagement is pivotal to successful organizational performance (Levinson, 2007a). High levels of employee engagement are desirable. Wollard and Shuck (2011) state that employee engagement has implications for all areas of HRD practice: training and organizational learning, career development, organization development, performance management and strategic change processes.

**Work centrality and employee engagement.** Multiple lines of research evidence propose that engaged employees outperform their disengaged colleagues. Fully engaged employees are less likely to turnover (Harter, Schmidt & Hayes, 2002) and are more productive (Saks, 2006). These workers demonstrate higher levels of affective commitment (Shuck, 2010) and eventually generate significantly higher levels of revenue (Czarnowsky, 2008; Wagner & Harter, 2006; Xanthopoulou et al., 2009). An engaged workforce contributes markedly to sustaining competitive advantage (Macey & Schneider, 2008). In Hirschfeld and Field’s (2000) research study using 347 full-time Fortune 500 employees, it was reported that employees who are highly committed to work not only identify with their work role, they are also engaged in the world of work. In Park and Gursoy’s (2011) study of 741 employees from twenty-nine hotels, it was determined if Millennials are less engrossed in their work, they are more likely to leave the organization. However if they found the job fulfilling and meaningful, thereby being deeply engaged, they were less likely to leave. As stated earlier, Twenge and other researchers have found declining work centrality for Millennials which means work is not as central to their lives as previous generations. Studies suggest that declining work
centrality will negatively influence employee engagement (Sharabi & Harpaz, 2010; Carr, Boyar & Gregory, 2008).

This researcher posits that as work centrality declines so also will employee engagement. If work is not central to one’s life (work centrality), it would be difficult to be highly involved, committed and passionate about one’s performance and productivity. The deduction being made is based on research examining the outcomes of engagement levels. High levels of employee engagement are related to positive employee performance and productivity (Bakker & Demerouti, 2008; Halbesleben, 2010; Schaufeli, Taris, & Bakker, 2006), positive organizational performance (Harter, Schmidt, & Hayes, 2002; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009) and employee retention and well-being (Halbesleben, 2010; Saks, 2006). One could suggest the opposite, that declining levels of work centrality will negatively affect engagement levels because employee engagement is related to an employee’s attitudes, intentions and behaviors (Saks, 2006).

Business performance matters. In any economy, organizational effectiveness is critical for success. To achieve increased and sustainable positive business outcomes, organizations need to execute strategy and engage workers (Pitt & Murdolo, 2009). Employee engagement is linked to success factors, which are employee performance/efficiency, productivity, employee retention, customer loyalty, and satisfaction, and profitability (Gonrig, 2008; Harter, Schmidt & Hayes, 2002; Maslach, Schaufeli & Leiter, 2001).

**Narcissism and employee engagement.** Narcissism has been defined by Barry, et al., (2007) as “grandiosity with preoccupation over one’s status compared to, and in the
eyes of others” (p. 934). A narcissist is “egocentric, prone to illusions of superiority and specialness and liable to be interpersonally abrasive or aggressive” (Gregg and Sedikides, 2010, p. 142). These definitions and those covered earlier in this chapter begin to describe similar characteristics. More importantly, it is how these narcissistic characteristics reveal themselves in organizational contexts. Narcissists engage in exhibitionism and attention-seeking behavior to maintain their inflated egos such as speaking unnecessarily with co-workers and at meetings (Buss & Chiodo, 1991) and are competitive and seek dominance in social situations such as team project meetings or staff meetings (Raskin & Terry, 1988; Emmons, 1984).

Even though there is extensive literature investigating narcissism specifically in the psychiatric and physiological arena, actual coverage of the narcissism construct from the social-personality perspective is insufficient in the organizational sciences. The organizational science literature for the most part is theory-based and limited in empirical work. However, the narcissism research most commonly conducted regarding organizations is related to the subject of leadership. Since Freud (1950), the link between narcissism and leadership has long been known. Narcissists, as perceived by others, display self-confidence and traits of an extrovert, which are often characteristics used to describe a leader (Lord, Foti, & DeVader, 1984). Kets de Vries and Miller (1984) state:

Narcissistic personalities . . . are frequently encountered in top management positions. Indeed it is only to be expected that many narcissistic people, with their need for power, prestige, glamour, eventually end up seeking leadership positions. Their sense of drama,
their ability to manipulate others, their knack for establishing quick, superficial relationships serve them as well. (p. 32)

Interestingly, research on narcissistic leaders appears to describe both a bright and a dark side of the leaders. Khoo and Burch (2008) state the narcissistic leaders from the bright side of leadership have strong social skills and charisma which are needed to facilitate the effective influence of employees. These positive outcomes can be attributed to their ability to articulate change-oriented goals, facilitate work group creativity and the inclination to take huge risks in pursuing the meeting of those goals (Chatterjee & Hambrick, 2007; Foster & Trimm, 2008). The dark side of narcissistic leaders according to Khoo and Burch (2008) is the exploitation of employees, lower quality relationships, and behaving in unethical ways to see both personal and organizational goals reach fruition (Blair, et al., 2008; Judge, et al., 2006). While understanding the behaviors of narcissistic leaders has merit and may possibly suggest how these behaviors can also influence employee engagement, the leadership aspects of narcissism are not the focus of this research. Due to the complexity of this leadership trait, which exhibits early positive leadership behaviors and often-resultant later negative behaviors, the time frame of this investigation would not be able to accurately capture the range.

Compared to the topic of leadership with the abundance of evidence which shows the propensity of narcissists to emerge as leaders, there is relatively little research on the influence of narcissism on employee engagement. Usually narcissism literature has as its subjects the C-Suite and high-level managers such as the study by Andreassen (2012), which did find managers reporting higher levels of narcissism and employee engagement than subordinates. The remaining employees of the voluminous workforce are often
overlooked. Because narcissism is on the rise, particularly for the youngest and largest
generation to be entering the workforce (Alsop, 2008; Twenge, Konrath, Foster,
Campbell & Bushman, 2008a, 2008b; Twenge, 2010; Smola & Sutton, 2002; Kowske, et
al., 2010), it is prudent to examine its influence on employee engagement which can
effect personal and organizational performance.

Engagement is related to better performance. The main drivers of engagement are job resources and personal resources. Examples of job resources are performance feedback, task variety, opportunities for learning and development and mentoring. Personal resources are related to personal characteristics such as extraversion, conscientiousness, emotional stability and psychological capital (Bakker & Demerouti, 2008). The pairing of mentoring which is a job resource and narcissism creates an interesting issue. Preliminary research suggests the harmful influence of narcissism on organizational mentoring. Allen et al (2009) found mentees that scored high in narcissistic entitlement could predict shorter duration relationships with mentors. Also, these same mentees report less psychosocial support, less career support and in general more negative mentoring experiences. Naturally, this has implications for development of future leaders as usually young potential future leaders are mentored. More importantly though, mentoring is one of the key organization resources that are offered to high-potential employees and mentoring is known to increase levels of employee engagement. It would then follow, if the Millennial generation is the future of the workplace, and narcissism is on the rise, employee engagement will be influenced. This has vital implications for HRD.
Narcissistic workers report higher levels of self-serving bias, which is the tendency to take credit for success from others and then blame others for failures (Campbell, et al., 2000). In jobs that require close interdependent working relationships with others, narcissists’ sense of entitlement and exploitativeness may lead to problems with relationships, thus reducing levels of performance. Narcissistic workers are more likely to respond to coworkers’ negative reactions to their narcissistic behavior in ways that are destructive rather than constructive (Campbell & Foster, 2002). Consequently, rising levels of narcissism in employees could be detrimental with jobs that require maintaining close working relationships.

The characteristics of narcissism that are observable in the workplace are arrogance, hostility and boastfulness (Morf & Rhodewalt, 2001). Even though narcissists project a very positive view of themselves, their personal view of themselves is unusually sensitive. Because their view is not grounded in an objective reality which would provide the reinforcement to make it stable and genuine, this personality trait is in constant need of attention, admiration and accolades from colleagues, peers and others (Zeigler-Hill, et al., 2010). This vulnerable nature compels narcissists to incessantly search for feedback to affirm their fragile feelings of self-worth. As one would imagine, these behaviors may annoy and aggravate coworkers. As a result, when narcissists are unsuccessful in receiving the admiration they desperately desire, they react with hostility and aggression (Zeigler-Hill, et al., 2010). Narcissists have a continuous need to feel respected and admired and it is unlikely this need will be entirely fulfilled in the normal organizational setting. If a narcissist is not receiving the adulation that he/she craves, it would follow that being engaged in and passionate about his/her work would decline.
The youngest generation now entering the workforce is expecting a different workplace than their parents (Twenge, Campbell, Hoffman, & Lance, 2010). Millennials have high expectations regarding the salary they will be earning. Society has been raising the expectations of teens but the economic reality of the present day has not kept up. In a recent survey, high school students predicted they would be earning approximately $75,000 when they would reach the age of thirty but in reality, the average income of a thirty year old was $27,000 (Reynolds, et al., 2006). Perhaps the present economy temporarily blocks some narcissistic behavior from showcasing but managers report Millennials feel entitled to greater rewards for less work (Twenge & Campbell, 2009).

One could surmise highly narcissistic workers may not be satisfied in the workplace, thus influencing employee engagement. It is also plausible, given the increase in narcissism among Millennials as determined by research, that Millennials could be an unhappy and less productive workforce because organizations fail to meet their preconceived expectations.

Social-personality research indicates that narcissism is negatively related to: willingness to change self-enhancing behaviors in close relationships; agreeableness; and commitment (Campbell, Et al. 2006). It appears logical that narcissism would be negatively associated with employee engagement. A rising tide of narcissism could present significant problems for organizations and their productivity.

Previous research found that levels of work centrality are declining and narcissism levels are increasing, it would follow that employee work engagement will be influenced. This may be most apparent with the youngest generation entering the
workplace who will be the largest and most influential generation in the workforce of
tomorrow.

Summary

In the past decade, the economic prosperity of organizations has been challenged
by several major issues: the recent credit crisis, fraudulent business and accounting
practices, and subsequent global recession. Typical with most survival responses,
workforces have been downsized and expenditures on employees reduced. This
downturn for HR only exasperates the efforts of integrating and improving the
performance of employees.

Arguably, no aspect of generational differences has received as much attention as
work-related attitudes and values (Meriac et al, 2010). It appears younger people will be
working to support a significantly large older generation even if some of the workers
remain in the workforce beyond customary retirement years. Generation X will be
moving into the management roles vacated by Baby Boomers but Generation X’s
numbers, (46 + million) are considerably smaller than their counterparts, the Millennials
(80+ million) (Crampton and Hodge, 2007). It is apparent that Millennials will play a
significant role in driving future businesses forward. As strategic management theory
suggests--successful organizations have the right people delivering the right strategy at
the right time (Young, 2006). When an organization can fine-tune how it manages its
most strategic asset-human capital, positive results will follow. The goal is for all
generations to be maximally productive. The task is for HRD professionals to not only
understand the generational differences of work centrality and narcissism, but also to
accurately address issues of employee engagement. HRD practitioners could benefit from additional rigorous research to understand the different generations of workers.
Chapter 3 – Methodology

The previous chapter’s literature review examined the subjects of generations, work centrality, narcissism and employee engagement. The literature revealed gaps in identifying the existence of work centrality and narcissism differences among the generations in the workplace. This study explores the generational differences of work centrality and narcissism among the generations actually in the workforce, with a particular attention given to the youngest and burgeoning generation, Millennials, who are replacing the retiring Baby Boomers. In addition, the study determines the influence of these two generational differences on employee engagement with intentions of contributing to HRD development of strategies for sustaining and improving workforce performance. The following chapter describes the methods to investigate the research questions.

Research Paradigm

Across and within disciplines, there are varying views of what research is and how it relates to the knowledge being developed. A paradigm is a worldview. Paradigms guide how one makes decisions and carries out research (Guba, 1990). As Patton (2002) states, it is “a way of thinking about and making sense of the complexities of the real world” (p. 69). It is a set of beliefs that guide actions and formally establishes a set of research practices. Thomas Kuhn (1962) recognized for the term “paradigm”, describes a paradigm as, “an integrated cluster of substantive concepts, variables and problems attached with corresponding methodological approaches and tools” (p. 8). Several of the common research paradigms are positivism, post positivism, critical theory, and constructivism.
**Positivism-philosophical research paradigm.** The philosophical research paradigm of *positivism* guides this study. Positivism assumes the world is objective. Swanson and Holton (2005) state “positivism assumes that an objective world exists and that scientific methods can mirror and measure while seeking to predict and explain causal relations among variables.” (p. 18). Positivism holds the position that the goal of knowledge is to describe the phenomena that is experienced. Science is seen as the way to get at the truth by understanding the world well enough to predict and control it. Positivists aim to test a theory “through observation and measurement in order to predict and control forces that surround us” (O'Leary, 2004). Positivism may be applied to studying the social world that is assumed “value free and explanations of a causal nature can be provided” (Mertens, 2005). For this study, the goal of the research is to find facts in terms of relationships among variables. The focal independent variables will be the different generation groupings (the presumed cause of relations) and the conceptual components of work centrality, narcissism and employee engagement will be the dependent variables (the presumed effect or outcome of relations).

**Research Questions**

This research study contributes to existing research by examining the generational differences of work centrality and narcissism among the generational cohorts, the relationship between work centrality and narcissism and how much work centrality and narcissism can explain differences in employee engagement. Specifically, the study seeks to answer:

1) If there are statistically significant generational differences in work centrality and narcissism by generational cohort, to what extent do they differ?
a) How does work centrality and narcissism differ statistically by generational cohort?

i) Do Millennials have statistically significant lower work centrality and higher narcissism as compared to Baby Boomers and Generation X workers as previous research has determined?

2) Is there a correlation between the constructs of work centrality and narcissism?

3) How much does work centrality and narcissism explain differences in employee engagement?

a) How do age differences influence employee engagement?

b) How do generational differences influence employee engagement?

c) Does work centrality and narcissism explain any variability in employee engagement after controlling for age?

**Hypotheses**

A quantitative research methodology is used to test and verify the proposed study’s hypotheses. The following hypotheses aided in drawing inferences about the populations of interest and constructs of the research study:

High work centrality is related to organizational performance and growth (Aggarwal & Bhargava, 2009; Sharabi, 2008; Harpaz & Meshoulam, 2004). This is a desirable outcome, yet, there are indications the Millennials’ work centrality is declining. The preceding observations about work centrality and Millennials resulted in the following hypotheses:

*Hypothesis 1:* Work centrality will vary among the Baby Boomer, Generation X and Millennial generational cohorts and it is hypothesized that
Millennials will have statistically significant lower work centrality than the Baby Boomer and Generation X cohorts.

Narcissism has risen steadily over the past twenty-five years. This generational shift in narcissism reflects broader cultural trends (Reynolds, et al 2006). The preceding observations about subclinical narcissism and Millennials resulted in the following hypotheses:

*Hypothesis 2*: Narcissism will vary among the Baby Boomer, Generation X and Millennial generational cohorts and it is hypothesized that Millennials will have statistically significant higher narcissism than the Baby Boomer and Generation X cohorts will.

Recent research indicates the Millennials have lower work centrality and higher narcissism than the preceding generations of the Baby Boomers and Generation X who are presently in the workforce (Twenge, 2010; Smola and Sutton, 2002; Kowske et al.,2010). It appears there is an inverse relationship between the two constructs. The preceding observations have resulted in the following hypothesis:

*Hypothesis 3*: There will be a statistically significant relationship between work centrality and narcissism.

A worker who attaches greater importance to working will show greater performance, be more committed to the organization and will exert greater job involvement than a worker who values working less (Ucanok, 2009). Previous research indicates that values are strong motivational forces that influence an individual’s behavior (Krebs, 1970). This researcher posits that as work centrality declines so too
does employee engagement. Based on the above, the following hypothesis was formulated:

_Hypothesis: 4:_ There will be a statistically significant positive relationship between work centrality and employee engagement such that as work centrality declines, so will employee engagement decline.

Millennials feel entitled to greater rewards for less work (Twenge & Campbell, 2009). One could surmise highly narcissistic workers may not be satisfied in the workplace, thus influencing employee engagement. The preceding observations about the narcissistic personality and potential influence on employee engagement led to the following hypotheses:

_Hypothesis: 5:_ There will be a statistically significant negative relationship between narcissism and employee engagement such that as narcissism increases, employee engagement will decline.

Employee engagement is a positive, work-related state of well-being characterized by a high level of energy and strong identification with one’s work (Bakker, Schaufeli, Leiter, & Taris, 2008). Engaged workers demonstrate higher levels of satisfaction, performance and productivity (Harter et al., 2003; Macey & Schneider, 2008). Lower work centrality and higher narcissism suggest an adverse impact on employee work engagement. Based on the above, the following hypothesis was formulated:
Hypothesis: 6: There will be a significant effect from work centrality and narcissism on employee engagement such that work centrality has a positive effect and narcissism has a negative effect.

Data Collection

This study is conducted using a survey. The survey is a descriptive research method and is useful when a researcher wishes to collect data on phenomena that cannot be directly observed as in this research study. Work Centrality, narcissism and employee engagement are not readily observed. Typically, surveys can be administered in a variety of ways, such as postal mail, telephone, home interviews and online. For this research study, the online survey was chosen for several reasons. Online surveys can easily be distributed through email messages, participants can efficiently be sent reminder email messages to participate, the cost of labor and printed mailed surveys is reduced, easier data preparation as data can easily be transferred to statistical software and the bias of personal interviews or face-to-face surveys can be avoided (Gosling, et al., 2004). There is an increased opportunity for higher response rates with an online survey because individuals check their email messages frequently and many prefer anonymity when responding. In addition, online surveys can be filled out any time and generally require less time to complete (Perkins, 2004). Perhaps the most beneficial advantages of online surveys are the shorter time in which to receive survey responses and the increased assurances of anonymity that could result in more accurate responses to sensitive issues (Strickland, et al., 2003). Upon receiving survey responses for this research study, quantitative data analysis processes are used to draw conclusions related to the study’s research questions.
Data are collected from the online survey. The survey instrument is provided in Appendix A. The instrument is composed of four parts. The first part of the survey included questions regarding participant demographics. The next three parts are previously administered and validated research instruments/scales related to work centrality, narcissism and employee engagement. The three research tools are described below.

**Work centrality instrument.** This study appraises work centrality of its research participants by using Paullay et al.’s (1994) 12-item measure of work centrality. The scale assesses the extent to which an individual believes that work is for him/her and how central work is to his/her life. Work centrality is the degree of general importance that work holds in an individual’s life at any given time. An individual’s degree of identification with the work role, embodied in the work centrality construct, has emerged as the prevailing conceptualization of what constitutes a general commitment to work (Paullay, et al., 1994). Originally, it was a six-item scale and was later modified to twelve items. Items 1, 6, 9, & 10 are reversed scored. Participants rate each item using a 6-point Likert scale (1 = “strongly disagree”; 6 = “strongly agree”). An example of an item is: “The major satisfaction in my life comes from my work”. Paullay, et al. (1994) regarded an individual’s degree of work centrality as a relatively stable attitude toward the work domain that is not very responsive to conditions in a particular work setting. This is easily reflected in the wording of all the scale’s statements as they relate to work in general and not to one’s present job. The reported coefficient alpha for the scale is $\alpha = 0.76$. Cronbach’s alpha is a coefficient of reliability. It is a measure of internal consistency meaning how closely related a set of items are as a group. George and
Mallery (2003) suggest that > .7 = Acceptable; > .8 = Good and > .9 = Excellent. A high number, such as .70 or above can imply evidence that the items measure an underlying/latent construct.

**Narcissism instrument.** The instrument assessing narcissism is the Narcissistic Personality Inventory (NPI). The NPI is the most commonly used self-report measure of narcissism (Andreassen, et al., 2012). Raskin and Hall (1979) were originators of the Narcissistic Personality Inventory (NPI). They included several heterogeneous aspects that conceptualized their view of the single personality trait of narcissism. Examples of the aspects included are “entitlement or the expectation of special favors without assuming reciprocal responsibilities”, “inability to tolerate criticism” and “a grandiose sense of self-importance or uniqueness” (p. 891). Although several versions of the NPI have been proposed in the literature, a forty-item forced-choice version (Raskin & Terry, 1988) is the one most commonly employed in current research. Raskin and Terry (1988) identified seven factors of the NPI: 1) Authority, 2) Superiority, 3) Exhibitionism, 4) Entitlement, 5) Vanity, 6) Exploitativeness, and 7) Self-sufficiency. Since then, several studies have further examined the factor structure of the NPI with varying results.

Ackerman et al (2011), a proponent and user of the NPI claims there are three different traits/factors measured with the NPI. The first is “leadership ability” which is associated with pro-social behavior while the other two traits of “grandiose exhibitionism” and “entitlement/exploitativeness” are associated with anti-social behavior. This study will not be separating the construct of narcissism into subvariables (the measurable specific traits/factors of the NPI) for statistical analysis. While the measured traits/factors may be interpreted differently among researchers, it is not a concern for this study.
This study is interested in the socially disruptive elements of narcissism that are measured in the NPI: grandiose exhibitionism and entitlement/exploitativeness. Grandiose exhibitionism can be manifested as self-absorption, vanity, superiority, and having exhibitionistic tendencies (Ackerman, et al., 2011). A worker who would score high on this aspect of narcissism needs to constantly be the center of attention and because he/she does not want to be ignored, may say shocking things, or inappropriately self-disclose. This person takes any opportunity to promote oneself and works to gain the interest and attention of others because it satisfies him/herself.

Attention is not enough for the employee who displays traits of entitlement and exploitativeness. This aspect includes a willingness to manipulate and take advantage of others along with a sense of deserving respect. This describes the worker who does not let the feelings and needs of others impede his/her goals (Ackerman, et al, (2011).

For this study, narcissism is assessed using the shorter 16-item version by Ames, Rose & Anderson (2006) of the 40-item Narcissism Personality Inventory (NPI) developed by Raskin & Terry (1988). The shorter version was chosen not only because of its acceptable Cronbach’s alpha but because it serves as an alternative measure of narcissism when situations do not allow the use of longer inventories. The online survey developed for this research study is composed of two other scales and the objective is for the entire online survey to be completed within 6 - 8 minutes. The Cronbach’s alpha for the narcissism scale is .85. As stated earlier, a reliability coefficient of .70 or higher is considered “acceptable” in most social science research situations.
The research participant reads each pair of statements (there are 16 sets of pairs) and marks one statement in each pair that comes closest to describing his/her feelings and beliefs about himself/herself. An example of a pair: “I am much like everybody else” or “I am an extraordinary person”. While these statement response choices may appear dichotomous, as the participant must choose one or the other in the pair, the statements are continuous variables because they represent a range. A survey participant scoring high on the NPI is likely to exhibit higher levels of aggressive, experience-seeking, impulsive, self-centered, self-indulgent, dominant, energetic, extraverted, exhibitionistic, subjectively self-satisfied traits compared to the typical population (Andreassen, et al., 2012).

**Employee engagement instrument.** An important focus in this study is exploring if work centrality and/or narcissism will influence employee engagement. Employee engagement is measured using the Utrecht Work Engagement Scale (UWES) developed by Schaufeli et al. (2002), Schaufeli, and Bakker (2003). Initially, engagement was situated at the opposite end of the continuum of job burnout (Maslach & Leiter, 1997). Later, Schaufeli et al (2002) viewed engagement as an independent construct from job burnout and defined it as a “positive, fulfilling, work-related state of mind that is characterized by vigor, dedication and absorption (p. 74). The UWES consists of 17 items with a 7-point scale of response choices ranging from “1” = “never in the last year” to “7” = “daily”. The scale measures the three dimensions of employee engagement. The dimensions are: 1) vigor which reflects energy, endurance and drive to put in effort at work (six items of the 17 items measure “vigor” in the scale, Cronbach’s alpha .87); 2) dedication which reflects feelings of inspiration, pride, challenge,
identification with work and feeling that what one does at work is important (five scale items, Cronbach’s alpha .91); and 3) absorption which assesses the ability to concentrate deeply on and immerse oneself in work tasks (six items measuring absorption in the scale; Cronbach’s alpha .87). The total composite reliability score for the 17 items is .95. Because all three dimensions are considered to describe adequately employee engagement, it is not surprising that engagement is a better predictor of job performance than are many earlier constructs, such as job satisfaction (Bakker, 2011). Examples of the items from each dimension include, “When I am working, I forget everything else around me” (absorption), “I am enthusiastic about my job” (dedication), and “When I get up in the morning, I feel like going to work (vigor).” As Schaufeli et al (2002) state, a high score indicates a high level of work engagement.

**Demographics.** Questions requesting demographic information of the survey participants were placed in the beginning of the online survey. Research indicates demographic items placed at the beginning of a survey increased the item response rate for demographic items without affecting the item response rate for non-demographic items or the average of item mean scores (Teclaw, et al., 2012).

**Survey sources.** Several sources were used in developing the online survey for this study. The three construct scales have been discussed earlier in this chapter. The demographic categories regarding race were adapted from admissions applications used at a Midwestern medical college. Questions regarding gender, age, race, level of education, full-time/part-time work, number of work years with organization, leadership position at current job and industry sector in which participant is employed, drew on standard commonly used category response options.
Pilot Study of the Online Survey

A pilot study can be used as a “small scale version or trial run in preparation for a major study” (Polit, Beck, & Hungler, 2001, p. 467). A pilot study can expose deficiencies in the design and/or procedure and assess the feasibility of the research. Baker (1994) suggests that a sample size of 10-20% of the total desired number of participants of the study is reasonable. Because this online survey instrument is already compiled of three existing reliable and valid instruments, the researcher deemed 5% as an acceptable number to pre-test specifically the logistics of the research instrument. The online survey used for the pilot study was distributed to a group of eighteen individuals. The group was composed of doctoral students, full-time employees of various ages and one university professor. The intention of this pilot study was to check if the instructions were comprehensible, if there was ease in navigating the survey, the wording of the study was “user friendly”, if there were ambiguities causing failure to answer or difficulty in responding and if there were misleading or inappropriate questions/statements. All responded positively to “ease of navigation” and “clearness of directions”. There were a few concerns about redundancy of statements and lack of clarity in the statement, “If unemployment benefit was really high, I would still prefer to work”. Because of the pilot study, several minor adjustments were made to the survey.

Research Design and Sampling

As mentioned earlier in this chapter, an online survey was used to gather data. Research participants were recruited from small to mid-size Midwestern businesses. A large employer (500+ employees in one location; U.S. Bureau of Statistics, 2011) would be ideal to ensure a sufficient size sample for the study and diverse sample of the working
population all from one source but it was determined that several of the large Midwestern businesses did not allow external surveys. Even though the organizations from which the sample was drawn, are small (1-99 employees) to mid-size (100-499 employees), the organizations have numerous departmental functions including administration, human resources, accounting, sales, marketing, public relations, product development and others. The researcher recognizes that the survey participants are from a non-random group who volunteer for the study, which may limit the study’s generalizability. In addition, the regional effects of the Midwestern organizations may diminish some aspects of generalizability.

The survey asks the participants if they work full or part-time. The United States Department of Labor does not define how many hours per week are considered full-time employment or part-time as it relates to the Fair Labor Standards Act (FLSA). Organizations implement their own policies that define full-time and part-time employment for each position. For purposes of this study, part-time work is twenty hours or less per week.

Even though four generations are represented in the present-day workforce, due to their diminishing numbers in the workplace and the additional statistical analysis required for a fourth generational cohort, Traditionalists (now 70-91 years old), were not considered for participation in this study. This study includes Baby Boomers, Generation X and Millennials.

Most survey participants were recruited via an email from the Human Resources department within the organization. A copy of the email, which explains the reason for the research and the request to complete the survey, is located in Appendix B. The
participants were directed to click on the embedded link within the recruitment email that directed them to the web-based survey. The online survey was created using the survey tool called Qualtrics. A design feature of Qualtrics prevented any individual from completing the survey more than once.

The survey was deployed for a period of one to three weeks for each organization. This length of time was mutually agreed upon between the researcher and the organizations. The researcher was cognizant of the lost labor productivity of employees when completing the survey and the disruption to the workplace. Reminder emails were sent by the HR department to encourage participation. Once the time had elapsed, the survey was closed and the survey link became inactive.

Twenge (2010) states the best design for determining generational differences is the time-lag study. The time-lag design examines individuals of the same age at different points in time. The time-lag design has advantages as it is able to isolate generational differences because with age held constant, differences can then be due to either generation (based on birth cohort) or time period. Though not the ideal choice, a cross-sectional design that is the most widely used method for data collection, was used for this study. Different groups of workers are studied at one point in time so all observations are completed with less expense and in a shorter time than a longitudinal or time-lag study. The cross-sectional design can be viewed as a design limitation, yet practical and efficient considering the time frame of a dissertation research study.

**Sample size.** Regarding the sample size of a research study, Comrey (1988) suggests a sample size of 200 is adequate for most studies of ordinary factor analysis that involve 40 or fewer items. Comrey also classifies a sample size of 100 as poor, 200 as
fair, 300 as good, 500 as very good and 1000 as excellent. Larger samples increase
generalizability of the conclusions reached by means of factor analysis. Perhaps
DeVellis (2003) states it best, “replicating a factor analytic solution on a separate sample
may be the best means of demonstrating its generalizability (p. 137).”

A “sample size estimation” analysis was completed for this research study using:
Ratio = N: q). Based on continuous variables, it was determined by the analysis that
340 participants would be an acceptable sample size. A parameter (q) size of 10 subjects
per item was chosen as the minimum. Tinsley and Tinsley (1987) recommend a ratio of
5 to 10 subjects per item up to about 300 subjects. Often 20:1 is the preferred parameter
size in large-scale research but for purposes of this research, 10:1 is within the acceptable
range and will be adequate.

The three survey instruments being used for the online survey determined the
number (N). The researcher selected the largest number of items/statements from an
instrument and in this study it was Employee Engagement at 17 statements (Work
Centrality has 12 statements; Narcissism has 16 statements). Then add another 17 for the
residuals of all the 17 statements (variance that is not explained) for each of the questions
which makes N = 34, multiplied by the parameter of 10 = 340. Three hundred forty
participants were needed for the study. This was a generous number of participants. A
“monte carlo” estimation using “Mplus” software would give a more accurate sample
size estimate if using structural equation modeling but for the purposes of this research
using multiple regression, a manual determination of sample size is sufficient.
Sample Characteristics

The target population was working adults from the age of 18 through age 69. Using a voluntary survey that was electronically distributed via participant’s work-related email to the majority of employees at Midwestern businesses, this researcher hoped the needed number of eligible completed surveys as determined by the sample size estimation analysis would be generated. The initial goal was to receive 340+ eligible completed surveys. Ideally, 100+ from each generation group would be desirable. All information extracted from the surveys was captured in Qualtrics and moved into SPSS.

Generic identification numbers were assigned to each participant after all the data were collected to conceal and protect the participants’ identities. All data will be destroyed within three years of collection. Paper records will be shredded and electronic files will scrambled and deleted from the hard drive.

Summary of Descriptive and Inferential Statistics

All data for analysis were gathered from the online survey responses. The data from the individual demographic variables of generation group, age, gender, race, education, number of years with the organization, position in the organization and industry sector, along with scale sum scores for work centrality, narcissism and employee engagement were transferred into SPSS for analysis.

Descriptive statistics, i.e., means and standard deviations, and frequencies and percentages were used to describe the entire sample using the demographic information obtained from the online survey. All inferential statistics were determined by ANOVA, MANOVA and multiple regressions. These statistical methods were chosen to test the differences among the three different generational cohorts and to study the complex
relationships among the variables of age, work centrality, narcissism and employee engagement.

The path diagram below provides a simplistic visualization of the research study’s possible relationships among the constructs. Wright (1921) invented path analysis and drew circles or ovals to present latent factors (work centrality, narcissism and employee engagement) and rectangular boxes to represent the observed (or measured) variables. Single headed arrows represent paths that are used to define causal relationships with the tail of the arrow causing the variable at the point. Double-headed arrows designate covariances or correlations, without causal interpretations.

![Path diagram](image)

Analysis of variance (ANOVA) is a hypothesis-testing method that is used to evaluate the mean differences between the three populations, i.e., generational cohorts. It has a definite advantage over a t-test because it can be used to compare two or more populations. The ANOVA is used to investigate whether the differences between the cohort groups on work centrality and narcissism respectively are due to chance or systematic differences between the means. A .01 level of significance was chosen for this study, which means the results would occur by chance less than one time out of 100.

Multivariate analysis of variance (MANOVA) is used when there are multiple independent and dependent variables in the study. In the current study, it was used for
comparing the multivariate means of the three generational cohorts. Unlike ANOVA, it uses the variance-covariance between variables in testing the statistical significance of the mean differences. It determines if there are differences between the three generational cohorts on more than one continuous dependent variable and in this case, there are two dependent variables, work centrality and narcissism.

The statistical technique called correlation was used to measure and describe the relationship between work centrality and narcissism. There is no attempt to manipulate the variables with this technique but to observe what occurs naturally. A Pearson Coefficient correlation determines the direction of the relationship (negative or positive), the form of the relationship (straight line or curved) and the degree of the relationship (numerical value of the correlation). This technique is valuable for making predictions because it indicates the magnitude of the relationship between two continuous variables (best to be close to +1.0 or -1.0).

The multiple regression model answers the question: how much does work centrality and narcissism predict differences in employee engagement? Multiple regression analysis examines the relationship between a single dependent variable (employee engagement) and two or more independent variables (work centrality and narcissism). It estimates the extent to which the proportion of variance in employee engagement is explained by the multiple independent variables of work centrality and narcissism. It tries to minimize the sum of squared errors (deviations).

The researcher also considered if age was related to work centrality and narcissism. The input into regression is a correlation matrix. If the variables in the correlation matrix are too highly correlated, then multicollinearity exists which means the
variables are explaining the same thing. In addition to generations, the researcher considered age as a continuous variable. Not knowing how related age was to work centrality and narcissism, age was put in the model first to see how much work centrality and narcissism add. Also, it was this researcher’s intention that violations of normality, linearity, multicollinearity, and homoscedasticity assumptions would not be found.

**Table 2: Research Questions and Statistical Analysis**

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) If there are statistically significant generational differences in work centrality and narcissism by generational cohort, to what extent do they differ?</td>
<td>1. Use one-way ANOVA to access the differences in work centrality and narcissism respectively between the generational cohorts.</td>
</tr>
</tbody>
</table>
| a) How does work centrality and narcissism differ statistically by generational cohort? | 1. Use MANOVA model to answer question “a”.  
2. Use contrasts in MANOVA to answer question “i” by contrasting Millennials vs. Baby Boomers and Millennials vs. Generation X workers with the adjusted alpha level to be $a/2=0.05/2=0.025$ |
| i. Do Millennials have statistically significant lower work centrality and higher narcissism as compared to Baby Boomers and Generation X workers as previous research has determined? | |
Summary

Some HRD professionals dwell on the differences among the generations in the workplace and see them as obstacles to productivity while others ignore the differences and deny they are real. The truth lies somewhere in between. There are observable patterns that a large percentage of employees exhibit related to formative influences from birth to early adulthood. This quantitative research study determines whether statistically significant generational differences in work centrality and narcissism do exist, and how they vary among the Baby Boomer, Generation X, and Millennial generations in the workplace. The study determines if there is a correlation between work centrality and narcissism and it examines how much work centrality and narcissism can explain differences in employee engagement. This methodology chapter covers the research paradigm, research study’s questions, hypotheses, data collection, pilot study, research design and sampling, sample characteristics and summary of descriptive and inferential statistics. The following chapter describes the results obtained through the implementation of the methodologies described in Chapter Three.
Chapter 4 - Results

This chapter provides results of the research study. The purpose of this study was threefold: to investigate if there are significant differences among the generational cohorts regarding work centrality, narcissism and employee engagement; if there is a relationship between work centrality and narcissism, and if work centrality and narcissism influence employee engagement. There are four sections presented in Chapter Four. The first section includes participant information, response rates and descriptive statistics as reported from the online survey data. In the second section, the psychometric properties of the three instruments are presented. The third section covers the analysis of the data, which addresses the research questions and hypotheses. The final section concludes with a brief synopsis of the research study’s main findings.

Participants

During late April, May and June 2013, employees from selected small to mid-size businesses in Midwestern United States were requested to complete this research study’s online survey. Human Resource Department personnel and upper-level administrators sent emails requesting employees to complete the voluntary survey. In order to qualify for the survey, participants needed to be working and between the ages of 18 – 69 years.

Response Rates

Four hundred thirty-one participants (431) opened the online survey link with 405 completing the entire survey. There were four parts to the survey: demographic questions asked of the participants and the three separate subscale instruments of work centrality, narcissism and employee engagement (Appendix A). If one or more of the four major parts of the survey were not completed, those surveys were discarded (listwise
Another option to handle missing data is pairwise deletion in which one of the subscales where many of the responses were missing would not be included. It was not chosen as an option to handle missing data because the researcher preferred the correlation matrix to be not based on differing numbers of participants in the correlations between the three subscales. In most cases of the discarded surveys, the third and/or fourth sections were not completed which were the narcissism and employee engagement items. This lack of completion could be attributed to the subject matter. In the narcissism section, a pair of statements was given and the respondent had to choose the statement that best described him/her and this posed challenges for some. Another possible reason could be that the narcissism and employee engagement sections were in the second half of the survey and perhaps some survey-takers had tired of the survey. In addition, if more than three individual items out of a total of 55 items in the survey were not completed anywhere within the survey, the survey was discarded. Remarkably, every one of the ten items in the demographics section was answered in the 405 usable surveys. The result of 405 usable surveys surpassed the sample size estimation suggested minimum of 340 respondents as determined in Chapter 3.

The response rate was 92.68% for those who chose to respond to the survey (405 useable surveys out of 431). The researcher does not know how many employees actually received the email request to take the survey as that would be the most accurate response rate but that could not be determined. If a researcher was targeting one specific business in which all 500 employees were given the online survey, then the response percentage would be easier to determine but multiple small businesses were contacted. On several occasions, the human resource department contact sent the survey only to a
select group of employees within the organization for which the researcher was not given the number of employees who actually were sent the request so again, the response rate percentage could not be determined.

It is interesting to note that in a few specific organizations, where the numbers of how many employees were sent the email survey request was known, the responses rates were 75% and 79%. These rates are considered very good online survey response rates (Fowler, 2009). There are several leading influencers of the response rate. First, the composition of the message in the email sent to the employees regarding participation in the survey, i.e., the introduction clearly defines its purpose and intentions for handling personal information. Second, the length of the survey and question types, i.e., short surveys yield a higher response rates (59% of respondents in this research study completed the survey in eight minutes or less) and respondents are more likely to answer close-ended questions (found in this survey) as they require less time and thought. Finally, the third major influencer of the response rate is the sender/author of the email (their credibility and position in the business) i.e., CEO, CFO, HR Department Head (Fowler, 2009). It was also interesting to learn that many employees are besieged by survey requests both internally and externally. In-house surveys from consultants for a variety of purposes such as business processes, job satisfaction, technology needs and trends, product development and then external survey requests from product suppliers, business clients, contractors and others are a constant appeal.

Data preparation. Data were transferred from Qualtrics (online survey software) to SPSS predictive analytics software. Reverse coding transformations were necessary for four work centrality items and eight narcissism items. These newly reverse-coded
items replaced the original item responses and were then used in the computation of the work centrality and narcissism sum of scores. A sum of scores for each subscale (work centrality, narcissism and employee engagement) was computed from the survey responses of each participant and used in many of the statistical procedures.

**Mean imputation.** When one or two, up to a maximum of three responses were missing from an individual survey, permissible values were assigned in place of the missing values. The missing value of the survey item was determined by the group mean of that specific survey item. The imputed mean was substituted. This is generally a conservative approach because it can diminish the probability of obtaining significant results. Seven missing values were filled with imputed means. Most of these substituted mean responses were located in the narcissism section. It is the researcher’s belief that having to choose one statement from a pair of statements when neither best described the respondent’s opinion was difficult for some respondents.

**Descriptive Statistics**

This sample group must be representative. It should reflect the membership and characteristics of the larger population so the researcher is able to draw conclusions about the entire population. The following paragraphs describe the respondents.

**Demographics of the sample.** Section one of the online survey included ten demographic questions. The questions asked of the survey respondents were gender, age, birth year range for generational cohort group, Hispanic or Latino origin, race, highest level of education, full-time/part-time employment, years in current place of employment, position at current job and industry sector in which employed. Of the 405 respondents in the sample, 42.5% identified themselves as male \( (n = 172) \) and 57.5%
identified themselves as female ($n = 233$). The range of ages reported was 18 – 69 years. The average age of the 405 respondents was 39.7 years. All the respondents were members of one of the generational cohorts depending on their birth year. The study was comprised of 26.91% Baby Boomers ($n = 109$), 33.58% Generation X ($n = 136$) and 39.51% Millennials ($n = 160$). Table 3 displays gender and generational cohort frequencies and percentages.

Table 3

Respondents by Gender and Generational Cohorts

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>172</td>
<td>42.47</td>
</tr>
<tr>
<td>Female</td>
<td>233</td>
<td>57.53</td>
</tr>
<tr>
<td>Total</td>
<td>405</td>
<td>100.00</td>
</tr>
<tr>
<td>Generational Cohort:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baby Boomers</td>
<td>1944-1960</td>
<td>109</td>
</tr>
<tr>
<td>Generation X</td>
<td>1961-1981</td>
<td>136</td>
</tr>
<tr>
<td>Millennials</td>
<td>1982-2002</td>
<td>160</td>
</tr>
<tr>
<td>Total</td>
<td>405</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Respondents were asked to indicate if they were of Hispanic or Latino origin. Two percent ($n = 8$) responded with “yes” and 98.0% ($n = 397$) identified themselves as not being of Hispanic or Latino origin. Survey participants were asked to report their race with a choice of five categories. White was the largest racial group of respondents with $n = 376$ (92.8%) followed by African American/Black with $n = 15$ (3.7%), Asian with $n = 10$ (2.5%), American Indian/Alaska Native with $n = 2$ (.5%) and Native Hawaiian/Pacific Islander with $n = 2$ (.5%). According to the Department of Labor, U. S. Bureau of Labor Statistics (2012), by race, Whites comprised the majority of the labor force in 2011 (81%). Blacks and Asians followed next with 12 percent and 5 percent,
respectively. American Indians/Alaska Natives composed about 1 percent of the labor force in 2011. Native Hawaiians and other Pacific Islanders made up less than 1 percent. The researcher recognizes this research sample should be representative of the general population yet the percentage of White employees (92.8%) in this study exceeds the norm of 81% as determined by the U. S. Bureau of Labor Statistics in 2011. This was not a random sample and perhaps contributed to the higher percentage of Whites as respondents.

Respondents were asked if they worked full-time or part-time (20 hours or less per week) at their current job. Three hundred seven-six survey participants (92.8%) indicated full-time employment and twenty-nine respondents (7.2%) indicated part-time employment. Table 4 illustrates the frequencies and percentages for the “highest level of education”, “length of time at current job” and “position at current job”. Almost half of the respondents had earned a Bachelor’s degree (n = 189; 46.67%). Over half of the survey participants had been employed at their current job for five years or less (n = 231; 57%). This high percentage of employment at the same business for “five years or less” can be attributed to the Millennials only recent entrance into the workforce and Millennials were the largest generational cohort represented in the research study (39.5%).
Table 4

Respondents by “Highest Level of Education Completed”, Length of Time at Current Job” and “Position at Current Job”

<table>
<thead>
<tr>
<th>Highest Level of Education Completed:</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School diploma/G.E.D.</td>
<td>36</td>
<td>8.89</td>
</tr>
<tr>
<td>Associates Degree; Technical School; Some</td>
<td>71</td>
<td>17.53</td>
</tr>
<tr>
<td>courses after High School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>189</td>
<td>46.67</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>78</td>
<td>19.26</td>
</tr>
<tr>
<td>PhD; MD; JD; DDS; Professional Degree</td>
<td>31</td>
<td>7.65</td>
</tr>
<tr>
<td>Total</td>
<td>405</td>
<td>100.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Length of time at current job:</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>101</td>
<td>24.94</td>
</tr>
<tr>
<td>1 year - 5 years</td>
<td>130</td>
<td>32.10</td>
</tr>
<tr>
<td>6 years - 10 years</td>
<td>55</td>
<td>13.58</td>
</tr>
<tr>
<td>11 years - 15 years</td>
<td>37</td>
<td>9.14</td>
</tr>
<tr>
<td>16 years - 20 years</td>
<td>38</td>
<td>9.38</td>
</tr>
<tr>
<td>More than 20 years</td>
<td>44</td>
<td>10.86</td>
</tr>
<tr>
<td>Total</td>
<td>405</td>
<td>100.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Position at current job:</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top-level/Senior management level; Executive</td>
<td>35</td>
<td>8.64</td>
</tr>
<tr>
<td>Suite; President, Vice President;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle-level manager; Department head;</td>
<td>47</td>
<td>11.60</td>
</tr>
<tr>
<td>First-level manager; Supervisor; Front-line</td>
<td>65</td>
<td>16.05</td>
</tr>
<tr>
<td>manager;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not in a supervisory/leadership position</td>
<td>193</td>
<td>47.65</td>
</tr>
<tr>
<td>Contract employee/Intern</td>
<td>35</td>
<td>8.64</td>
</tr>
<tr>
<td>Other</td>
<td>30</td>
<td>7.41</td>
</tr>
<tr>
<td>Total</td>
<td>405</td>
<td>100.00</td>
</tr>
</tbody>
</table>

In an attempt to have a diverse representation of employees by industry sectors, the researcher contacted a varied selection of organizations to complete the online survey. Sample participants worked in fourteen different industries with the largest groups from
Banking/Financial Services ($n = 80; 19.8\%$) and Manufacturing and Engineering ($n = 74; 18.3\%$). Table 5 illustrates the frequencies and percentages by industry sector.

Table 5

Respondents’ Employment by Industry Sector

<table>
<thead>
<tr>
<th>Respondents’ Employment by Industry Sectors:</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting Services</td>
<td>31</td>
<td>7.65</td>
</tr>
<tr>
<td>Auto Sales and Service</td>
<td>27</td>
<td>6.67</td>
</tr>
<tr>
<td>Banking; Financial Services; Insurance; Real Estate</td>
<td>80</td>
<td>19.75</td>
</tr>
<tr>
<td>Educational Services</td>
<td>40</td>
<td>9.88</td>
</tr>
<tr>
<td>Forestry, Paper &amp; Packaging; Agriculture; Fishing</td>
<td>24</td>
<td>5.93</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>25</td>
<td>6.17</td>
</tr>
<tr>
<td>Information Technology; Journalism; Mass Communications; Media</td>
<td>9</td>
<td>2.22</td>
</tr>
<tr>
<td>Legal Services</td>
<td>25</td>
<td>6.17</td>
</tr>
<tr>
<td>Leisure and Hospitality; Entertainment, Arts, Recreation</td>
<td>8</td>
<td>1.98</td>
</tr>
<tr>
<td>Manufacturing and Product Development; Engineering Services; Construction</td>
<td>74</td>
<td>18.27</td>
</tr>
<tr>
<td>Public Service; Government</td>
<td>11</td>
<td>2.72</td>
</tr>
<tr>
<td>Retail Sales &amp; Wholesale Trade</td>
<td>11</td>
<td>2.72</td>
</tr>
<tr>
<td>Transportation, Warehousing, Logistics</td>
<td>3</td>
<td>0.74</td>
</tr>
<tr>
<td>Other</td>
<td>37</td>
<td>9.14</td>
</tr>
<tr>
<td>Total</td>
<td>405</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Overall, the sample demographic characteristics provide a general description of the workers who voluntarily participated in this research study. This demographic data, specifically generational cohorts and age, was used to address the research questions and hypotheses.

Psychometric Properties

Reliability analysis. Three subscales were used in the online survey: Work Centrality (Paullay, et al., 1994), Narcissism (Raskin & Terry, 1988) and Employee Engagement (Schaufeli and Bakker, 2003). Work centrality is the degree of general
importance that work holds in an individual’s life at any given time. Narcissism is selfishness, excessive sense of self-importance, grandiose view of one’s own talents, craving for admiration and lack of empathy for others. Employee engagement is a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption. Each subscale has previously determined consistency reliability computations from earlier published research studies. Prior to conducting the data analysis designed to answer this study’s research questions, a reliability analysis was performed on each of the subscales in order to establish their internal consistencies. By conducting a reliability analysis, the researcher can accomplish three tasks: 1) determine the extent to which items in the instrument are related to each other, 2) obtain an overall index of internal consistency of the scale (repeatability) and, 3) identify any problem items that may require exclusion from the scale. A scale is deemed internally consistent when its items are highly intercorrelated, meaning they share a common cause and are all measuring the same concept (DeVellis, 2003). Reliability is measured in terms of the ratio of true score variance to observed score variance. It is important to note that alpha is a property of the scores on a specific test/survey from a specific sample of test-takers/survey-takers. Therefore, researchers should not rely on published alpha estimates and should measure alpha each time the scale is administered (Streiner, 2003). All three instruments used in this research study were examined for reliability. In theory, the reliabilities of each instrument should be similar to those previously determined, yet slight differences can occur due to a different sample, different time and different place. The model used to check for internal consistency, based on the average inter-item correlation for this study was Cronbach’s Alpha (α). All three instruments remained
above 0.7, which is desirable (George and Mallery, 2003). The guideline is, the higher the alpha value, the less error being measured by the scale. Table 6 provides the Cronbach’s Alpha reliability analysis for the study. The result of the reliability analysis for work centrality was \( \alpha = 0.83 \), narcissism \( \alpha = 0.72 \) and employee engagement \( \alpha = 0.93 \). Based on psychometric properties, all three survey instruments were determined to be reliable.

Table 6

Reliability Analysis of Work Centrality, Narcissism and Employee Engagement Instruments

<table>
<thead>
<tr>
<th>Instruments</th>
<th>Cronbach's Alpha (( \alpha )) Previously Determined</th>
<th>Cronbach's Alpha (( \alpha )) Present Study</th>
<th>Number of respondents from present study</th>
<th>Number of instrument items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Centrality</td>
<td>0.76</td>
<td>0.83</td>
<td>405</td>
<td>12</td>
</tr>
<tr>
<td>Narcissism</td>
<td>0.85</td>
<td>0.72</td>
<td>405</td>
<td>16</td>
</tr>
<tr>
<td>Employee Engagement</td>
<td>0.95</td>
<td>0.93</td>
<td>405</td>
<td>17</td>
</tr>
</tbody>
</table>

Preliminary statistical analysis. Before specific statistical processes were conducted to answer the research questions, the three subscales of work centrality, narcissism and employee engagement were examined for means and standard deviations and for possible correlations/associations. Table 7 shows the overall means and standard deviations for the three subscales. The sample means provide a concise description of the entire sample. The mean score for the work centrality scale was 3.14 out of six response options that ranged from strongly disagree to strongly agree. A score of three denotes the “slightly disagree” response option. The higher the score on the work centrality instrument, the higher work is central to the life of the respondent. The average individual score for the narcissism scale was 1.26. There were two response options in
the narcissism scale. A score of one represents normal behavior and a score of two represents narcissistic behavior. Finally, the average individual score on employee engagement was 5.06 with seven survey response options. The employee engagement subscale response choices ranged from never to always-every day. A score of five corresponds to the response “often-once a week”. The higher the score, the more engaged the employee is in the workplace.

Table 7

*Descriptive Statistics for Subscale Analysis*

<table>
<thead>
<tr>
<th></th>
<th>Minimum to Max. Survey Response Choices</th>
<th>Standard Deviation</th>
<th>Number of survey respondents</th>
<th>Number of items in scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Centrality</td>
<td>3.14</td>
<td>1 - 6</td>
<td>1.17</td>
<td>405</td>
</tr>
<tr>
<td>Narcissism</td>
<td>1.26</td>
<td>1 - 2</td>
<td>0.41</td>
<td>405</td>
</tr>
<tr>
<td>Employee Engagement</td>
<td>5.06</td>
<td>1 - 7</td>
<td>1.32</td>
<td>405</td>
</tr>
</tbody>
</table>

While the means provides a description of the sample, a correlation provides a description of the relationship between two variables. The researcher chose to have a general idea of any possible correlations before beginning an in-depth analysis of the survey data. A Pearson correlation was used to measure the degree and direction of any possible linear relationships between the subscales. Table 8 summarizes the correlation outcomes between the variables. There is a positive moderate relationship between work centrality and employee engagement $r = .396, p<.01$. Moderate means the relationship falls between $0.3 < |r| < 0.7$ (Gravetter & Wallnau, 2007). A more detailed statistical analysis of the generational cohorts, age, and three subscales will follow.
Table 8

**Correlations for Three Subscales**

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Centrality</td>
<td>1.000</td>
<td>0.000</td>
<td>405</td>
</tr>
<tr>
<td>Narcissism</td>
<td>0.075</td>
<td>0.134</td>
<td>405</td>
</tr>
<tr>
<td>Employee Engagement</td>
<td><strong>0.396</strong></td>
<td><strong>0.000</strong></td>
<td>405</td>
</tr>
</tbody>
</table>

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

**Analysis of the Data**

The first data preparation step in the statistical analysis is determining the sum of scores. The responses by survey participants were summed into an overall score and categorized by generational cohort groups based on the participant’s year of birth.

Summation of the overall scores for work centrality, narcissism and employee engagement were obtained to determine the group mean for each generational cohort.

The mean is a common measure of central tendency but does not give a sense of how the scores are distributed. It is important to know how much variability there is in the set of numbers. A common measure of variability is standard deviation. Standard deviation means the extent the set of scores vary from the mean, the larger the standard deviation, the more widely the scores vary from the mean and when the standard deviation is small, the variability is small. Knowing the mean and standard deviation of a group of scores
gives a better understanding of an individual score. Standard deviations are particularly useful if the distribution of scores is normal (bell-shaped curve).

Researchers are interested in sampling a manageable subgroup of the population. The objective though is to obtain a representative sample so that conclusions are general to the population so standard deviation is altered slightly. When using a sample to estimate the standard deviation of a population, the researcher divides by \( n - 1 \). This revised formula gives a better estimate of the actual standard deviation for the population. As is the case for all three of the variables (work centrality, narcissism and employee engagement), the higher the mean of the sum score, the higher the level of that construct. The Baby Boomers have the highest mean score \( (M = 89.09) \) for employee engagement so they would be considered more engaged than the other two cohorts. Table 9 displays the means, standard deviation of work centrality, narcissism and employee engagement by generational cohort and total group.

Table 9

Means of Work Centrality, Narcissism and Employee Engagement by Generational Cohort

<table>
<thead>
<tr>
<th>Generational Cohorts</th>
<th>Work Centrality</th>
<th>Narcissism</th>
<th>Employee Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1944-1960</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baby Boomers</td>
<td>Mean</td>
<td>38.11</td>
<td>19.83</td>
</tr>
<tr>
<td>( n = 109 )</td>
<td>Std. Dev.</td>
<td>8.48</td>
<td>2.94</td>
</tr>
<tr>
<td>1961-1981</td>
<td>Mean</td>
<td>37.31</td>
<td>20.10</td>
</tr>
<tr>
<td>Generation X</td>
<td>Std. Dev.</td>
<td>8.37</td>
<td>2.96</td>
</tr>
<tr>
<td>( n = 136 )</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982-2002</td>
<td>Mean</td>
<td>37.68</td>
<td>20.29</td>
</tr>
<tr>
<td>Millennials</td>
<td>Std. Dev.</td>
<td>7.98</td>
<td>2.89</td>
</tr>
<tr>
<td>( n = 160 )</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Participant</td>
<td>Mean</td>
<td>37.67</td>
<td>20.10</td>
</tr>
<tr>
<td>Group</td>
<td>Std. Dev.</td>
<td>8.23</td>
<td>2.93</td>
</tr>
<tr>
<td>( n = 405 )</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The means and standard deviations alone are not able to determine significance. It appears all the means are very similar as noted in Table 7 except for a larger difference between the Baby Boomers ($M = 89.09$) and Millennials ($M = 82.63$) for Employee Engagement. The means will need to be compared by one-way ANOVAs to determine if there is significance.

The three figures below illustrate the movement of the mean scores by generational cohort for work centrality, narcissism and employee engagement. It is interesting to have visual figures of the mean directional movements for the three generational cohorts as there are increases in narcissism and decreases in employee engagement as noted by the mean scores. Only if there are significant differences will the directional movements of mean scores be of value, which will be determined later in this chapter.
Figure 2. Work Centrality Means by Generational Cohort

Figure 1. Narcissism Means by Generational Cohort
Much of statistical analysis is explaining the variance in the dependent variable. The basic question is: does the independent variable influence the dependent variable to vary/lean in a certain direction? In this case, does a generational cohort group cause the dependent variable to move in a certain direction? The researcher has chosen to take a broad view of the independent and dependent variables by conducting a MANOVA before moving to a more focused approach with a specific individual dependent variable (ANOVA). If the overall multivariate test is significant, a researcher would examine the univariate $F$ tests for each variable to interpret the respective effect. The reason for this is to identify the specific dependent variables that contributed to the significant overall effect. A MANOVA, multivariate analysis of variance, is a method to test the hypothesis that one or more independent variables have an effect on a set of two or more dependent variables. In this study, the researcher wishes to test the hypothesis that three different

![Employee Engagement Means by Generational Cohort](image)

Figure 3. Employee Engagement Means by Generational Cohort
generational cohorts (three categories of the independent variable) may result in significant differences in work centrality, narcissism and employee engagement (dependent variables). One of the reasons for conducting a MANOVA is the possibility that none of the individual ANOVAs may produce a significant main effect on the dependent variable, but in combination, they might, which could suggest that the variables are more meaningful if taken together than considered separately.

Before using MANOVA, there are four main assumptions that needed to be met: normality (normal distribution), linearity, homogeneity of variances (homoscedasticity) and homogeneity of covariances matrices. Regarding normal distribution, the researcher ran pairwise relationship tests for outliers to make certain the dependent variables were normally distributed within groups as outliers can produce Type I or Type II errors. There was no need to transform or remove outliers, as major outliers were not present. The second assumption is linearity. MANOVA assumes there are linear relationships among all pairs of dependent variables because when the relationship deviates from linearity, the power of the analysis will be compromised. Scatter plots revealed cigar-shaped elliptical bands, which indicate acceptable linearity. Homogeneity of variances (homoscedasticity), the third assumption, assumes that the dependent variables display equal levels of variance across the range of independent variables. The Levene’s test assesses this homoscedasticity assumption. If the variances of the two groups are different from each other, then adding them together is not appropriate because it will not produce an estimate of common within-group variance. The resulting $P$-value for any of the dependent measures (work centrality .956; narcissism.855; employee engagement .029 – all nonsignificant) was greater than the critical value (0.01), so the null hypothesis
that the error variance of the dependent variable is equal across groups remained (not rejected), and therefore the homogeneity of variances assumptions has not been violated.

Finally, the fourth assumption is homogeneity of covariances matrices. In multivariate designs, there are multiple dependent variables, which require that their intercorrelations (covariances) are homogeneous across the cells of the design, meaning equal across all levels of the independent variable. The amount of variance within each groups needs to be comparable so one can assume that the groups have been drawn from a similar population. This homogeneity assumption was tested with the Box’s $M$ test.

Table 10 shows the Box’s Test results. Box’s $M$ is equal to 24.593 and is not significant $F(12,634,834) = 2.03$, providing assurance that the assumption of equality of covariance matrices has not been violated. Using a significance level of $p < .01$, the Box’s $M$ had $p < .018$ which is acceptable meaning the within-group covariance matrices are equal. The design is balanced so that there are an equal number of observations in each cell and the robustness of the MANOVA test is guaranteed.

Table 10

*Box’s Test of Equality of Covariance Matrices*

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Box's M</td>
<td>24.593</td>
</tr>
<tr>
<td>$F$</td>
<td>2.027</td>
</tr>
<tr>
<td>df1</td>
<td>12.000</td>
</tr>
<tr>
<td>df2</td>
<td>634834.201</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.018</td>
</tr>
</tbody>
</table>

Table 11

MANOVA tests if there will be a significant multivariate main effect for generational cohorts. This means the three subscales of work centrality, narcissism and employee engagement are different among the three generational cohorts.
exhibits the multivariate tests. The focus is on the Wilks’ Lambda and the $F$ value.

Lambda is a measure of the percent of variance in the dependent variables that is not explained by differences in the level of the independent variable. Lambda varies between one and zero, and the preference is to be near zero (no variance that is not explained by the generational cohort). In this test, the Wilks’ Lambda for generational cohort is .958 (not a strong result) and has an $F$ value of 2.91, which is significant at $p < .008$. A one-way MANOVA revealed a significant multivariate main effect for generational cohort, Wilks’ $\lambda = .958$, $F(6, 802) = 2.91, p < .008, \eta^2_p = .021$. Partial eta squared is the proportion of the effect plus error variance that is attributable to the effect. Partial eta squared = .021 was of small size. A small effect size will need a large sample size for significant differences to be detected. Suggested norms for partial eta-squared: small = 0.01; medium = 0.06; large = 0.14 (Gravetter & Wallnau, 2007). The partial $\eta^2_p = .021$ indicates the percentage of variance (2.1%) that is accounted for by the group effect.

Observed power to detect the effect was .898. Obtaining as large a sample as possible can maximize the power of the study. The MANOVA shows that generational cohort has a significant impact on the three dependent variables. Due to this finding, the researcher proceeded to examine the univariate $F$ tests for each variable to interpret the respective effect.
Table 11

**Multivariate Tests**

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Noncent. Parameter</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>Pillai's Trace Wilks' Lambda Hotelling's Trace Roy's Largest Rt</td>
<td>0.987</td>
<td>10344.351</td>
<td>3</td>
<td>400</td>
<td>&lt;.001</td>
<td>0.987</td>
<td>31033.054</td>
</tr>
<tr>
<td>Gen. Cohort</td>
<td>Pillai's Trace Wilks' Lambda Hotelling's Trace Roy's Largest Rt</td>
<td>0.042</td>
<td>2.894</td>
<td>6</td>
<td>802</td>
<td>0.009</td>
<td>0.021</td>
<td>17.365</td>
</tr>
</tbody>
</table>

The tests of between-subjects effects provides information about the univariate effect of the independent variable (generational cohort) on each of the dependent measures separately. Because there are three tests, with an experiment-wise alpha rate of .01, an acceptable confidence level of each of the three tests will be $p < .003$ ($0.01 ÷ 3 = .003$). By that criterion, the only significant univariate result is for the effect of generational cohort on employee engagement ($p < .002$). Table 12 reports the tests of between-subjects effects.
Through MANOVA, it has been determined that there is a relationship between generational cohort and employee engagement. Now the research moves into a more focused approach. Additional questions need to be answered. Were the results a consequence of the independent variable or were they a result of chance? Do the results vary enough from chance to conclude that something else is causing the variability in the dependent variable? The “t test” is a critical ratio that can answer the chance question with confidence but does not qualify for this research study because it only allows the

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Noncent. Parameter</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>Wrk Cent</td>
<td>38.9</td>
<td>2</td>
<td>19.4</td>
<td>0.286</td>
<td>0.752</td>
<td>0.001</td>
<td>0.6</td>
<td>0.095</td>
</tr>
<tr>
<td></td>
<td>Narcissim</td>
<td>13.3</td>
<td>2</td>
<td>6.6</td>
<td>0.775</td>
<td>0.462</td>
<td>0.004</td>
<td>1.5</td>
<td>0.182</td>
</tr>
<tr>
<td></td>
<td>Emp Engage</td>
<td>3181.8</td>
<td>2</td>
<td>1590.9</td>
<td>6.591</td>
<td>0.002</td>
<td>0.032</td>
<td>13.2</td>
<td>0.910</td>
</tr>
<tr>
<td>Intercept</td>
<td>Wrk Cent</td>
<td>561535.4</td>
<td>1</td>
<td>561535.4</td>
<td>8255.2</td>
<td>&lt;.001</td>
<td>0.954</td>
<td>8255.2</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Narcissim</td>
<td>159241.6</td>
<td>1</td>
<td>159241.6</td>
<td>18574.7</td>
<td>&lt;.001</td>
<td>0.979</td>
<td>18574.7</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Emp Engage</td>
<td>2951165.</td>
<td>1</td>
<td>12227.317</td>
<td>6.591</td>
<td>0.002</td>
<td>0.032</td>
<td>13.2</td>
<td>0.910</td>
</tr>
<tr>
<td>Gencohort</td>
<td>Wrk Cent</td>
<td>38.9</td>
<td>2</td>
<td>19.4</td>
<td>0.286</td>
<td>0.752</td>
<td>0.001</td>
<td>0.6</td>
<td>0.095</td>
</tr>
<tr>
<td></td>
<td>Narcissim</td>
<td>13.3</td>
<td>2</td>
<td>6.6</td>
<td>0.775</td>
<td>0.462</td>
<td>0.004</td>
<td>1.5</td>
<td>0.182</td>
</tr>
<tr>
<td></td>
<td>Emp Engage</td>
<td>3181.8</td>
<td>2</td>
<td>1590.9</td>
<td>6.591</td>
<td>0.002</td>
<td>0.032</td>
<td>13.2</td>
<td>0.910</td>
</tr>
<tr>
<td>Error</td>
<td>Wrk Cent</td>
<td>27344.8</td>
<td>402</td>
<td>68.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Narcissim</td>
<td>3446.4</td>
<td>402</td>
<td>8.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emp Engage</td>
<td>97026.1</td>
<td>402</td>
<td>241.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Wrk Cent</td>
<td>602064.0</td>
<td>405</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Narcissim</td>
<td>167144.0</td>
<td>405</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emp Engage</td>
<td>3096964.</td>
<td>405</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected</td>
<td>Wrk Cent</td>
<td>27383.7</td>
<td>404</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Narcissim</td>
<td>3459.6</td>
<td>404</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emp Engage</td>
<td>100207.8</td>
<td>404</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 12

Tests of Between-Subjects Effects
independent variable to have two categories (dichotomous variable) and the independent variable of generational cohorts has three categories.

The “F test” was chosen instead, using a statistical procedure called analysis of variance (ANOVA). An “F test” is an appropriate statistical measure procedure when there are more than two categories for the independent variable (as in this study - three categories: Baby Boomers, Generation X and Millennials) and the dependent variable is continuous. A simple one-way ANOVA was used to answer the question of the deviation from the chance model question. The probability level indicates the level of significance and gives the odds that the observed difference was due to chance. A p value (probability level) of p < .01 was used which means that a result could have occurred by chance one time (or less) out of 100 to be considered significant. Table 13 illustrates the ANOVA results of generational cohorts and dependent variables of work centrality, narcissism and employee engagement. Results are the same as the previous MANOVA.
In Table 13, the *between-group variance* (variance caused by the independent variable) indicated that only employee engagement $F(2, 402) = 6.59, p = .002$ showed a significant difference among the three mean scores of work centrality, narcissism and employee engagement. This indicates that the variance is caused by the independent variable in one or more of the generational cohort categories. Post Hoc analysis, which will be discussed later, will determine which of the generational cohorts causes the variance.

The ANOVA results are of key importance to this research study. There are three major research questions to be answered by the research study. The first question is if significant mean score differences in work centrality, narcissism and employee engagement occur among the generational groups. There was no significance found among the generational cohorts in work centrality $p = .752$ and narcissism $p = .462$ but
there are significant mean score differences in employee engagement $p = .002$ with the $p$ value set at .01. A value less than .01 results in significant effects while any value greater than .01 results in nonsignificant effects. This result of $p = .002$ suggests that the means differ more than would be expected by chance alone. Table 13 does not tell what the effects were, just that there most likely were real effects.

In addition, Table 13 also displays the $F$ ratio. The $F$ Ratio is a measure of how different the means are relative to the variability within the sample. The larger the value above 1.0, the greater the possibility that the differences between the means are due to something other than chance. For employee engagement, the $F$ Ratio is $F(2, 402) = 6.59$. This statistic informs the hypothesis that the effects are real, which means there is a significant difference among the three groups (generational cohorts). When the null hypothesis is rejected, as in this case, it indicates only that there is a difference between at least two of the independent variable means.

In review, up to this point, the analysis shows there is a statistically significant relationship between one or more generational cohorts and employee engagement that cannot be explained by chance. However, the magnitude of the relationship, i.e., independent variable’s effect on the dependent variable (effect size) is not known. Correlation coefficients, to be covered later, will answer the effect size question.

The next challenge is explaining what influenced the dependent variable of employee engagement to change. To determine where the significant differences existed, the researcher followed the ANOVA with post hoc tests. The most frequently used post hoc tests are least squares difference (LSD), Tukey, Scheffé and Bonferroni. The tests compared all the possible paired combinations of the independent variable groups (1944-
1960 Baby Boomers; 1961-1981 Generation X and 1982-2002 Millennials) and gave the mean differences between each group and a p value to indicate significance. Table 14 illustrates the results of the post hoc tests. Even though all three post hoc tests differ from one another in how they calculate the p value, yet each determined that the Baby Boomers and Millennials differed significantly for employee engagement. Tukey and Bonferroni resulted in \( p = .003 \) significance. Scheffé, one of the safest of the posttest techniques because it provides the greatest protection from Type 1 errors had \( p = .004 \) significance. Even with the Bonferroni correction in which the \( p < .01 \) probability level is divided by the number of times the same test is being used (.01 divided by 3 cohorts = .003), statistical significance was still achieved.

Table 14

<table>
<thead>
<tr>
<th>Results of Post Hoc tests on Employee Engagement and Generational Cohorts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dep Variable</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>Generational Cohort</td>
</tr>
<tr>
<td>1944-1960</td>
</tr>
<tr>
<td>1961-1981</td>
</tr>
<tr>
<td>1982-2002</td>
</tr>
<tr>
<td>1961-1981</td>
</tr>
<tr>
<td>1982-2002</td>
</tr>
<tr>
<td>1944-1960</td>
</tr>
<tr>
<td>1982-2002</td>
</tr>
<tr>
<td>1944-1960</td>
</tr>
<tr>
<td>1982-2002</td>
</tr>
<tr>
<td>1944-1960</td>
</tr>
<tr>
<td>1982-2002</td>
</tr>
</tbody>
</table>

*The mean difference is significant at the .01 level.
Several questions of the research study have now been answered. The first of three major questions with subcategories in the research study is:

1) If there are statistically significant generational differences in work centrality and narcissism by generational cohort, to what extent do they differ?
   
a) How does work centrality and narcissism differ statistically by generational cohort?
      
i) Do Millennials have statistically significant lower work centrality and higher narcissism as compared to Baby Boomers and Generation X workers as previous research has determined?

Work centrality and narcissism do not differ statistically by generational cohort as asked in Question “1a”. After completing a simple one-way ANOVA, the significance levels for work centrality $p = .752$ and narcissism $p = .462$ for between groups are not significant at the $p < .01$ level, as evidenced in Table 13. Question “1i” further expands on the previous question, but the result is the same, there is no significance so the researcher cannot address if the Millennials have statistically significant lower work centrality and higher narcissism as compared to Baby Boomers and Generation X workers as previous research has determined. Figures 1 & 2 were included earlier in Chapter 4 to show the directional movement of the mean scores among the generational cohorts for work centrality and narcissism. The Millennials have lower work centrality and higher narcissism than Baby Boomers but the differences lack statistical significance. Although already examined, the statistical significance of employee engagement between the Baby Boomer and Millennial cohort will be covered later in this chapter when that research question is addressed.
The second major research question is: Is there a correlation between the constructs of work centrality and narcissism? Recent research suggests that Millennials have lower work centrality and higher narcissism than the preceding generations of the Baby Boomers and Generation X who are presently in the workforce (Twenge, 2010; Smola and Sutton, 2002; Kowske et al., 2010). The researcher viewed this as a possible inverse relationship between the two constructs, which warranted further study.

The Pearson’s product moment coefficient was selected to study the relationship between work centrality and narcissism. The Pearson is a parametric correlation that relies on assumptions. It was used to estimate the degree of association between the two quantitative continuous variables of work centrality and narcissism. If the number \( r \) is zero or close to zero, it indicates a nonexistent or weak relationship which is the case in this correlation where \( r = .075 \). There is an almost nonexistent or a very weak relationship between work centrality and narcissism as determined by the Pearson Correlation procedure. The rule of thumb by Cohen (1988) regarding the degree of the relationship is: small effect: \( .10 < r < .30 \); medium effect: \( .30 < r < .50 \) and large effect: \( r > .50 \). Table 1 shows the results of the Pearson Correlation. The closer the correlation coefficient is where \( r = +1.00 \) or \(-1.00\), the greater the strength and direction of the relationship. Correlations do not demonstrate causation but can be valuable for making predictions. In addition, the probability \( (p\text{-value}) \) is \( p = 0.134 \) and is not equal to or less than \( p = .01 \) so the null hypothesis is retained. The researcher is not confident there is a correlation between work centrality and narcissism. As a result, the second major research question’s answer is “no” to the possibility of a correlation between work centrality and narcissism.
Table 15

Results of Pearson Correlation between Work Centrality and Narcissism

<table>
<thead>
<tr>
<th></th>
<th>Work Centrality</th>
<th>Narcissism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Centrality</td>
<td>Pearson Correlation</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.134</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>405</td>
</tr>
<tr>
<td>Narcissism</td>
<td>Pearson Correlation</td>
<td>0.075</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.134</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>405</td>
</tr>
</tbody>
</table>

The previous correlation was bivariate because it examined the relationship between two continuous variables. The third research question involves multivariate statistics because the dependent variable (employee engagement) is influenced by more than one independent variable at a time such as work centrality and narcissism. The third major and final research question with its subcategories is:

3) How much does work centrality and narcissism explain differences in employee engagement?
   a) How do age differences influence employee engagement?
   b) How do generational differences influence employee engagement?
   c) Does work centrality and narcissism explain any variability in employee engagement after controlling for age?

Multiple regression was used to evaluate the relative influence of the independent (predictor) variables of work centrality and narcissism on the dependent (output) variable, which is employee engagement. Work centrality was entered into the model first, followed by narcissism, as that is the order they were presented in Chapter 2. There is not a theoretical framework as to which variable would have the greatest effect, so the
order in the model was not influenced. In the Model Summary, \( R = .396 \) and \( R^2 = .157 \). The “\( R \) value” represents the correlation and \( r = .396 \) is low to mid level. It means there is a relationship with work centrality and narcissism on employee engagement.

Furthermore, \( R^2 = 0.157 \) is the coefficient of determination and indicates how much of the dependent variable can be explained by the independent variable/s which is 15.7%. This means that about 15.7% of the variation in employee engagement is explained by work centrality and narcissism and this answers the question of how much work centrality and narcissism explains differences in employee engagement. This is a small number (15.7%), which means only a small percentage can be explained. Table 16 shows the model summary.

The Coefficients table provides information about each predictor variable and helps formulate the regression line. The “\( B \) value” of the constant is for the intercept line. The “\( B \) values” for independent variables listed below the constant are the gradients for the regression line. For every one point increase in the independent variable such as work centrality, there will be a .756 increase in the dependent variable’s value. In addition, the Beta scores help to determine which of the independent variables best predict the output/constant variable. In this case, work centrality had a beta of \( \beta = .395 \) and narcissism’s beta was \( \beta = .010 \). Narcissism does not predict employee engagement while work centrality does. The \( t \) test tells if the predictor variable is statistically significant. Work centrality had significance at \( p < 0.001 \), this means work centrality contributes significantly to the model and can predict employee engagement. Table 17 illustrates the coefficients of narcissism and work centrality.
Table 16

*Model Summary – Multiple Regression Analysis for Employee Engagement*

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.396</td>
<td>0.157</td>
<td>0.153</td>
<td>14.497</td>
<td>1.779</td>
</tr>
</tbody>
</table>

Predictors: (Constant), Work Centrality; Narcissism
Dep Var: Employee Engagement

Table 17

*Coefficients Table: Multiple Regression Analysis for Employee Engagement*

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandard Coefficient</th>
<th>Std. Error</th>
<th>Stand. Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>56.468</td>
<td>5.806</td>
<td>9.727</td>
<td>&lt;.001</td>
<td></td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Narcissism</td>
<td>0.053</td>
<td>0.247</td>
<td>0.010</td>
<td>0.829</td>
<td>0.994</td>
<td>1.006</td>
<td></td>
</tr>
<tr>
<td>Work Centrality</td>
<td>0.756</td>
<td>0.088</td>
<td>0.395</td>
<td>8.606</td>
<td>&lt;.001</td>
<td>0.994</td>
<td>1.006</td>
</tr>
</tbody>
</table>

Dependent Variable: Employee Engagement

In response to research Question 3: How much does work centrality and narcissism explain differences in employee engagement? In Table 17, note that Narcissism (p = 0.829) does not have a relationship with employee engagement, thus is not able to predict employee engagement. There is a significant relationship between work centrality (p < 0.001) and employee engagement. Work centrality is a predictor variable for employee engagement, which means work centrality explains differences in employee engagement.

Research study Question 3a is: How do age differences influence employee engagement? Multiple regression was used to evaluate if age differences influence employee engagement. Before beginning the regression, all actual age numbers given by the respondents were transformed into a "centered" age score. Centering makes...
regression parameters more meaningful. It involves subtracting a constant, in this case, 39.7, which is the mean age of all the respondents, from every observation's value of age (predictor variable). The distance from the mean was calculated for each given age to determine the “age center” and then running the model on the centered data. Centering redefines the zero point for the predictor. It shifts the scale over, but retains the units.

In the Model Summary below, \( r = .184 \) at significance level .01, which means this is a low-level correlation and \( R^2 = .034 \) explains how much of the dependent variable can be explained by the independent variable. This means that about 3.4% of the variation in employee engagement is explained by age and this answers the research question: how do age differences influence employee engagement? Age only minimally influences employee engagement as determined from the small number of 3.4 percent. Table 18 shows the Model Summary.

The Coefficients table provides information about age as the predictor variable for employee engagement. The “B value” is the gradient for the regression line. In this case, for every one-point increase in “age”, there will be a .212 increase (not very strong) in employee engagement’s (dependent variable) value. The Beta score predicts the outcome variable. Age had a beta of \( \beta = .184 \) and does predict employee engagement at a low level. The \( t \) test determines if the predictor variable is statistically significant. Age had significance at \( p < 0.001 \) and can explain differences in employee engagement. Table 19 illustrates the coefficients for age and employee engagement.
### Table 18

**Model Summary – Multiple Regression Analysis for Age and Employee Engagement**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.184</td>
<td>0.034</td>
<td>0.032</td>
<td>15.499</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), age (centered)
Dependent Variable: Employee Engagement

### Table 19

**Coefficients Table: Multiple Regression Analysis for Age and Employee Engagement**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>95.0% Confidence Interval for B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>(Constant)</td>
<td>86.019</td>
<td>0.77</td>
<td>111.69</td>
</tr>
<tr>
<td>Age centered</td>
<td>0.212</td>
<td>0.056</td>
<td>0.184</td>
</tr>
</tbody>
</table>

Dependent Variable: Employee Engagement

Question 3b of the research study is: How do generational differences influence employee engagement? Earlier in Chapter 4, when examining if generational cohorts influence any or all of the dependent variables of work centrality, narcissism and employee engagement, this question was answered. The MANOVA determined that there is a relationship between generational cohort and employee engagement. Moving to a more focused approach, the ANOVA verified the earlier MANOVA findings, as it found that there was no significance among the generational cohorts in work centrality \( p = .752 \) and narcissism \( p = .462 \) but there is significance in employee engagement \( p = .002 \) with the \( p \) value set at .01. To determine where the significant differences existed among the generational cohorts, the researcher followed the ANOVA with post hoc tests. All three post hoc tests determined that the Baby Boomers and Millennials differed significantly. Tukey and Bonferroni resulted in \( p = .003 \) significance and Scheffé had
\( p = .004 \) significance with \( p < .01 \) probability level. This analysis shows there is a statistically significant relationship between the generational cohorts of Baby Boomers and Millennials and employee engagement that cannot be explained by chance.

The final research question of the study, Question 3c is: Does work centrality and narcissism explain any variability in employee engagement after controlling for age? It appears many in the popular press and in the research domain believe that chronological age plays a bigger role in influencing employee engagement than other variables such as, generational cohort. To examine this predominant opinion, the researcher conducted another multiple regression analysis while controlling for age. Studying whether the association between work centrality/narcissism and employee engagement remains after the effects of “age” are removed from the association, means the “age” variable is controlled because its influence is removed. The “age” variable will have its values held constant to better analyze the relationship between the outcome variable and predictor variables. Table 20 shows the Model Summary. In the Model Summary, \( R = .434 \) and \( R^2 = .188 \). The “\( R \) value” represents the correlation and \( r = .434 \) is near mid level. It means there is still a relationship with work centrality and narcissism on employee engagement while controlling for age. Furthermore, \( R^2 = 0.188 \) means that about 18.8\% of the variation in employee engagement is explained by work centrality and narcissism.

Table 21 illustrates the coefficients of work centrality and narcissism while controlling for age. Regarding “\( B \) values” for every one-point increase in work centrality, there will be a .746 increase in the value of employee engagement while it is .137 for narcissism and .204 for age. In addition, the Beta scores help to determine which of the independent variables best predict the output/constant variable. As determined
earlier, work centrality still had the highest beta of $\beta = .390$ and narcissism’s beta was $\beta = .026$. Age does predict the output variable of employee engagement but not to the extent of the influence of work centrality. The $t$ test tells if the predictor variable is statistically significant. Both work centrality and age had significance at $p < 0.001$.

Table 20

*Model Summary – Multiple Regression Analysis controlling for Age*

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.434</td>
<td>0.188</td>
<td>0.182</td>
<td>14.243</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Age (centered), Work Centrality, Narcissism

Table 21

*Coefficients Table: Multiple Regression Analysis controlling for Age*

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>55.147</td>
<td>5.714</td>
<td>9.652</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Work Centrality</td>
<td>0.746</td>
<td>0.086</td>
<td>0.390</td>
<td>8.643</td>
</tr>
<tr>
<td>Narcissism</td>
<td>0.137</td>
<td>0.244</td>
<td>0.026</td>
<td>0.563</td>
</tr>
<tr>
<td>Age (centered)</td>
<td>0.204</td>
<td>0.052</td>
<td>0.178</td>
<td>3.935</td>
</tr>
</tbody>
</table>

Dependent Variable: Employee Engagement

**Hypotheses.** Studies begin with research questions and then are transformed and guided by hypotheses. Hypotheses are proposed answers to research problems that indicate a relationship between at least two variables (Hoy, 2010). The researcher has chosen to state only the directed alternative hypotheses rather than both the null and accompanying directed alternative hypotheses. Six hypotheses guide the study.
Hypothesis 1: Work centrality will vary among the Baby Boomer, Generation and Millennial generational cohorts and it is hypothesized that Millennials will have statistically significant lower work centrality than the Baby Boomer and Generation X cohorts. This is rejected, as the Millennial cohort did not have statistically significant lower work centrality than Baby Boomers and Generation X.

Hypothesis 2: Narcissism will vary among the Baby Boomer, Generation X and Millennial generational cohorts and it is hypothesized that Millennials will have statistically significant higher narcissism than the Baby Boomer and Generation X cohorts. This is rejected, as the Millennial cohort did not have statistically significant higher narcissism than Baby Boomers and Generation X.

Hypothesis 3: There will be a statistically significant relationship between work centrality and narcissism. This hypothesis is rejected, as there is not a statistically significant relationship between work centrality and narcissism.

Hypothesis 4: There will be a statistically significant positive relationship between work centrality and employee engagement such that as work centrality declines, so will employee engagement decline. This hypothesis is accepted, as there is a statistically significant relationship between work centrality and employee engagement.

Hypothesis 5: There will be a statistically significant negative relationship between narcissism and employee engagement such that as narcissism increases, employee engagement will decline. This hypothesis is rejected, as there is not a statistically significant relationship between narcissism and employee engagement.

Hypothesis 6: There will be a significant effect from work centrality and narcissism on employee engagement such that work centrality has a positive effect and
narcissism has a negative effect. This hypothesis is partially accepted. There is a positive significant effect between work centrality and employee engagement and this part of the hypothesis remains but there is not a negative significant effect between narcissism and employee engagement and this part of the hypothesis is rejected.

**Conclusion**

The purpose of this study was threefold: to investigate if there are significant differences among the generational cohorts regarding work centrality, narcissism and employee engagement; if there is a relationship between work centrality and narcissism, and if work centrality and narcissism influence employee engagement. Perhaps of most interest was finding that there were statistically significant differences among the generational cohorts, but only for employee engagement, and not work centrality and narcissism as the popular press tends to promote and some published research has determined.

Before a thorough analysis was conducted, a Pearson correlation was used to measure the degree and direction of any possible linear relationships between the subscales. There was a positive moderate relationship between work centrality and employee engagement $r = .396$, $p < .01$. The MANOVA was then conducted which showed that generational cohort has a significant impact on the three dependent variables.

In review, one of the main purposes of the study was to find if significant mean score differences in work centrality, narcissism and employee engagement occur among the generational groups. There was no significance found among the generational cohorts in work centrality $p = .752$ and narcissism $p = .462$ but there was significance in employee engagement $p = .002$ with the $p$ value set at .01. Further investigation was
needed to determine which cohort or cohorts influence employee engagement. All three post hoc tests determined that the Baby Boomers and Millennials differed significantly for employee engagement. Tukey and Bonferroni resulted in $p = .003$ significance. Scheffè, had $p = .004$ significance. This analysis shows there is a statistically significant relationship between the generational cohorts of Baby Boomers and Millennials and employee engagement that cannot be explained by chance.

The second purpose of the study was to determine the degree of association between the two continuous variables of work centrality and narcissism. If the number ($r$) is zero or close to zero, it indicates a nonexistent or weak relationship which is the case in this correlation where $r = .075$. There is an almost nonexistent or a very weak relationship between work centrality and narcissism as determined by the Pearson Correlation procedure.

Using multiple regression, the third purpose of the study was to determine if work centrality and narcissism influence employee engagement. It was found that about 15.7% of the variation in employee engagement is explained by work centrality and narcissism. This is a relatively small number (15.7%), which means only a small percentage can be explained. The Beta scores help to determine which of the independent variables best predict the output/constant variable. Work centrality had a beta of $\beta = .395$ and narcissism’s beta was $\beta = .010$. Narcissism does not predict employee engagement while work centrality does. Work centrality had significance at $p < 0.001$, this means work centrality contributes significantly to the model and can explain differences in employee engagement.
A popular belief is that age is a major influencer of work-related constructs such as employee engagement. Using age as the predictor variable, age’s $r = .184$, at significance level .01, which means this was a low-level correlation and $R^2 = .034$ means that about 3.4% of the variation in employee engagement is explained by age. In review, age had a beta of $\beta = .184$ and this does predict employee engagement at a low level. It was also found that age had significance at $p < 0.001$ and can explain differences in employee engagement albeit, not a strong predictor.

It was important to conduct another regression to control for “age”. The results were a correlation of $r = .434$ which is near mid-level. It means there is still a relationship with work centrality and narcissism on employee engagement while controlling for age. Furthermore, it was found that $R^2 = 0.188$ which means that about 18.8% of the variation in employee engagement is explained by work centrality and narcissism with age removed.

Chapter Five, the next and final chapter, discusses the major findings of the research study. In addition, the limitations, implications of the study, directions for future research and conclusions are covered.
Chapter 5 – Discussion

Generational phenomena underlie organizational challenges (Joshi, et al., 2010). Fundamental concerns regarding specific generational differences and their implications in organizations remain unanswered. An extensive consulting niche has been born out of the focus on workplace generational differences. Large firms such as Price Waterhouse, along with boutique consultancies, offer generational-based services, yet there is a lack of transparency of methodology. Consulting firm research methodology is often proprietary, or simply too vague for replication. While there are trainers and speakers aplenty, their focus is usually on the awareness of generational differences rather than how to work with the different generations. Often their information is based on anecdotal evidence. Some of the literature available does not provide specific details about data collection methods, number of respondents, sources of the data, which makes it complicated to identify findings based on analyses of data collected versus subjective interpretations of the data (Alsop, 2008). This study captures empirical evidence to inform HRD professionals how they can best work with generational diversity. It is necessary to understand how to engage employees in order to take advantage of the benefits that having an engaged workforce can yield, i.e., increased employee and organizational performance. Overall, this research provides a view into the complex world of understanding multiple generations at work. The study explores if there are significant generational differences of work centrality, narcissism, and employee engagement among the three largest generational cohorts in the workforce of today. Furthermore, the study examines if there is a relationship between work centrality and narcissism, and if work centrality and narcissism influence employee engagement.
There are several key findings in this study. First, this research study did not find statistically significant generational cohort differences regarding work centrality and narcissism among the Baby Boomer, Generation X and Millennial generations, yet did determine significant differences regarding employee engagement among the Baby Boomer and Millennial generational cohorts. Second, the study did not find a relationship between work centrality and narcissism. Third, the study did find a positive moderate relationship between work centrality and employee engagement. It appears that almost 16% of employee engagement is explained by work centrality and narcissism with work centrality being significant and narcissism not being significant. In addition, age can explain 3.4% of employee engagement and is significant. When age is controlled, work centrality and narcissism can explain 18.8% of employee engagement. These findings are discussed below. Limitations of the study, implications of the findings, specifically for HRD practitioners and scholars, directions for future research and conclusion follow the discussion of the findings.

Before telling the story of the research findings’ significances, addressing why this concept of generation is so important needs a quick review. Generations are not elective groups but membership is based on the shared position of an age-group in historical time (Mannheim, 1952). Members of a generation are born, begin school, enter the workforce, begin families and retire at approximately the same time and age. Members are in the same cohort when technological advances occur and wars are waged. When a new generation is born, social forces such as schools, families, customs, laws, etc., acquaint the new members with the society to which they now belong. The newcomers form their own reactions to the agents of socialization and the shared
historical occurrences. It is the shared experiences that contribute to the values, personalities and attitudes that define and differentiate one generation from another. This study investigated generations within the context of work, including differences in work-related values (work centrality), personalities (narcissism), and work attitudes (employee engagement).

The concept of generation is important because as old generations depart the workforce and new generations enter, coupled with historical events and social events, it all combines to drive social change. Social change refers to significant alterations in behavior patterns and cultural values and norms over time. It is the premise of this study that significant generational differences may be driving social change in the workplace. This has crucial implications for HRD practitioners and scholars.

An online survey, comprised of four sections was completed by 405 participants. The first section asked demographic questions of the participants and was followed by three previously determined reliable scales: work centrality (Paullay, Alliger, & Stone-Romero, 1994), narcissism (Narcissistic Personality Inventory, Raskin & Terry, 1988) and employee engagement (Utrecht Work Engagement Scale, Schaufeli and Bakker, 2003). The survey-takers, ages 18 – 69, work in organizations and businesses located in the Midwest region of the United States. The current study identified mean score differences among the three generational cohorts in all three of the constructs: work centrality, narcissism and employee engagement. Yet, only in employee engagement was there statistical significance for the generational cohorts of Baby Boomers and Millennials. The following paragraphs discuss the findings for each of the three constructs.
Work centrality and generational differences. Empirical research suggests generations are more similar than different and where differences do exist, they are inconsistent. Several results of this study point to the inconsistencies. The current study, regarding work centrality and narcissism, was influenced by the findings of Twenge (2010), Smola and Sutton (2002) and Kowske et al. (2010). Work centrality is the degree of general importance that work has in an individual’s life at any given time (MOW, 1987). Their time-lag studies found declining work centrality among the three generational cohorts, with Baby Boomers at the highest level then declining with Generation X followed by further decline for the Millennials. The current study’s mean scores for work centrality indicate a decline from Baby Boomers to Generation X but then the mean scores increase for the Millennials. Even though the work centrality mean scores were not significant among the three generations in this study, as determined by a one-way ANOVA, neither did the mean scores continue declining as the newest generation entered the workforce, which is contrary to Twenge (2010), and Smola and Sutton (2002) findings. This is an inconsistency in generational differences research. The researcher suspected the earlier findings of Twenge (2010) might be replicated. The current study’s results were unexpected because the time-lag data obtaining method used by Twenge is considered more accurate than the cross-sectional design (used for this study) for determining generational differences because time-lag examines individuals of the same age at different points in time, thus holding age constant.

Perhaps a contributing factor is the participant differences in employment for this study. Twenge (2010) and Smola and Sutton (2002) used high school and college students as participants who had not yet entered the workforce, while this research study
used only working participants. Being entrenched in the workplace, rather than anticipating being in the workforce, may influence how central the role of work is in one’s life. When work consumes a major part of one’s day after being accustomed to the student lifestyle, this major life change may influence the importance work represents. Lived experiences alter values. A majority of the Millennials who participated in the online survey have been in the workforce less than five years and this may account for the increase in work centrality as compared to the research using students. In addition, considerably earlier research on Millennials did not have adequate access to their work values due to their young age.

On the contrary, a meta-analysis by Low, et al., (2005) has shown that work attitudes are relatively stable from early adolescence to early adulthood, which implies that the Millennials’ work values should not have changed. Hanson and Dik (2005) determined that the work interests of high school seniors “remained predictive of occupational membership as far as twelve years after graduation from high school” (p. 365). Twenge et al., (2010) found that the development of values is strongest during childhood and adolescence. Other studies have determined that work values are relatively stable throughout early adulthood which means what an individual learns to value in his/her youth carries into early adulthood.

In support of the Millennials increasing work centrality, Javidan, (2004) and Kuchinke at al., (2011) determined if a social group (generation) assigns high centrality to work, the group will also value and desire: 1) individual achievement; 2) performance appraisal systems that promote achievement of results; and, 3) feedback as necessary for improvement. This supports Millennials’ increase in work centrality because research
regarding Millennials in the workplace has determined and confirmed their constant desire for feedback, the constant need to know how well they are doing, and their wanting to achieve, quickly and early in their tenure, so they can be promoted (Herbison and Boseman, 2009; Crumpacker & Crumpacker, 2007, Ng et al., 2010).

The other issue that may add confusion is misconstruing work centrality with work commitment. A person, such as a Millennial can value the importance of work, recognize work as crucial to one’s existence and view work as a top priority in life, which is different from work commitment. Work commitment is feelings of loyalty, duty and psychological involvement in the workplace. A person can value work yet not be committed to work, as this may be the case for Millennials. While the Millennials increasing work centrality is contrary to recent research, there is a definite benefit. High work centrality is a desirable value because it leads to engagement in work and positive job performance (Field, 2000; Ng, Sorensen, & Feldman, 2007). Implications regarding increasing work centrality for HRD practitioners and scholars are covered later in the implications section.

**Narcissism and generational differences.** Studies suggest that generational cohorts differ in personality, which may have ramifications for HDR regarding work-related outcomes and work attitudes (Barrick, et al., 2001). Several personality traits have been steadily increasing in college students across generations. Self-esteem, extraversion and external locus of control have increased from Baby Boomers to Generation X (Twenge and Campbell, 2001). Instead of declining work centrality as new generations enter the workforce, the opposite occurred for narcissism. Narcissism was found to be increasing in the Twenge (2010), Smola and Sutton (2002), and Kowske et al
Narcissism is an inflated view of oneself. It is a belief that one is extraordinary and unique and expects special treatment from others while believing one owes little in return (American Psychiatric Association, 2000; Millon, 1996). Research suggests that narcissism has steadily increased from the Baby Boomers through the Millennials. This study’s slightly increasing narcissism scores were similar to the Twenge, Smola and Sutton, and Kowske et al studies. Narcissism mean scores for the three generational cohorts followed a similar increasing pattern with the highest narcissism mean scores for Millennials. Even though the narcissism mean scores among the three generations in this study illustrate an increase in mean scores, the narcissism generational differences, as determined by a one-way ANOVA, are not statistically significant.

This nonsignificance for increasing narcissism among the recent generations entering the workforce is inconsistent with recent generational research (Alsop, 2008; Twenge, Konrath, Foster, Campbell & Bushman, 2008a, 2008b; Smola & Sutton, 2002; Kowske, et al., 2010; Westerman, et al., 2012). Perhaps again, sampling high school and college-age students influences the significance. For example, Westerman, et al. (2012) reported that the current generation of college students (N = 560) has significantly higher levels of narcissism than the college students over the past twenty-five years. Westerman, et al., used a baseline from ten different studies to represent historical narcissism level averages. There are researchers who argue narcissism is related to age and not generation. In support of this study’s nonsignificance, a recent meta-analysis by Roberts, Edmonds, & Grijalva (2010) concluded that age changes in narcissism are large in comparison to generational changes and replicable. When older people are told that
younger people are getting increasingly narcissistic, they tend to agree but confuse the claim for an increasing generational difference when in fact it is just that younger people are simply more narcissistic than older people are. Roberts, et al (2010) indicated that age is the main factor in determining narcissism because with youth comes exuberance, inexperience and naiveté. The researcher suggests that surveying Millennials in the workforce rather than high school and higher education students, as in previous studies, could influence the narcissism results. It is possible with over twenty percent of the participants with less than one year in their current employment (lack of familiarity and experience) and the reality of the workplace (limited job market, sluggish economy, and entry-level positions) keeps over-confidence and inflated views of themselves at bay and does not increase levels of narcissism to the point of significance.

**Employee engagement and generational differences.** Generational differences in work attitudes appear to capture most of the popular press’s interest. Job satisfaction, recognition, career development and advancement, job security, pay and benefits, and other factors influence commitment and retention. Ultimately, work attitudes and behavior affect productivity and financial outcomes. Work attitudes, behaviors and outcomes are all part of the employee engagement story. Employee engagement is a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption in work (Schaufeli et al., 2002).

This study investigates whether there are significant differences among the three generations in employee engagement. The employee engagement mean scores declined from Baby Boomer to Generation X to Millennials. Unlike work centrality and narcissism, significant differences regarding employee engagement were found. The
ANOVA between-group variance indicated that only employee engagement showed a significant difference among the three mean scores of work centrality, narcissism and employee engagement. To determine where the significant differences existed among the three generational cohorts, the researcher followed the ANOVA with Tukey and Bonferroni *post hoc* tests, which determined that the Baby Boomers and Millennials differed significantly for employee engagement.

This research finding, the declining of employee engagement among the generations is the most noteworthy and impactful of the current study because engagement is a desirable and advantageous condition in which an employee exhibits high levels of involvement, commitment, passion, enthusiasm, focused effort and energy (Macey & Schneider, 2008). Engaged employees are needed in all organizations because engaged employees show higher levels of discretionary effort, thus increasing both overall individual and collective performance (Harter, Schmidt, & Keyes, 2003). Lockwood (2007) states that engaged employees “work with passion and feel a profound connection to their company. They drive innovation and move the organization forward” (p. 2). “Engaged employees excel at their work through a willingness to adapt their behavior toward communicated organizational outcomes” (Shuck and Wollard, 2010, p. 103). All of these previous research determinations which promote the positive benefits of high employee engagement are included to highlight the possible detriment that declining levels of engagement among the younger generations in the workforce may have on workplace performance.

In addition to listing the usual litany of benefits for highly engaged employees in the workplace, it is helpful to understand the many reasons why engaged workers
perform better than non-engaged employees. First, engaged workers often experience positive emotions. These positive emotions of enthusiasm, happiness, and gratitude seem to broaden employees’ thought-action repertoire, which implies they are constantly working on their personal resources (positive self-evaluation-self-esteem, self-efficacy locus of control) (Fredrickson, 2001). Second, engaged employees experience better health, which allows them to focus a majority of their energy and skills on their work. Third, engaged workers create their own job and personal resources. Finally, engaged employees transfer their engagement to colleagues in their immediate work environment (Bakker & Xanthopoulou, 2009). It then follows that in most organizations, performance is a collaborative effort, and the engagement of one worker may transfer to others and ultimately improve team performance.

It is understandable that Baby Boomers would have higher engagement than younger generations due to more opportunities for leadership and responsibility, tenure, increased satisfaction with one’s career, higher levels of compensation, greater flexibility of career choice based on education levels and work is more central to their lives. It is equally understandable that Millennials have the lowest employee engagement scores, as they are new to the workforce and attempting to find their place and roll in the organization. They have had the shortest timeframe to understand the organization, least amount of education among the cohorts that can limit career opportunities, fewest advancement opportunities, limited work experiences for learning success on the job and limited opportunities to receive training, mentoring and recognition for their work, which they as a generation desire.
Without research to substantiate, one could suggest the Millenials decline in employee engagement may be linked to the current economic recession and reflective of the current time in history. Millennial workers may not be employed in the job of their choice or related to their education/training. There may be underemployed Millennials who have settled for lower paying or part-time work because that is all they could find. They may feel vulnerable about their immediate employability. These issues could influence their employee engagement scores.

Although it is counterintuitive that Millennials are increasing in work centrality and declining in employee engagement because if work is a high priority, meaning it is central to one’s life (work centrality), it would be more likely for the person to be highly involved, committed and passionate about one’s performance and productivity. Studies suggest that declining work centrality will negatively influence employee engagement (Sharabi & Harpaz, 2010; Carr, Boyar & Gregory, 2008). Yet, the Millennials do value work (higher work centrality) but are the least engaged of the three generations.

Employee engagement is intensifying as a critical organizational concern particularly as businesses are struggling from the distress of the global recession. In order to compete in the global marketplace, HRD professionals and organizations will need to understand how to foster employee work engagement to ensure all employees are maximally productive. Implications regarding declining employee engagement for Generation X and Millennials will be covered in the implications section.

**Relationship between work centrality and narcissism.** Previous empirical research indicates the Millennials have lower work centrality and higher narcissism than the preceding generations of the Baby Boomers and Generation X (Twenge, 2010; Smola
and Sutton, 2002; Kowske et al., 2010). It is possible that there could be an inverse relationship between the two constructs. The Pearson’s product moment coefficient found a correlation of \( r = .075 \) meaning there is no relationship (almost nonexistent) between work centrality and narcissism. The researcher initially thought that even though correlations cannot demonstrate causation, the possible correlation between work centrality and narcissism would be valuable for making predictions. It was an interesting observation with potential for making generation-related predictions in the workplace but was not supported by the survey data.

**Work centrality, narcissism, age and relation to employee engagement.** The constant quest to improve and sustain individual and organizational performance results in a never-ending search to find the constructs that have the greatest potential to explain and influence productivity and outcomes. This study chose a work value (work centrality) and a personality characteristic (narcissism) to explain influence on employee engagement. Multiple regression was used to evaluate the relation. A positive moderate relationship between work centrality and employee engagement was found. Work centrality is a predictor variable while narcissism was not significant. Even though only 15.7% of the variation in employee engagement is explained by work centrality, it is still of significant importance because now HRD professionals know that if employees view work as central to their lives and value work as one of life’s top priorities, employees have a better chance of being engaged in their work. It is helpful to know the factors that can predict employee engagement, such as work centrality. Fostering strong employee engagement is a key human resource objective as employee engagement is related to positive employee performance and productivity (Bakker & Demerouti, 2008;
Halbesleben, 2010; Schaufeli, Taris, & Bakker, 2006), positive organizational performance (Harter, Schmidt, & Hayes, 2002; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009) and employee retention and well-being (Halbesleben, 2010; Saks, 2006).

A multiple regression was conducted to evaluate if age differences influence employee engagement. Age had a significant low-level correlation and can explain 3.4% of employee engagement. While this may be a low-level correlation, it remains a significant finding. As the survey data has already determined, older employees score higher on employee engagement than their younger counterparts. Knowing that age can predict 3.4% of employee engagement, if HRD practitioners had to choose where to focus their engagement efforts, this finding will provide them with focus, i.e., younger members of the workforce.

An additional multiple regression was conducted to examine whether the association between work centrality/narcissism and employee engagement remains after the effects of “age” are removed from the association. Results indicated that the correlation became stronger after age was removed with about 18.8% of the variation in employee engagement is explained mostly by work centrality. Research has already determined the importance of high work centrality as it is related to organizational performance and growth (Aggarwal & Bhargava, 2009; Sharabi, 2008; Harpaz & Meshoulam, 2004). The data results are not surprising but more an affirmation of logical thinking. It follows that if work is central to employees’ lives; they invest in it more, thus choosing to be more engaged at work, i.e., assuming leadership roles, being innovative and creative. This finding gives support to HRD practitioners’ objectives to bolster
efforts in helping all generations of employees to value work and find balance with the priorities in their lives.

One of the findings in this study is that generational effect sizes are small which suggests that generations are not as different as the popular press promotes. Although not as initially speculated, this study now concurs with earlier studies purporting that generations are more similar than different and in the differences, there are inconsistencies. Unless researchers can consistently use time-lag or longitudinal designs and control for age, the generational differences research continues to be confounded by age, time-period and generation.

Limitations

The present study has several key findings, however, as with all research, this study has several limitations that may have influenced the results and the conclusions that were drawn.

Research on generations, albeit appealing to investigate a mechanism for social change, is plagued by the linear relationship between age, period and generational group membership because the variables are inherently intertwined (Yang and Land, 2008). In this study, cross-sectional data were used to examine generational differences. The current study provides a picture of a particular moment in time and this may be problematic because any difference could be attributed to age, time-period and/or generational effects. The effect of period is held constant in cross-sectional designs, as in this research study, because multiple generations were compared in a sample selected in one period in time, yet the effects of age and generation are still confounded. Despite the inability of cross-sectional designs to offer definitive evidence of causality, they do offer,
if needed, the necessary preliminary insights to warrant further research, preferably with longitudinal or time-lag designs.

The researcher used the generational taxonomy (generation birth years) of Howe and Strauss (2000) to designate each survey participant to a specific generation. Other historians and academicians may use similar but different birth year groupings for each generation. Generational characteristics are not rigid birth ranges, but fluid cohorts that help to understand common perceptions, attitudes and expectations. Results could have been different if different generation birth year brackets were used. Differences can also occur within generational cohorts. Generation groups could be characterized by “early”, “middle” and “late” groups within a cohort. Perhaps for even more accurate representation of values, personalities and behaviors, future research could examine different birth year brackets for each generation and/or groupings within a generation designation.

Other limitations include substituting imputed means for missing data because it can diminish the probability of obtaining significant results. Online surveys have many advantages such as anonymity and efficiency but lack face-to-face conversations. Engagement has a large emotional element that could be more thoroughly assessed through the addition of qualitative means (face-to-face interviews; generational focus groups).

This survey had representation from fourteen different industry sectors. It was the intention of this research to represent a broad base of industries. Additional sectors could have strengthened the participant base even further. On the contrary, additional specific insights unique to an organization could have been found had the sample been drawn
from a single sector where all survey participants share the same work environment, culture and organizational experiences had that been the objective of the study.

Equal representation of demographic groupings is always desirable. The optimum would be 50%/50% female/male and 33% of the participants from each of the three generational cohorts. Most of the groupings were adequate except for the disproportionate grouping of Whites for the category of race. This study surveyed a relatively homogenous sample (91% White) and one could surmise that the values might only represent “white middle class” values and this is a limitation. Perhaps the employees were from a variety of social economic levels, yet the results did not take into consideration the possibility that race, social economic status and ethnicity may provide different generalizations for an individual generational cohort.

The hypotheses and research design of the current study are based on a Western perspective. A global perspective would eliminate the inherent danger of assuming the claims on specific generations are the same in every country. A researcher cannot apply U.S. findings to other cultures. Similarly, this sentiment applies to the sample for this study. All participants were from the Midwest region of the United States. Different regions could produce different results. The lack of diversity could adversely influence generalizability of findings.

When a sample, rather than an entire population, is surveyed, there is the probability that the sample estimates may differ from the “true” population values they represent (U.S. Bureau of Labor and Statistics). This was not a random sample for this study and is a limitation. It was a convenience sample. The researcher accepted
participants from organizations and businesses that would allow the online survey to be completed by its employees.

Survey responses obtained from Millennials in the current study are limited to the oldest members of the Millennial cohort as not all members are yet in the workforce. The Baby Boomer and Generation X had representation from the entire cohort. In spite of the limitations, this research study has added to the generational literature regarding work centrality, narcissism and employee engagement and has the potential to generate future ideas.

**Implications for Human Resource Development-Practitioners and Scholars**

The more insight and understanding which can be garnered from generational research, the better the opportunity to develop HRD strategies, which improve the working relationships of all generations in the workplace. The popular press gives the impression that generational differences cause severe conflict in the workplace. A significant number of book titles include conflict terms such as “clash” and “collide” and suggest the eminent need for HRD’s focus on the management of this generational conflict caused by differences. This study disagrees to the extent and degree of the generational conflict caused by the differences. It would be wiser for HRD practitioners and managers to identify individual employee differences, which can be attributed to age, lack of experience and other factors, to explain the discordance being witnessed in the workforce then rely on anecdotal generational-related comments from a variety of sources.

The lack of statistical significance for generational differences in work centrality in this study should not give employers any confidence that the work environment is not
fundamentally affected by the nonsignificance. HRD practitioners should be delighted that work centrality is increasing (although not significant) for Millennials as compared to Generation X because work centrality is about the value and importance of work in the configuration of one’s life (Kanungo, 1982). Yet, HRD personnel would be negligent to not recognize that as work becomes less central to some employees’ lives, the employees invest in it less. Lower work centrality can lead to less job satisfaction, less employee engagement and higher turnover intention, thus affecting organizational performance. For example, there has been a recent decline in the number of workers who desire to move into leadership positions because they prefer to not have work consume their lives (Families and Work Institute, 2005). In the long term, fewer candidates competing for management positions will complicate succession-planning efforts and this is one example of the affects of lower work centrality. HRD practitioners and scholars need to capitalize on the knowledge that work centrality is one factor that predicts employee engagement and it is important for employees to value work.

To eliminate “human capital gaps”, reliable research must provide the platform from which HRD practitioners and scholars can formulate sound workforce development strategies to address generational differences (Crumpacker & Crumpacker, 2007, p. 349). This study did reveal that certain work values/attitudes are influenced by perspectives unique to generations. Significant differences in work centrality and narcissism were not found, yet there were significant generational differences between Baby Boomers and Millennials in employee engagement. The subject of declining employee engagement among the generational cohorts does need to take center stage. This is a conundrum because the Millennials view work as central to their lives but their employee
engagement is declining. Usually if a person views work as an important aspect of one’s life, it leads to engagement in work and positive job performance (Ní, Sorensen, & Feldman, 2007). Is it because Millennials understand that work is a necessity and value work as a priority, yet are not as willing to tolerate the current organizations’ policies and practices? Perhaps a paradigm shift needs to be considered by HRD practitioners. HRD professionals should be asking, “How will Millennials’ disengagement shape and influence changes in HRD practices? In what ways does the organization need to address and/or accommodate? Are Millennials more open about asking what they need and continue to persevere until they get their needs met and then become more engaged? Alternatively, do they readily jump ship and find employment in an area in which they are more passionate and meets their expectations?

Multiple generations are now working side-by-side in organizations requiring HRD professionals to reexamine how to respond to the specific needs of each generation in order to create an engaged workforce. One of the reasons for examining if there are specific generational differences is to determine if engagement strategies should be tailored based on the specific needs of each generation in the U. S. workforce. HRD professionals are given two options when working with the declining employee engagement. Work with the entire organization’s employees or specifically target the younger generation to work on improving their engagement. Sustaining employee engagement for the older generations and fostering employee engagement for the younger generations matches well with the function of HRD in an organization. Swanson and Holton (2001) state,
the purpose of HRD is to advance the mission of the performance system that sponsors the HRD efforts by improving the capabilities of individuals working in the system and improving the systems in which they work (p. 137).

Employee engagement is a personal choice dependent upon what the worker considers worth investing oneself in. It is a cognitive, emotional and behavioral commitment needed for organizational performance and profitability, employee job performance and productivity, employee retention and employee well-being. Employees who are engaged display energy, mental resilience, invested effort, persistence, feelings of significance, enthusiasm, inspiration, pride -- all engagement characteristics crucial for the performance system of an organization.

An important starting point for any HRD employee engagement process is the baseline measurement of engagement and evaluation of personal and job resources among all employees. Examples of job resources are: performance feedback, skill variety, autonomy, learning opportunities, and social support from colleagues. Examples of personal resources are: self-evaluation, organizational-based self-esteem and optimism, self-efficacy, locus of control, and the ability to perceive and regulate emotions (Bakker, 2011). Based on the assessment, the range of the scores will help HRD practitioners learn where to most usefully focus interventions, i.e., individual employees, teams, job positions or departments and how to custom tailor the interventions.

For HRD practitioners, the current study’s results indicate that employee engagement is significantly declining from the Baby Boomers to the Millennials. It is
now HRD’s role to address this decline by developing strategies/interventions while keeping in mind that employee engagement is about adaptive behaviors. Engaged workers excel at their work because of a willingness to adapt their behavior toward communicated organization outcomes (Macy & Schneider, 2008). It is a personal decision chosen by the employee for his/her own reasons. This means employee engagement is an individual-level construct and it is at this level where most insights can be gleaned. The capacity to engage comes from a sense of competence and autonomy, which can be developed (Maslow, 1970). Workers need to feel competent, respected, valued, and purposeful in their work. Organizations, under the direction of HRD practitioners, help with the competence and autonomy development by informing workers of what specifically is expected of them, providing adequate resources to complete their work and following-up with focused and balanced feedback. Kahn (1990) states that work is an engaging experience when job roles are interesting, challenging and meaningful and allow employees the ability to decide how work gets accomplished, not just what needs to be done. The individual motivation to engage depends significantly on the quality of communication from the organization regarding many subjects such as job roles and responsibilities and the degree of challenge the job provides (Shuck & Wollard, 2010). The freedom to engage depends on how safe an employee feels when taking certain actions. HRD practitioners can help organizations build this psychologically safe environment by communicating with transparency, demonstrating integrity, and behaving consistently. Trust in one’s place of work, leads to the freedom to engage. The objective of the above list of steps is to create environmental conditions for engagement to develop. The second step is to help the employee overcome his/her limitations. When recruiting,
make certain there is a good degree of job fit. When already onboard, re-evaluate the job fit. Learning programs, both e-learning and face-to-face, that focus on skill development, career development, self-awareness and alignment with the organization’s vision, mission and values and comfort with the organization’s culture will help promote engagement.

Targeted specifically for Millennials, the youngest generation, HRD practitioners should offer soft-skills training on how to assimilate into a new workplace culture, how to process feedback, how to approach a supervisor for coaching or mentoring, how to set long-term career goals, how to work with team members assertively and diplomatically and other topics that build on that sense of belonging and being part of something important. Recognize the personal desires of the different generations and address them accordingly, e.g., flexible work schedules for employees ready to retire, creating a rotational job change for young workers. Efforts to encourage employee engagement should draw from both personal and job resources. Ultimately, it will be a blend of strategies that will create an effective engagement culture.

**Directions for Future Research**

There are several promising directions for future research. Significant findings in this research study lead to additional areas for future research. Work centrality explains 15.7% of the variance of employee engagement. Further study is needed to determine other variables that can explain a larger percentage of the variance in employee engagement.

Significant employee engagement differences were found between the generational cohorts of Baby Boomers and Millennials. It would be prudent to determine the specific factors associated with the Millennials’ declining employee engagement so
HRD professionals can base their strategies on empirical findings. Further research to identify and rank-order the contributing factors would be beneficial. There is little known about how leaders influence their followers’ engagement. Do effective leaders offer the right mix between job resources and job demands?

Researching Millennials, as well as any generational cohort, has an inherent age range limitation. By the time, researchers can examine an entire generation in the workforce (approximately 20 years); they will be managing their younger counterparts. Nonetheless, future research should examine the Millennials for generational differences after the majority is in the workforce, as this will allow for a more accurate representation of Millennials’ values, personalities, and behaviors. This will require consistent data collection over the time span. Dividing the generation cohorts into subgroups, ex., early, middle and late Millennials, would allow making broader inferences about the generational effect.

Many changes have occurred in U.S. industries that have fundamentally altered the nature of work. Mass layoffs have occurred throughout industrialized history, especially during the Great Depression but the youngest generation may conceptualize job security differently given the prevalence of layoffs in the last ten years. It would be interesting to know if the severe changes in the labor market and volatile economy have led Millennials to lower their expectations or whether the imprint of this generation is so strong that expectations remain high. Studying if the Millennials’ workplace actions, motivation and loyalty have been affected by the volatile economy would be useful.

It is time to think about the influence of the next generation coming into the workforce as they will be entering in approximately five years. Will there be significant
generational differences between the Millennials and the next generation called the Homelanders? Alternatively, will their values be similar?

There is a lack of attention to the affects of culture within generational cohorts. This study did not address culture. Each culture has unique events that can influence generational characteristics for that culture. From a more global perspective, there is a lack of cross-culture generalizability. For example, a world war, or nuclear bomb is a global event, and as generations are shaped by historical events, and these events are experienced across cultures similarly, the experience can define cultures across generations. Future research could address cross-culture and culture generational differences.

Future research of generations should address the affect of race, ethnicity and social economic status on generations as the concern is that most generational studies represent “middle white class” values. Over the next decade the diversity of the labor force will become even more racially and ethnically diverse. The 2010 labor force percentages by race and ethnicity were: Hispanic 14.8%, White/Non-Hispanic 67.5%, Asian 4.7% and African American 11.6%. The projections for the 2020 labor force are: Hispanic 18.6%, White/Non-Hispanic 62.3%, Asian 5.7% and African American 12% (Bureau of Labor Statistics, 2012). The combination of rapid population growth for Hispanics and high participation rates in the workforce for both Hispanics and Asians will account for their labor force percentage increases (4% Hispanics, 1% Asian). These substantial increases in diversity among the Millennial generation in the workforce and the future Generation Z, also called the Homelanders should be addressed in future research.
The current survey obtained demographic data that was not used for statistical analysis. It would be interesting to explore the influence of gender, race, years employed in the same business, occupation, level of education and position/rank in the organization on work centrality, narcissism and employee engagement. Which profession has the highest engagement levels? Are employees with the most education, the most highly engaged? Are males more narcissistic than females across all generational cohorts? In addition, the Utrecht Work Engagement Scale is composed of three factors: vigor, dedication and absorption. While this research study did not measure these three components separately for each generation, it would be advantageous to know how the different generations respond to the three factors. This could assist HRD practitioners in fine-tuning their strategies to sustain and foster employee engagement. Studying generations in the workplace can offer numerous opportunities to develop multidisciplinary research programs that can inform future policy initiatives, which will aid in effectively managing generational differences.

As earlier research has determined, individual and business performance matters. In any economy, organizational effectiveness is critical for success. To achieve increased and sustainable positive business outcomes and improve the well-being of employees, HRD practitioners need to execute strategy and engage workers (Pitt & Murdolo, 2009). Employee engagement is linked both to work centrality and to success factors, which are employee performance/efficiency, productivity, employee retention, customer loyalty, and satisfaction, and profitability (Gonrig, 2008; Harter, Schmidt & Hayes, 2002; Maslach, Schaufeli & Leiter, 2001). Continued research in any dimension of employee engagement, narcissism, work centrality, and generations will build upon the growing
foundation of knowledge from generations of dedicated scholars while remaining cognizant that “good research in education is theoretical, empirical, controlled, and replicable” (Hoy, 2010, p. 16).

**Conclusion**

Even though the subject of generational differences has received much attention by the media, popular press, authors, and scholars, the idea that generational differences exist has drawn mixed support. It is the premise of this study that significant generational differences are driving social change in the workplace and will have future implications for HRD practitioners and scholars.

This study addresses the generational differences of work centrality, narcissism and employee engagement and how they vary among the Baby Boomer, Generation X, and Millennial generations in the workplace. The study also examines the relationship between work centrality and narcissism and if work centrality and narcissism influence employee engagement with intentions of contributing to HRD development of strategies for sustaining and improving workforce performance.

The findings indicate there are not statistically significant generational cohort differences regarding work centrality and narcissism among the three generations in the workplace, but significant generational differences regarding employee engagement among the Baby Boomer and Millennial cohorts. In addition, a positive moderate relationship between work centrality and employee engagement was found along with age explaining 3.4% of employee engagement.

The workplace is complex and changing. Not only by the anticipated exodus of Baby Boomers, but also by the influx of younger workers entering the workplace who
will be the future leaders. More importantly though, is addressing the declining employee engagement among the youngest generation in the workforce. Based on economic trends worldwide, HRD’s role in preparing the workforce to achieve future sustainable economic growth is both a difficult and crucial strategic organizational imperative. Personal and organizational performance outcomes are dependent on successful HRD strategies that promote work centrality and foster employee engagement.

Improving employee engagement is a challenging and robust task, albeit a worthy HRD goal. This is an opportunity to advance the practice of HRD by linking employee engagement to guidelines for evidence-based practice grounded in theory and research. Seeking the development of an engaged workforce keeps both HRD scholars and practitioners at the forefront of emerging practical and scholarly knowledge on employee engagement.

A great business leader once said:

"...the basic philosophy, spirit, and drive of an organization have far more to do with its relative achievements than do technological or economic resources, organizational structure, innovation, and timing. All these things weigh heavily in success. But they are, I think, transcended by how strongly the people in the organization believe in its basic precepts and how faithfully they carry them out.” (Thomas J. Watson, Jr., *A Business and its Beliefs - The ideas that helped build IBM*).
References


Roberts, B. W., Edmonds, G., & Grijalva, E. (2010). It is developmental me, not generation me: Developmental changes are more important than generation changes in narcissism–Commentary on Trzesniewski & Donnellan (2010). Perspectives on Psychological Science, 5, 97-102.


Twenge, J. M., Konrath, S., Foster, J., Campbell, W. K., & Bushman, B. (2008a). Egos inflating over time: A cross-temporal meta-analysis of the Narcissistic personality inventory. *Journal of Personality*, 76(4), 876-901.

Twenge, J., Konrath, S., Foster, J., Campbell, W., & Bushman, B. (2008b). Further evidence of an increase in narcissism among college students. *Journal of Personality*, 76(4), 919-928.


Appendix A: Online Survey

Directions: **Check the box, in each category that best describes you.**
The information you provide will be kept completely confidential and only a description of the group as a whole will be reported.

1. Indicate your gender:
   - [ ] Male
   - [ ] Female

2. Write your age on line below:
   

3. Indicate the year range in which you were born:
   - [ ] Born in 1943 or earlier
   - [ ] 1944 - 1960
   - [ ] 1961 - 1981
   - [ ] 1982 - 2002

4. Are you of Hispanic or Latino origin?
   - [ ] yes
   - [ ] no

5. Indicate is your race: (Choose one or more)
   - [ ] African American or Black
   - [ ] American Indian or Alaska Native
   - [ ] Asian
   - [ ] Native Hawaiian/Pacific Islander
   - [ ] White
   - [ ] Other or prefer not to respond

6. Indicate the highest level of education you have completed:
   - [ ] High School Diploma/ G.E.D.
   - [ ] Associates Degree; Technical School; Some courses after high school
   - [ ] Bachelor’s Degree
   - [ ] Master’s Degree
   - [ ] PhD; MD; JD; DDS; Professional Degree
   - [ ] Did not complete High School

7. At your current job, indicate your status:
   - [ ] Full-time
   - [ ] Part-time (20 hours or less per week)

8. Indicate how long you have been working at your current place of employment:
   - [ ] Less than 1 year
   - [ ] 1 year - 5 years
☐ 6 years – 10 years
☐ 11 years – 15 years
☐ 16 years – 20 years
☐ More than 20 years

9. Indicate your position at your current job:
   ☐ Top-level/Senior management level; Executive Suite; President, Vice President;
   ☐ Middle-level manager; Department head;
   ☐ First-level manager; Supervisor; Front-line manager;
   ☐ Not in a supervisory/leadership position
   ☐ Contract employee
   ☐ Other

10. Indicate the industry sector in which you are employed:
    ☐ Accounting Services
    ☐ Auto Sales and Service;
    ☐ Banking; Financial Services; Insurance; Real Estate;
    ☐ Educational Services
    ☐ Forestry, Paper & Packaging; Agriculture; Fishing
    ☐ Health Care and Social Assistance
    ☐ Information Technology; Journalism; Mass Communications; Media
    ☐ Legal Services
    ☐ Leisure and Hospitality; Entertainment, Arts, Recreation
    ☐ Manufacturing and Product Development; Engineering Services; Construction
    ☐ Public Service; Government
    ☐ Retail Sales & Wholesale Trade
    ☐ Transportation, Warehousing, Logistics
    ☐ Utilities; Energy; Mining
    ☐ Other
Work Centrality Survey

Using a rating scale of 1 – 6, circle the number which represents how much you agree or disagree with each of the following statements.
1= strongly disagree
2= disagree
3= slightly disagree
4= slightly agree
5= agree
6= strongly agree

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Slightly Disagree</th>
<th>Slightly Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Work should only be a small part of one’s life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>2.</td>
<td>In my view, an individual’s personal life goals should be work oriented.</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>3.</td>
<td>Life is worth living only when people get absorbed in work.</td>
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<td>2</td>
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<td>4</td>
<td>5</td>
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<td>4.</td>
<td>The major satisfaction in my life comes from my work.</td>
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<td>3</td>
<td>4</td>
<td>5</td>
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<td>5.</td>
<td>The most important things that happen to me involve my work.</td>
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<td>6.</td>
<td>I have other activities more important than my work.</td>
<td>1</td>
<td>2</td>
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<td>7.</td>
<td>Work should be considered central to life.</td>
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<td>8.</td>
<td>I would probably keep working even if I didn’t need the money.</td>
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<td>5</td>
</tr>
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<td>9.</td>
<td>To me, my work is only a small part of who I am.</td>
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<td>2</td>
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<td>10.</td>
<td>Most things in life are more important than work.</td>
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<td>2</td>
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<td>11.</td>
<td>If the unemployment benefit was really high, I would still prefer to work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
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<td>12.</td>
<td>Overall, I consider work to be very central to my existence.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
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</table>

**Narcissism Inventory**

Read each pair of statements below and place an “X” by the one that comes closest to describing your feelings and beliefs about yourself. You may feel that neither statement describes you well, but pick the one that comes closest.

Please complete all 16 pairs by choosing one statement in each pair.

<p>| | |</p>
<table>
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<tbody>
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<td>1.</td>
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<td></td>
<td>I really like to be the center of attention.</td>
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<td></td>
<td>It makes me uncomfortable to be the center of attention.</td>
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<td>2.</td>
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<td></td>
<td>I am no better or no worse than most people.</td>
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<td></td>
<td>I think I am a special person.</td>
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<td>3.</td>
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<td></td>
<td>Everybody likes to hear my stories.</td>
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<td>Sometimes I tell good stories.</td>
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<td>4.</td>
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<td></td>
<td>I usually get the respect that I deserve.</td>
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<td></td>
<td>I insist upon getting the respect that is due me.</td>
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<td>5.</td>
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<td></td>
<td>I don’t mind following orders.</td>
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<td></td>
<td>I like having authority over people.</td>
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<td></td>
<td>I am going to be a great person.</td>
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<td></td>
<td>I hope I am going to be successful.</td>
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<td>7.</td>
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<td></td>
<td>People sometimes believe what I tell them.</td>
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<td></td>
<td>I can make anybody believe anything I want them to.</td>
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<td>8.</td>
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<td></td>
<td>I expect a great deal from other people.</td>
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<td></td>
<td>I like to do things for other people.</td>
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<td>9.</td>
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<td></td>
<td>I like to be the center of attention.</td>
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<td></td>
<td>I prefer to blend in with the crowd.</td>
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<td></td>
<td>I am much like everybody else.</td>
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<td></td>
<td>I am an extraordinary person.</td>
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<td>11.</td>
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<td></td>
<td>I always know what I am doing.</td>
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<td>Sometimes I am not sure of what I am doing.</td>
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<td>12.</td>
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<td></td>
<td>I don’t like it when I find myself manipulating people.</td>
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<td>I find it easy to manipulate people.</td>
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<td>13.</td>
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<tr>
<td></td>
<td>Being an authority doesn’t mean that much to me.</td>
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<td></td>
<td>People always seem to recognize my authority.</td>
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</table>
14. ___ I know that I am good because everybody keeps telling me so.
    ___ When people compliment me I sometimes get embarrassed.

15. ___ I try not to be a show off.
    ___ I am apt to show off if I get the chance.

16. ___ I am more capable than other people.
    ___ There is a lot that I can learn from other people.

Source: Narcissistic Personality Inventory (Raskin & Terry, 1988)
Work and Well-Being Survey (UWES)

The following 17 statements are about how you feel at work – at your current job. Please read each statement carefully and decide if you ever feel this way about your job.

- If you have never had this feeling, circle the “1” in the space after the statement.
- If you have had this feeling, indicate how often you felt it by circling the number (from 2 to 7) that best describes how frequently you feel that way.

1= Never
2= Almost Never - A few times a year or less
3= Rarely - Once a month
4= Sometimes - A few times a month
5= Often - Once a week
6= Very often - A few times a week
7= Always - Every day

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<th>Never</th>
<th>Almost Never - a few times a year</th>
<th>Rarely - once a month</th>
<th>Sometimes - a few times a month</th>
<th>Often - once a week</th>
<th>Very Often - a few times a week</th>
<th>Always - every day</th>
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15. At my job, I am very resilient, mentally.  
16. It is difficult to detach myself from my job.  
17. At my work, I always persevere, even when things do not go well.  

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<th>Qno</th>
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Source: Utrecht Work Engagement Scale (Schaufeli and Bakker, 2003).
Appendix B - Consent Letter with IRB Protocol Number and Approval Date

Informed Consent: UW–Milwaukee
IRB Protocol Number: 13.357
IRB Approval Date: April 9, 2013

Hello,

You are invited to participate in a research study entitled: Examining Generational Differences in the Workplace: Work Centrality, Narcissism, and their Relation to Employee Work Engagement. The study is being conducted by Doctoral Candidate Judith Fenzel and Professor Barbara Daley of the University of Wisconsin-Milwaukee. The purpose of this study is to examine the generational differences of work centrality (how central work is to one’s life) and narcissism among the different generations in the workplace and determine if work centrality and narcissism influence employee engagement.

Approximately 350 people will participate in this study. If you agree to participate, you will be asked to complete the following anonymous online survey. This will take less than 10 minutes of your time. There will be not be a cost for participating and there will be not be a benefit to you other than to help the researcher and advance research on this topic.

Your information collected for this study is completely confidential and no individual participant will ever be identified with his/her research information. Data from this study will be saved on a password-protected computer for 3 years. Only the researchers and the doctoral committee of the student researcher will have access to the information. However, the Institutional Review Board at UW-Milwaukee may review this study’s records.

Your participation in this study is voluntary. You may choose not to take part in this study, or if you decide to take part, you can change your mind later and withdraw from the study. You are free to not answer any questions or withdraw at any time. Your decision will not change any present or future relationships with the University of Wisconsin-Milwaukee. If you have questions about the study or study procedures, you are free to contact the investigator at the address and/or email address below. If you have questions about your rights as a study participant or complaints about your treatment as a research participant, contact the Institutional Review Board at (414) 229-3173 or irbinfo@uwm.edu.

To agree to take part in this study, you must be 18 years of age or older and working. By completing the survey, you are giving your consent to participate voluntarily in this research project.

Thank you!

Judith L. Fenzel
University of Wisconsin-Milwaukee
Department of Administrative Leadership
P.O. Box 413
Milwaukee, WI 53201
jfenzel@uwm.edu
Curriculum Vitae

Judith (Julie) L. Fenzel

EDUCATION

University of Wisconsin-Milwaukee, Milwaukee, Wisconsin
Dissertator, Ph.D. Program in Urban Education; Department of Administrative Leadership; Expected Graduation December 2013
Specialization in Adult and Continuing Education
Program Focus on Human Resource Development
Minor in Organizational Behavior, Training and Strategic Management

Dissertation Title: Examining Generational Differences in the Workplace: Work Centrality, Narcissism, and their Relation to Employee Work Engagement

Marquette University, Milwaukee, Wisconsin
Master of Business Administration (60 credits)-emphasis Organization Development

Arizona State University, Tempe, Arizona
Master of Counseling Psychology (60 credits)-emphasis Organizational Behavior

University of Wisconsin-Madison, Madison, Wisconsin
Master of Science in Continuing and Adult Education
Specialization: Administration of Post Secondary Education
Thesis title: Using Value Clarifying Strategies as a Method of Instruction in Consumer Economics

University of Wisconsin-Stevens Point
Bachelor of Science in Consumer Economics

EMPLOYMENT

Medical College of Wisconsin, Milwaukee, Wisconsin 2007–2010

- Medical Education Specialist/Faculty Support - Department of Academic Affairs
- Program Designer, Instructional Designer and Educator - Consult with project directors and educators on the design, implementation of needed programs. Facilitate small group breakout sessions with medical doctors utilizing evidence-based instructional design, drawing on resources and theories from business, psychology, cognition, and education to inform the discussions and development of programs.
- Evaluator of programs - Co-design formative and summative program evaluations, surveys and learner assessment measures for medical faculty development programs. Collect, analyze and present qualitative and quantitative results at monthly faculty sessions and yearly reports.
- Coordinator of Medical Faculty Development program - Identify appropriate materials for e-based and face-to-face distribution. Provide on-going communication and
interaction with medical doctors regarding their roles as educators, their projects, learner assessment tools, program evaluations and peer-reviewed publications;

- Co-developer of peer-reviewed educational programs and exercises - (e.g., Madness to Methods exercise-learning about the multitude of Instructional Methods)
- Presenter/Trainer at medical student sessions, medical faculty development sessions, regional and national medical conferences


- Publisher of National Attorney Referral Directories
  - Directory of Former U.S. Department of Justice Attorneys
  - Directory of Former Federal Court Law Clerks in United States Courts
  - Directory of Former FBI Agent Attorneys
- Marketer of national legal referral directories; Developer of marketing publications;
- Database manager, Business manager
- Trainer of temporary employees for database management

Honeywell – Large Information Systems Division, Phoenix, Arizona 1983-1985

- Organization Development Consultant, Department of Organization Development and Management - Served as consultant to identify employee needs and mediate resolution of labor/management conflicts
- Facilitator, Employee Productivity Teams; Quality Circles
- Trainer, Problem-Solving and Conflict Resolution; Change Management

Chicanos Por La Causa, Phoenix, Arizona 1981-1983

- Prevention Specialist, Responsible for administration and management of state funded agency for substance abuse, prevention and education
- Coordinator and presenter of seminars for community colleges, industry and community groups on topics related to stress management, worker productivity, drug abuse and alcoholism
- Trainer of new employees and VISTA volunteers

Peer Reviewed Workshops/Presentations:

1. **FENZEL J**, Brousseau, D, Marcdante K, Simpson D, Warwick A.  

Medical College of Wisconsin Teaching Experience

09/2009 Presenter, Medical Students Year 1; 200+ (M1s); Pathway related instruction on: Glassick’s Six Criteria for Evaluating Scholarship: Research Posters.

09/2009 Presenter, Medical Students Year 2 & 3; 250+ (M2s, M3s); Pathway related instruction on: Glassick’s Six Criteria for Evaluating Scholarship: Research Posters.

05/2009 Presenter, Primary Care Faculty Development, Excellence in Clinical Education and Leadership (ExCEL): Enriching Educators’ Repertoire of Appropriate Instructional Strategies: A Faculty Development Innovation Workshop.

Marquette University Teaching Experience

Spring 2008 Instructed several sessions: 300 level Organizational Behavior

Refereed Journal Publications/MedEdPORTAL


Refereed Abstracts/Posters


Editorial Board Invited Reviewer