

**THE MILLENNIALS: AN INVESTIGATION OF THEIR
ORGANIZATIONAL COMMITMENT, WORK VALUES, AND
PERSON-WORK ENVIRONMENT FIT**

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the Faculty of Graduate Studies and Research
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Masters of Arts

by

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Abstract

Using a sample of 331 employed participants, this study investigated the organizational commitment and work values of the Millennials relative to Baby Boomers and Generation X, and whether a poor person-work environment fit, associated with generation-specific work values, contributes to lower organizational commitment. The Millennials had significantly lower affective commitment compared to Baby Boomers, but not Generation X; moreover, they did not differ from the older two generations on normative commitment. Generational differences in work values were observed for two of the nine work values evaluated; compared to older generations, the Millennials placed greater importance on opportunities for advancement in their career and less importance on teamwork. Despite these differences, the Millennials had a similar degree of fit with their work environment as the older generations and the Millennials' lower organizational commitment could not be explained by generation-specific work values and a poor fit with the work environment. Overall, the findings challenge the significance of a generation effect on work values, organizational commitment, and person-work environment fit.

Dedication

I would like to dedicate this master's thesis to my parents, Ron and Judy Littau, who have instilled in me the values and work ethic necessary to successfully complete my master's degree. Their love and support have encouraged me to continue pursuing my dreams and goals.

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The Millennials: An Investigation of their Organizational Commitment, Work Values,
and Person-Work Environment Fit

Introduction

“The children now love luxury. They have bad manners, contempt for authority. They allow disrespect for elders and love chatter in place of exercise. Children now are tyrants...”

-Socrates

Until recently the workforce has been composed of three generations including the Silent Generation (people born between 1925 and 1942), the Baby Boomers (people born between 1943 and 1960), and Generation X (people born between 1961 and 1981) (Strauss & Howe, 1991). The most recent generation to enter the workforce is the Millennials (people born in 1982 and later; Howe & Strauss, 2000), about which the popular business literature and news media have engaged in much negative speculation as to the work attitudes (i.e., how individuals feel about their work) and work values (i.e., what individuals want out of work and their work preferences) of the Millennials.

According to suggestions made by the media, the Millennials are the generation least committed to work and to their employers (Brusilow, 2008; Katz, 2008; Safer, 2007), however, the empirical research to support this claim is limited. Although some research has examined differences in organizational commitment between the Baby Boomers and Generation X (Daboval, 1998; D’Amato & Herzfeldt, 2008), there has been only one recent study (Patalano, 2008) investigating differences between Generation X and the Millennials, which found that the Millennials have lower organizational commitment compared to Generation X. Thus, further research is needed to determine the

validity of the claims that the Millennials are the least committed generation (Brusilow, 2008; Katz, 2008; Safer, 2007), and the extent to which this claim holds true for different types of commitment such as affective and normative commitment (e.g., one's emotional attachment to the organization versus commitment arising from a sense of obligation).

Despite the many suggestions that the Millennials are less committed to their employers relative to other generations, there has been little attempt to understand *why* this is so. One such factor may be due to the unique work values held by the Millennials and work environments that fail to meet their generation-specific needs, which has been found to have a negative effect on work attitudes such as organizational commitment (Boxx, Odom, & Dunn, 1991; Chatman, 1991; Davis, 2006). Based on the theoretical premise that workplaces are founded on the beliefs, ideologies, and values of the most influential members (Schein, 1992), the majority of which belong to the older generations, it is likely that the Millennials' work values do not fully align with their work environments. Thus, a poor person-work environment fit, directly associated with generation-specific work values, may be a contributing factor to the lower organizational commitment that is said to characterize the Millennials.

Although research to date suggests that there are generational differences in work values, it has mainly focused on differences between the Baby Boomers and Generation X (e.g., Jurkiewicz, 2000; Lee, 2007; Smola & Sutton, 2002), and the limited studies that have investigated the Millennials have yielded mainly contradictory findings (Cennamo & Gardner, 2008; Lyons, 2004). Thus, it is largely unknown what environmental characteristics would likely contribute to an improved person-work environment congruency for the Millennials. Despite the fact that recent media reports and 'pop'

management books have written about the generation –specific work values of the Millennials, the methodologies and the quantitative evidence supporting their claims have not been addressed (Brusilow, 2008; Katz, 2008; Lancaster & Stillman, 2002; Zemke, Raines, & Filipczak, 2000), resulting in the questionable validity of their conclusions. In order to identify whether the Millennials have different work values compared to the Silent Generation, the Baby Boomers, and Generation X, and where such differences lie, further research is necessary.

Understanding generational differences in the relation between work values and work environment as well as the outcomes of low person-environment fit are important building blocks for effectively attracting, retaining, and training not only the newest generation, but also those generations already in the workforce. Human resource policies built around the assumption that there are differences in the work attitudes and work values held by each generation are likely to be ineffective if there are indeed relatively few differences or if the differences are contrary to the stereotypes. Therefore, the current study sought to investigate whether the Millennials had lower organizational commitment compared to the Baby Boomers and Generation X, and if this was the case, to explore whether this lower commitment could be explained by generation-specific work values and a work environment that did not fit with the values of the Millennials.

Generation Theory

According to Mannheim's (1952) early sociological perspective on generations, people who are born in the same era and live through a particular period of social change share a collective identity and belong to the same generation. Each generation is distinguished from the next as a result of being influenced by the same variety of critical

factors including shifts in societal attitudes, changes in social, economic, and public policy, and major events such as the Vietnam War or 9/11 (Eyerman & Turner, 1998; Wyatt, 1993). As a result of these shared experiences, each generation can be defined by specific values, attitudes, preferences, and behaviours that influence the way in which that generation interprets subsequent life events, from how they spend their money to what they expect at work (Kupperschmidt, 2000; Strauss & Howe, 1991). The generational approach of understanding the values, attitudes, preferences, and behaviours of cohorts of people captures the sociological consequences of sharing experiences in time.

A factor that separates members of a given generation from others who were also alive during the same time is the stage of development that they were in when experiencing the event (Mannheim, 1952). That is, the creation of a collective identity that defines a generation is the result of how younger and older people process the world around them. For older people, each new event is incorporated into the collection of experiences and memories that the person has already amassed, and thus does not change the individual (Mannheim, 1952). For younger people, however, new events cause learning and consequently shape the individuals' consciousness because they are in their formative years (Mannheim, 1952). This means that all young people who experienced the same historical events are likely to develop a shared collective identity that is used to consequently define them as a generation. Cavalli (2004) identified three criteria derived from cognitive psychology that must occur for a crucial historical event to cause a learning effect leading to key signifiers of a particular cohort. First, the event must overcome the selective perception and attention of the individual. Second, it must cause a

“surprise effect”; that is, the event must be dissonant with the mental organization of information already present in the individual’s cognitive structure. Third, the event must result in a restructuring of the cognitive maps, the orientation system, and the way in which one views the world. For an event to have an impact, it must cause an interruption in the flow of what is perceived to be normal during the formative years (Cavalli, 2004).

The presence of a collective identity is often thought to function in a manner similar to social class. According to Eyerman and Turner (1998), like social classes, generations exercise strategic exclusion. That is, “a generation may be perceived as a cohort which has peculiar and strategic access to collective resources and which, through rituals of exclusion, preserves not only its individual and cultural identity, but excludes other generational cohorts from access to cultural capital and material resources generally” (Eyerman & Turner, 1998, pp. 93-94). Thus, in a manner similar to social class, being aware of belonging to a particular generation involves being aware of its relationship to other generations, and results in behaviours favorable to members of one’s own group.

Generational Characterizations

Anecdotal evidence concerning the various generations is presented below and highlights purported differences in values, attitudes, preferences, and behaviours said to characterize each generation. It is important to note that the name and the defining date ranges of each generational category tend to differ depending on the author (e.g., Adams, 1997; Lancaster & Stillman, 2002; Strauss & Howe, 1991; Zemke et al., 2000). As Strauss and Howe (1991) point out, fitting any one generation into a defined birth year range may be difficult; rather each generation may overlap into another generation by as

much as four years at the beginning and end of a generation. Thus, the years defining one generation from the next are best conceptualized as a guideline.

The Silent Generation. The oldest generation in the North American workforce today, born between 1925 and 1942, is the Silent Generation (Strauss & Howe, 1991). The Silent Generation has also been referred to as the Veterans (Zemke et al., 2000), the Traditionals (Lancaster & Stillman, 2002), the Matures (Lyons, Duxbury & Higgins, 2007), and the Elders (Adams, 1997). The defining events for this cohort included World War I, the Roaring Twenties, the Great Depression, and World War II (Strauss & Howe, 1991). They grew up in traditional families that were greatly influenced by Judeo-Christian ethos, meaning that discipline and obedience were stressed (Kupperschmidt, 2000). Throughout their adolescence, this generation was pressured to conform and be loyal, upstanding citizens (i.e., marry early, raise obedient children with the father as the breadwinner and the mother as homemaker, provide for the aging, and give back to the community; Kupperschmidt, 2000). As a result of the two world wars through which they lived, members of this generation came of an age when authority was respected, and when the command model of management, and executive top down decision making was the norm in the workplace (Kupperschmidt, 2000). This cohort put an enormous amount of faith in societal institutions including the government, the church, and the military (Strauss & Howe, 1991). Consequently, the Silent Generation is often portrayed as accepting of authority and willing to conform to tradition (Zemke et al., 2000). It is thought that the Great Depression taught members of the Silent Generation the value of the dollar (Lancaster & Stillman, 2002). They are often characterized as being willing to forgo personal gratification for later rewards (Adams, 1997). This cohort is described as

living by “the golden rule” (i.e., do unto others as you would have other do unto you) and “plays by the rules” (Adams, 1997). For members of the Silent Generation, work tends to be viewed as inherently valuable and one’s duty, and, as a result, they are often portrayed as devoted and hardworking (Kupperschmidt, 2000).

The Baby Boomers. The Baby Boomers, born between 1943 and 1960 (Strauss & Howe, 1991), grew up in a time of both economic and educational expansion (Kupperschmidt, 2000). This generation was influenced by the persistently high birth rates in North America between 1945 and the early 1960s (Strauss & Howe, 1991). Given the sheer size of their generation, they had to compete for attention growing up and for jobs later in life, despite the economic expansion (Foot, 1998). The large size of this cohort also likely played a role in the importance that Baby Boomers are said to place on status symbols (e.g., corner offices, cars) as a means of setting themselves apart from others (Lancaster & Stillman, 2002). The Baby Boomers were cherished as children and expected the best from life, often said to have grown up embracing a psychology of entitlement (Kupperschmidt, 2000). Living in the era of post war economic prosperity, the Boomers are said to view economic recessions as cyclical in nature and not cause for long term concern (Zemke et al., 2000). The Boomers were educated in a traditional school system with rigorous academic standards. School prepared them to be inner-driven, ideal-cultivating individualists (Howe & Strauss, 2000). During their formative years, social norms were challenged, protested, and even rejected, leading to a period of social upheaval (Kupperschmidt, 2000). As a result of the exposure of political, religious, and business leaders, the Baby Boomers are said to have lost respect for authority and social institutions (Lancaster & Stillman, 2002). Despite the fact that the

Boomers are often characterized as indulgent and pleasure seeking (Zemke et al., 2000), they are also often thought of as optimistic, idealistic, and achievement oriented (Lancaster & Stillman, 2002).

Generation X. Generation X was born between 1961 and 1981 (Strauss & Howe, 1991) and grew up with financial, family, and societal insecurity (Howe & Strauss, 1993). This is the first generation said to be worse off than their parents (Howe & Strauss, 1993). In addition to the recessions in the early 1980s and 1990s, the high unemployment and inflation, there were increasingly high divorce rates, and more single family homes (Howe & Strauss, 1993). Gen Xers, who often came home to empty houses, are frequently referred to as ‘latch-key’ children (Kupperschmidt, 2000). In the educational system, social skills, self-esteem, and independence, rather than academic achievement, were stressed (Kupperschmidt, 2000). Members of this generation were taught to become street-smart, free-agent entrepreneurs (Howe & Strauss, 2000). Generation X is often characterized as preferring to rely on their efforts to get ahead rather than expecting assistance from their family or other societal institutions (Lancaster & Stillman, 2002). This cohort was raised in a sea of diversity and experienced liberalized immigration laws, increased tolerance for divorce and remarriage, and alternative lifestyles, and is consequently thought to be more comfortable with change than with stability (Howe & Strauss, 1993). Gen Xers are often portrayed as skeptics and highly cynical individuals who lack commitment to their organization (Lancaster & Stillman, 2002). According to Kupperschmidt (2000), “Whereas Traditional employees [Silent Generation] accepted command management and bureaucratic organizations, Boomers challenged and changed it, Generation X employees change jobs if their work

demands are not met. Rather than organizational commitment, they speak of alignment with organizations who value their competencies, reward productivity rather than longevity and create a sense of community” (p. 70).

The Millennials. The newest generation, the Millennials, were born from 1982 and onward (Howe & Strauss, 2000). This cohort, also commonly referred to in the media as Generation Y (Eisner, 2005), the Echo Boom (Foot, 1998), or the Nexus Generation (Zemke et al., 2000), is often considered to be the first “wanted” generation of children. A changing and increasingly positive attitude towards babies is thought to have contributed to the increase in births of Millennial babies (Howe & Strauss, 2000). The increase in the number of Millennials can also be attributed to the Baby Boomers entering their childbearing years; due to the sheer size of the Baby Boom generation, the birth rate increased resulting in an ‘echo’ of the Baby Boom generation (Foot, 1998). Growing up, the Millennials were exposed to a “kids come first attitude” (Howe & Strauss, 2000) and having been raised by highly participative parents, this generation has been included in all major family decisions (Lancaster & Stillman, 2002). This is the first generation that has had access to cell phones, pagers, computers, and the internet since they were born, and have been exposed to many different types of people through travel, the media, and the internet throughout their entire life (Howe & Strauss, 2000). As a generation, they have also had access to better health care and better economic realities than previous generations (Howe & Strauss, 2000).

Despite this, not everything about the world in which the Millennials are growing up has been great. Many children, exposed to the stresses of their parents’ work, and the constant anxiety surrounding organizational downsizing, are thought to hold a certain

distrust towards institutions, although not to the same extent as Generation X (Howe & Strauss, 2000). According to Lancaster and Stillman (2002), the Boomers have given the Millennials the confidence to be optimistic about the ability to succeed, and Gen Xers have given them just enough skepticism to be cautious. Thus, it has been said that the Millennials are realistic (Lancaster & Stillman, 2002). It has also been suggested that the Millennials are self-absorbed, achievement oriented (Zemke et al., 2000), innovative, and independent (Tapscott, 1998).

Despite these characterizations, given that many members of the Millennial generation are still developing and only beginning to enter adulthood, there has not been much time to observe the characteristics of the Millennials. Consequently, some disagreement over the defining attributes of the Millennials still exists, as generations are easier to characterize later in life. For example, while Strauss and Howe (2000) suggest that the Millennials are the next great generation who will usher in return to duty, civic responsibility, and teamwork, Twenge (2006) argues that this is not plausible due to their “me” focus and high sense of entitlement. Given time and empirical research, a better understanding of the values, attitudes, preferences, and behaviours of the Millennials will emerge.

The purported differences in the formative influences, values, attitudes, preferences, and behaviours for each of the four generations presented here suggest that the Millennials are likely to have different work values and work attitudes than Generation X, the Baby Boomers, and the Silent Generation. According to generational theory, these differences are largely the result of the Millennials experiencing unique social, economic, and political events during their formative years compared to the

distinguishing events that respectively shaped each of the three previous generations. However, the results of some research on generational differences in work values suggests that the generational cohorts are more alike than different (Jurkiewicz, 2000; Licata, 2007). Thus, despite the premises of generational theory and media and pop literature speculations about generational differences in work attitudes and work values (e.g., Katz, 2008; Lancaster & Stillman, 2002; Safer, 2007), further empirical research is necessary to determine the validity of these suggestions.

Organizational commitment

Organizational commitment is the psychological state that characterizes an employee's relationship with his or her organization and is typically considered to be composed of three facets including 1) affective commitment; 2) normative commitment; and 3) continuance commitment (Allen & Meyer, 1990). Affective commitment refers to one's emotional attachment to his or her organization and the degree to which that person identifies with, is involved with, and enjoys membership in the organization (i.e., I want to stay; Allen & Meyer, 1990). Affective commitment develops out of personal involvement, identification, and value congruence with the organization (Meyer & Herscovitch, 2001). Normative commitment refers to a feeling of obligation to remain with an organization (i.e., I feel I should stay), and is thought to develop from the process of cultural and organizational socialization, where the norm of reciprocity is invoked (Wiener, 1982). Finally, continuance commitment is based on the perceived costs associated with leaving an organization (i.e., I need to stay), and occurs when a person has side bets (e.g., pension plan, stock option) that link him or her to consistent activity, thereby increasing the cost associated with leaving (Allen & Meyer, 1990). In the three-

component model of organizational commitment, affective, normative, and continuance commitment are viewed as components of commitment rather than distinct types of commitment because each can be experienced to varying degrees together (Allen & Meyer, 1990). For example, some people may feel both a strong need and obligation to be committed to the organization, but no desire to do so.

Much of the literature on organizational commitment has been concerned with identifying the antecedents, correlates, and consequences of all three forms of organizational commitment. In general, affective commitment and normative commitment are 1) positively influenced by age, organizational support, role clarity, absence of role conflict, and perceived presence of procedural, distributive, and interactional justice in the workplace; 2) are positively related to job satisfaction, job involvement, and occupational commitment; and 3) lead to positive work behaviours including decreased absenteeism, increased job performance, and lower turnover intention (Meyer, Paunonen, Gellatly, Goffin, & Jackson, 1989; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). By contrast, continuance commitment is 1) generally found to increase with fewer alternatives for employment and lower transferable skills and education; and 2) is associated with negative employee behaviours including poor job performance (Meyer et al., 1989; Meyer et al., 2002). Although there are three facets of organizational commitment, affective and normative commitment have received the strongest empirical support. Further, affective and normative commitment, as opposed to continuance commitment, have been found to be negatively influenced by an incongruence between work values and work environment (Meyer, Irving, & Allen,

1998), which may be a reason for lower organizational commitment among the Millennials.

Generational Differences in Organizational Commitment

Despite the vast theoretical and empirical history of organizational commitment, few studies have investigated generational differences in affective and normative commitment. Although there have been suggestions that the Millennials are less likely to endure tough work situations and to be committed to their organization compared to other generations (Katz, 2008; Safer, 2007), there appears to be only one study to date that partially substantiates these claims. Patalano (2008) found that, relative to Generation X, the Millennials had lower normative and affective commitment. This research, however, did not include the Silent Generation or the Baby Boomers in the sample, and thus limits the conclusions that can be drawn surrounding generational differences in organizational commitment. There is some evidence that, relative to the Baby Boomers, Generation X has lower affective commitment (Daboval, 1998; D'Amato & Herzfeldt, 2008), which in conjunction with Patalano's (2008) finding that the Millennials have lower affective commitment than Generation X, suggests that the Millennials are likely to be the least committed generation.

One reason that the Millennials may report lower affective commitment could be their recent entrance into the workforce. The presence of affective organizational commitment is highly influenced during the early period of employment (Buchanan, 1974; Meyer, Bobocel, & Allen, 1991; Porter, Steers, & Mowday, 1974). In general, commitment levels generally decline in the first nine months of employment, often accompanied by a decline in job satisfaction, organizational dependability, self-

expression, perceived equity, and personal importance (Meyer & Allen, 1987) leading to greater turnover intention and turnover (Hom, Roberson, & Ellis, 2008; Wanous, 1992). This decline in affective commitment has often been attributed to the fact that early work experiences often do not live up to employees' expectations (Meyer et al., 1991; Wanous, 1992). Given that the Millennials are just entering the workforce, they are in this critical time period, and therefore the observed lack of commitment to their organization may be the result of their new entry into an organization as opposed to a cohort effect. Despite these speculations, it must first be determined whether the Millennials' affective commitment differs from that of the Silent Generation, the Baby Boomers, and Generation X.

The literature on normative commitment suggests that the Millennials likely have lower normative commitment relative to Generation X, the Baby Boomers, and the Silent Generation. Allen and Meyer (1993) found that older employees expressed significantly stronger feelings of obligation to their organization (i.e., normative commitment) than younger employees, suggesting that older generations may have higher normative commitment than is the case for younger generations due to their socialization in reciprocity. That is, the receipt of benefits from the organization activates the need to reciprocate in members of the older generations (i.e., the Silent Generation and the Baby Boomers), and thus remain loyal to the organization. Therefore, if normative commitment is influenced by growing up in a similar historical period, then normative commitment would likely be higher for the Silent Generation and the Baby Boomers than is the case for Generation X or the Millennials.

Differences in the propensity to commit have been attributed not only to cohort or to organizational entry, but also to individual personality differences and/or differences in the conditions surrounding their employment (Meyer & Allen, 1987). One such personal characteristic is work values (Elizur & Koslowsky, 2000; Knoop, 1994; Putti, Aryee & Liang, 1989), which are partly influenced by generation (Jurkiewicz, 2000; Lee, 2007; Licata, 2007; Lyons, 2004; Smola & Sutton, 2002). It is likely that generational differences in work values may be a contributing factor to generational differences in both affective and normative organizational commitment. Although Daboval (1998) speculated that the lower commitment in Generation X relative to the Baby Boomers is due to different belief systems (i.e., Generation X views self-development and marketability as the keys to advancement within the work world whereas the Baby Boomers view loyalty as the key for advancement), reasons for generational differences in both affective and normative organizational commitment have yet to be fully investigated.

Values

Before reviewing the work values construct and research on generational differences in work values, an overview of values is necessary given that work values are a subset of general values (Dose, 1997). Values are thought to be guiding principles of the standards and criteria upon which affective and behavioural responses are based (Kluckhohn, 1951; Meglino & Ravlin, 1998; Rokeach & Ball-Rokeach, 1989). There is, however, little consensus regarding what constitutes a value. The often cited definition of values, put forth by Rokeach (1973), states that “values are determinants of virtually all kinds of behaviour that could be called social behaviour or social action, attitudes and

ideology, evaluations, moral judgments and justifications of self and others, and attempts to influence others” (p. 5). While Rokeach (1973) linked values to beliefs, other theorists have linked values to needs (Super, 1973), goals (Schwartz & Bilsky, 1987), criteria for choosing goals (Locke, 1976), and attitudes (Eagly & Chaiken, 1993).

Values can be thought of as a motivational construct. Motivation is a set of forces that originates both within as well as beyond an individual’s being that influences behaviour and determines its form, direction, intensity, and duration (Reeve, 2005). Thus, values constitute one of the individual forces that influence the direction, intensity, and duration of behaviour (Bardi & Schwartz, 2003; Rokeach, 1973). The manner in which values impact behaviour can be direct or indirect: values can influence behaviour that involves careful thought and conscious decisions (e.g., weighing the pros and cons of engaging a certain behavior; Feather, 1988) or they can influence behaviour in a subtle manner through such things as habits, which do not rely on a conscious thought process (Bardi & Schwartz, 2003).

Often values are also understood as having an ‘oughtness’ about them. That is, values guide people’s behaviour based on a personal belief as to how they ‘ought’ to behave as opposed to how they want to behave (Kluckhohn, 1951; Rokeach, 1973). This suggests that values are, at least partially, derived from cultural and societal expectations (Meglino & Ravlin, 1998). In fact, personal experiences and socialization processes are thought to be the most influential factors in the development of values, and the consequent similarities and dissimilarities among people (Rokeach, 1973). Values are seen as the product of culture and social systems, and can be learned both informally and formally.

As a result of similar experiences, values are often shared at the group level as opposed to simply the individual level. Agle and Caldwell (1999) identified five levels of value analysis in the literature on values, which include 1) values held by the individual; 2) organizational values (e.g., values that define the culture of the organization); 3) institutional values (e.g., values held by certain professions, industries, and societal institutions such as the government); 4) societal values (e.g., values held by members belonging to a given society); 5) and global values (e.g., values that are universally held by people around the world). The idea that values are shared and learned provides support for the notion that there could be generational differences in values.

Indeed, Lyons, Duxbury, and Higgins (2005, 2007) found that there were generational differences in values. For example, in one study (2007) they found that whereas the Silent Generation and the Baby Boomers valued self-transcendence (i.e., favouring equality and concern for others) more than the younger two generations, the Millennials valued self-enhancement (i.e., pursuit of success and pleasure irrespective of others' welfare) much more than the older three generations. These findings provide probable evidence that the Millennials will also hold unique work values that define them from the other three generations.

Different from attitudes and opinions, values are thought to be relatively stable and enduring, although there is the possibility that values can change under certain conditions such as traumatic events (Rokeach & Ball-Rokeach, 1989). Rokeach (1973), for example, proposed that values are stable because they are learned in isolation from one another in an all-or-nothing manner. Conversely, Jones and Gerard (1967) suggested

that value stability comes from the experience of discomfort in acquiring the value. That is, attachments develop to the values that one has undergone discomfort to acquire.

In a review of the literature on values, Meglino and Ravlin (1998) describe two basic types of values, those that are possessed by a person and often used to describe an individual, and those inherent in an object. Values possessed by a person can be further categorized as terminal and instrumental (Rokeach, 1973). Terminal values refer to self-sufficient end states such as wisdom, whereas instrumental values are modes of behaviour such as honesty (Rokeach, 1973). The second type of value, those inherent in an object, refers to the value placed on an object or outcome such as the value of pay (Meglino & Ravlin, 1998). It is this second type of value that is of primary concern in the current study because the purpose of this research is to understand what people value within their work environment.

Work Values

Whereas basic values play an important role in the affective and behavioural responses of people, work values have been found to affect work-related attitudes and behaviours (Butler & Vodanovich, 1991; Klenke, 2005; Judge, & Bretz, 1992; Super, 1970). Writings on work values suffer from a lack of consensus regarding the definitions and the conceptualizations (Dose, 1997), which is due to the disparity of approaches and the use of different terms to define the work value construct (Pryor, 1982). According to one line of thought, work values are conceptualized as the significance of work for people (Dose, 1997). From this perspective, work values are thought to pertain to work in general as opposed to the outcomes of a narrowly defined job (Blood, 1969; Wollack, Goodale, Wijting, & Smith, 1971). Studies of work values following this tradition tend to

focus on the extent to which people adhere to the Protestant Work Ethic (Blood, 1969; Wollack et al., 1971). The Protestant Work Ethic is based on the notion that work is a divine calling from God and the presence of wealth and success is a sign of grace. It is the Protestant Work Ethic that is accredited with fuelling capitalism by providing the necessary moral justification for the accumulation of wealth (Weber, 1985). Such characteristics as industriousness, self-discipline, and individualism are thought to be representative of an individual adhering to the protestant work ethic, and have consequently been the focus of many studies on work values (Blood, 1969; Wollack et al., 1971).

An alternative conceptualization of work values is values as preference for the type of work environment or work (Lofquist & Dawis, 1978; Pryor, 1982; Super, 1973). According to this point of view, work values are seen as objectives that one seeks to attain to satisfy a need (Lofquist & Dawis, 1978; Super, 1973). Often, researchers use the terms work values, work needs, and work preferences interchangeably when taking this approach (Lofquist & Dawis, 1978; Pryor, 1982; Super, 1973). Studies of work values that conceptualize work values as work preferences have focused on 1) vocational work values (e.g., goals that a worker seeks to achieve, and include such outcomes as material success; 2) the importance of various aspects of a job or an organization (e.g., having safe and comfortable working conditions, an autonomous work environment, and an achievement-oriented focus); and/or 3) preferences for certain job characteristics (e.g., job security, continued development of skills, prestige, the ability to be creative, and the existence of a work-life balance; Dose, 1997). Overall, work values conceptualized as the significance of work are somewhat more abstract assessments of values and are less

concerned with the content of work than they are with the individuals' assessment of work in general. Conversely, work values conceptualized as work preferences are thought to represent those aspects of work that are considered important in making decisions, choosing behaviours, and influencing attitudes within the workplace. Thus, given that the current study was interested in the influence of work values on organizational commitment, work values were conceptualized as work preferences.

Researchers investigating work values have also adhered to somewhat different structural approaches to work values. The most widely used approach to structure work values has been to classify them as intrinsic work values (e.g., occurring through the process of work including intellectual stimulation, meaningful, and challenging work) and extrinsic work values (e.g., consequences of work including job security and material gains; Alderfer, 1972; Blood, 1969; Borg, 1990; Mottaz, 1985; Pryor, 1987; Wollack et al., 1971). Some researchers have also suggested that there are status-related work values (e.g., advancement, influence and recognition; Ross et al., 1999), freedom-related work values (e.g., work-life balance, flexibility on the job; Lyons, 2004), social-related work values (e.g., social relations with supervisors, colleagues and others; Elizur, 1984; Lyons, 2004), and altruistic-related work values (e.g., work that makes a contribution to society; Lyons, 2004). To date, many theorists and researchers have focused on the intrinsic – extrinsic dichotomy of work values (Saige, Elizur, & Kolowsky, 1996) rather than the further categorizations of status, freedom, social, and altruistic-related work values, but, according to Elizur (1984), using only the intrinsic – extrinsic classification limits the generalizability of research on work values, and does not provide a detailed picture of work values. Thus, it is necessary to investigate more facets of work than simply intrinsic

– extrinsic classification to ensure that all possible work values are accurately represented.

Generational Differences and Work Values

Work values, often thought to develop from personal experiences and socialization processes, are viewed as the product of culture and social systems (Rokeach, 1973) making them a candidate for generational effects. As a result of society-wide changes in the meaning of work due to social, cultural, and political events, work values have changed over time (Bernstein, 1997), likely contributing to intra-generational similarities and inter-generational differences in work values. This idea is congruent with generational theory which suggests that work values will be shared amongst groups of people who experienced the same historical events during their formative years (Mannheim, 1952). Thus, shared historical experiences should contribute to the presence of work values that uniquely define and distinguish the Millennials from Generation X, the Baby Boomers, and the Silent Generation.

Historically, studies that focused on differences in work values have investigated age-related effects (Cherrington, Condie, & England, 1979; Shapira & Griffith, 1990; Taylor & Thompson, 1976) in which age was used as a continuous variable to investigate differences in work values (Cherrington et al., 1979) or as categorical variables reflecting older and younger workers (Shapira & Griffith, 1990). Although investigating age effects allows for an understanding of differences in work values at various stages of the life cycle, it does not allow for the consideration of historical and social contexts in work values as does an investigation of generational effects. Thus, creating generational

categories enables one to attribute group differences in work values to certain shared historical events.

Recently, researchers have investigated the effect of generation on work values (Jurkiewicz, 2000; Lee, 2007; Licata, 2007; Smola & Sutton, 2002), however, only three empirical investigations to date have included the Millennials (Cennamo & Gardner, 2008; Licata, 2007; Lyons, 2004). Although the findings from these studies independently suggest that the Millennials differ from the other three generations with respect to their work values, when compared with each other, the findings appear somewhat contradictory. For example, Cennamo and Gardner (2008) and Lyons (2004) both found that the Millennials do not differ from other generations with respect to the value assigned to intrinsic aspects of the job, whereas Licata (2007) reported that relative to the other generations, the Millennials assigned the least importance to pride in work and activity preference, both intrinsically-oriented work values. Similarly, there appears to be divergent results with respect to the importance placed on status-related values. Whereas Cennamo and Gardner (2008) and Lyons (2004) both found that the Millennials placed a higher emphasis on status-related work values compared to the other generations, Licata (2007) found no such differences.

Despite the consistent findings of Cennamo and Gardner (2008) and Lyons (2004) for intrinsic and status-related work values, there appears to be divergent results with respect to their results for freedom-related work values, extrinsic work values, altruistic work values, and social work values. Specifically, where Cennamo and Gardner (2008) found that the Millennials assigned greater importance to freedom-related work values and extrinsic work values relative to Generation X and the Baby Boomers, Lyons (2004)

found no such generational differences. Conversely, Lyons (2004) found that the Millennials were the least likely generation to value altruistic aspects of work and more likely to value social aspects of the work environment when compared to the older generations, but Cennamo and Gardner (2008) found no such differences.

The inconsistent results reported by Licata (2007) compared to Cennamo and Gardner (2008) and Lyons (2004) for intrinsic and status-related work values may be reflective of different measurement scales. That is, Cennamo and Gardner (2008) and Lyons (2004) assessed work values as the preference for a certain work environment, whereas Licata (2007) used the Survey of Work Values (Wollack et al., 1971), designed to capture the meaning and significance of work to a person in general as opposed to preferences for a specific job.

It is possible the inconsistent findings reported by Cennamo and Gardner (2008) and Lyons (2004) may be attributable to the only recent inclusion of Millennials in empirical research on generational differences in work values (likely due to the fact that the Millennials are just entering adulthood and the workforce). In fact, Lyons (2004) used a sample of undergraduate business students to assess the Millennials' work values relative to an employed sample of Generation X, the Baby Boomers, and the Silent Generation because there were not enough employed Millennials at the time of the research. The use of students may be problematic in the validity and reliability of the findings if replicated with an employed sample of Millennials, as was the case in Cennamo and Gardner's research, and thus may explain the differences between these two studies. It may be that the experience of working differentially influences an

individual's reflection on what they value in the workplace, something that likely cannot be done accurately in a non-work environment such as a university setting.

Another possible explanation for the inconsistent findings reported by Cennamo and Gardner (2008) and Lyons (2004) may be the use of samples from different geographic locations in the world. Lyons' (2004) sample consisted of North American employees, whereas Cennamo and Gardner's (2008) sample was composed of employees from New Zealand. This geographic difference may be especially important given the influence of societal and cultural factors on values and work values (Rokeach, 1973). According to Schwartz (1992), although values are universal, values differ between geographic locations based on the priority that people assign to them.

Despite these probable explanations for the variation in the research findings on the Millennials' work values, it is noteworthy that even with an increasing number of studies on the work values of Generation X and the Baby Boomers (Jurkiewicz, 2000; Lee, 2007; Licata, 2007; Smola & Sutton, 2002), the findings are still relatively inconsistent. Although this may suggest that factors other than generation explain the variation in work values, there may be methodological differences amongst the studies that can explain the divergent results. The contradictory nature of research on generational differences in work values may be attributable to the type of work value measured and whether categories of values (e.g., extrinsic-related work values) are used rather than individual work values (e.g., value assigned to pay). Although work values may cluster into categories such as extrinsic or intrinsic work values, by examining higher order groupings, much detail is lost.

Indeed, studies reporting generational differences in the individual work values of Generation X and the Baby Boomers (Jurkiewicz, 2000; Lee, 2007; Smola & Sutton, 2002; Westerman & Yamamura, 2007) appear to be generally inconsistent with the studies that investigated categories of work values (Cennamo & Gardner, 2008; Lyons, 2004), which for the most part demonstrated no generational differences. For instance, compared to the Baby Boomers, Generation X has been found to prefer a work environment that offers suitable levels of job challenge, that has opportunities for participation, and strong expectations for accomplishment (Westerman & Yamamura, 2007), and that provides stimulating and meaningful tasks (Lee, 2007). Despite the fact that these individual work values all cluster under the intrinsic-related work value category, studies that have specifically focused on generational differences in categories of work values reported no differences in intrinsic-related work values (Cennamo & Gardner, 2008; Lyons, 2004).

Overall, it appears that examining higher order groupings washes out important details. That is, within each cluster, there may be generational differences in the importance placed on each of the values that may be masked when the variables are grouped. Given the media and popular literature speculation that there are specific, individual work values that are characteristic of the Millennials including 1) opportunities to learn new skills; 2) opportunities for advancement in one's career; 3) having the ability to influence organizational outcomes; 4) being provided with challenging work; 5) having personally fulfilling work (Sujansky, 2002); 6) work that allows for personal flexibility; 7) work-life balance (Brusilow, 2008; Katz, 2008; Safer, 2007); 8) teamwork; and 9) feedback from management (e.g., performance reviews; What you need to know,

2003), then it is important to examine each of the values at the individual rather than the grouped-variable level.

Person-Work Environment Fit

Generational differences in work values may result in generational differences in person-work environment fit. Person-work environment fit is generally defined as the compatibility that occurs when personal and environmental characteristics are well matched (Muchinsky & Monahan, 1987). In generating conceptualizations of person-work environment fit, there are two different approaches. In the first approach, a distinction is often made between supplementary fit and complementary fit (Muchinsky & Monahan, 1987). Supplementary fit refers to when a person possesses characteristics similar to others in an environment, whereas complementary fit occurs when the characteristics of a person makes the environment whole or adds to it what is missing (Muchinsky & Monahan, 1987).

Alternatively, in the second conceptualization of person-work environment fit, a distinction is made between needs-supplies fit and demands-abilities fit. In this perspective, needs-supplies fit occurs when the needs, desires, or preferences of an individual are satisfied by the environment, whereas demands-abilities fit occurs if the person has the abilities to meet the demands of the environment (Caplan, 1987; Edwards, 1991). In an attempt to integrate the two conceptualizations of fit (i.e., supplementary/complementary fit and needs-supplies/demands-abilities fit), Kristof (1996) suggested that both needs-supplies and demands-abilities fit are examples of complementary fit.

Previous research on person-work environment fit has investigated various levels of fit including fit with one's job, organization, work group, work environment, and/or vocation (e.g., Dawis & Lofquist, 1984; Edwards, 1991; Judge & Ferris, 1992; Kristof, 1996; O'Reilly, Chatman, & Caldwell, 1991). In addition to different levels of person-work environment fit (e.g., group versus organization), fit has been operationalized using a variety of content dimensions such as skills, needs, preferences, values, personality traits, and goals (Boxx et al., 1991; Chatman, 1989; Judge & Bretz, 1992; Posner, 1992; Vancouver, Millsap, & Peters, 1994; Vancouver & Shmitt, 1991; Verquer, Beehr, & Wagner, 2003).

Person-work environment fit has also been measured in different ways including 1) perceived fit (i.e., derived by asking the participant to make a direct and global assessment of their fit with their environment); 2) subjective fit (i.e., assessed indirectly by comparing two separately rated individual and environmental characteristics, both of which are completed by the same person); or 3) objective fit (i.e., calculated indirectly through the comparison of separately rated individual and environmental characteristics by two different sources, such as employee and supervisor; Kristof-Brown, Zimmerman, & Johnson, 2005). In the current study, person-work environment fit was conceptualized as needs-supplies fit (i.e., complementary fit) and assessed as subjective fit so that congruence between specific work values and characteristics of the work environment could be assessed.

Despite the many types of fit, operationalizations of fit, and ways of measuring fit, research in this area appears to be relatively consistent in demonstrating the importance of person-work environment fit in predicting various work outcomes.

Specifically, congruence between the person and his or her work environment has been found to positively impact both affective and normative organizational commitment, job satisfaction (Boxx et al., 1991; Chatman, 1991; Davis, 2006; Downey, Hellriegel, & Slocum, 1975; Meyer et al., 1998; O'Reilly et al., 1991; Vancouver et al., 1994; Vancouver & Schmitt, 1991; Verquer et al., 2003), organizational tenure, and to negatively impact intentions to quit (Bretz, & Judge, 1994; Chatman, 1991; O'Reilly et al., 1991; Vancouver et al., 1994; Vancouver & Schmitt, 1991). These outcomes suggest that those who fit better with their work environment are more likely to have greater workplace motivation, better performance, and more positive work attitudes than those whose fit is worse, which is in accordance with reinforcement theory that states individuals will find and stay in environments that maximize the number of positive reinforcements (Skinner, 1953).

If it is the case that Millennials have less positive work experiences, such negative experiences may be due to an incongruence between their work values and the work environment, leading to less emotional attachment to the organization (i.e., affective commitment) or less felt obligation to the organization (i.e., normative commitment) as other generations because their needs are not being met. Based on the theoretical premise that workplaces are founded on the beliefs, ideologies, and values of the most influential members (Schein, 1992), the majority of which belong to the older generations, it is likely that the Millennial's work values, if they are in fact different than the older generations, do not fully align with the work environment. Conversely, given their long-standing presence in the workforce, the work values of the Silent Generation, the Baby Boomers, and Generation X are likely fulfilled to a greater extent by the work

environment. Thus, it is likely that an incongruence between the Millennials work values and the specific characteristics of the work environment may affect their organizational commitment.

Current Study

The current study sought to empirically investigate suggestions made by the media and popular business literature that the Millennials are the generation least committed to their organizations and, if this was the case, to explore possible reasons for the Millennials' lower commitment. Thus, the first purpose of the current study was to investigate the effect of generation on commitment to one's employer. It was expected that the Millennials would have significantly lower affective and normative commitment relative to Generation X, the Baby Boomers, and the Silent Generation.

The second purpose of the current study was to explore whether the low affective and normative commitment thought to characterize the Millennials was related to their unique work values and a work environment that does not meet their generation-specific needs. Based on the anecdotal suggestions made by the media and popular management literature, it was expected that relative to Generation X, the Baby Boomers, and the Silent Generation, the Millennials would assign significantly different importance to the following nine work values 1) opportunities to learn new skills; 2) opportunities for advancement within one's career; 3) having the ability to influence organizational outcomes; 4) being provided with challenging work; 5) work that allows for personal flexibility; 6) doing work that is personally fulfilling; 7) having work-life balance; 8) being provided with opportunities for teamwork; and 9) having management that provides feedback.

Despite the relation between work values and organizational commitment, it is generally accepted that work values themselves may not directly affect work outcomes such as affective commitment. Rather, work values modify the way in which a person perceives a situation, and the perception of the environment in turn influences the outcome (Locke, 1976; Meyer et al., 1998). Thus, the lower levels of affective and normative commitment in the Millennials may be the result of work environments that are incongruent with their work values. Therefore, it was thought that there would be generational differences in person-work environment fit, which would in turn explain the Millennials' lower affective and normative commitment relative to the older generations.

Specifically, it was anticipated that the Millennials' work values would be incongruent with the characteristics of the work environment leading to lower person-work environment fit than the older three generations on nine work value-work environment dimensions including 1) opportunities to learn new skills; 2) opportunities for advancement within one's career; 3) having the ability to influence organizational outcomes; 4) being provided with challenging work; 5) work that allows for personal flexibility; 6) doing work that is personally fulfilling; 7) having work-life balance; 8) being provided with opportunities for teamwork; and 9) having management that provides feedback. In turn, it was expected that the presence of generational differences in person-work environment fit for each of the nine work value-work environment dimensions would partially explain the Millennials' lower affective and normative commitment compared to Generation X, the Baby Boomers, and the Silent Generation.

Method

Participants

The total sample was composed of 378 participants¹; 1.5% were Silent Generation, 30% were Baby Boomers, 43% were Generation X, and 25.5% were Millennials. The average age of each of the generations was 68 years ($SD = 2.07$, range = 67 - 72) for the Silent Generation; 55 years ($SD = 4.85$, range = 48 - 66) for the Baby Boomers; 36.5 years ($SD = 6.45$, range = 27 - 48) for Generation X; and 23 years ($SD = 2.30$, range = 18 - 27) for the Millennials. The six respondents from the Silent Generation were excluded from subsequent analyses because of the small group size.

Approximately 56% of participants were female and 34% were male. Close to half of the sample were married (46%); the rest were single (13%), in a serious dating relationship (12%), living common-law (13%), divorced (5%), or widowed (1%). The majority of the sample was well educated: 21% had a community college diploma, 25% had a university degree, 12% had a Masters degree, and 1.5% had a PhD, whereas the rest of the participants had some college or university education (18%), or some high school education or a high school diploma (11%). First generation Canadians comprised 8% of the sample, whereas second or subsequent generation Canadians comprised 76% of the sample. Older generations were not more likely to be first generation Canadians, $\chi^2(2) = 1.48, p = .48$. Of the 81.3% of the sample who provided information on their racial background, the majority were Caucasian (75.5%), with the remaining participants being Aboriginal (0.3%), Asian (2.5%), Russian/European (0.6%), Middle Eastern (0.8%), African American (0.8%), East Indian (0.3%), and Chinese (0.5%).

¹ Total sample before data cleaning.

All participants were employed: 76% had full-time jobs and 11% had part-time jobs. The remaining 13% of participants reported that their employment varied depending on the week and/or the market. More than half of participants were employed on a permanent basis (68%), whereas 16% were contingent workers (i.e., casual, contract, or temporary), 4% were independent agents in the real estate sector employed by an organization, and 1% were self-employed. Participants worked in a variety of job categories including sales (16%), management (14%), administrative services (11%), engineering, research and design (9%), kitchen staff or waiter/waitress (8%), human resources (4%), research (4%), health care (3%), education/ teaching (3%), and mechanic or part services (2%). The remaining 26% of participants worked in jobs such as law, marketing, accounting, housekeeping, information technology, special events coordinators, manufacturing, military, journalism, landscaping, home inspections, finance, and professional services. Table 1 presents demographic information of the sample by generation.

Procedure

Participants were recruited either through sampling the employees of specific organizations (55%) or through snowball sampling (45%). For the organization-specific sample, all employees from a real estate firm, truck dealership, high technology firm, and a hotel chain were invited to participate in the research by completing a 20-minute questionnaire. Employees from the real estate and high technology firms received the questionnaire in electronic format. Employees at the truck dealership and hotel chain received the questionnaire in hard copy and were provided with a self-addressed, postage-paid envelope in which to return the questionnaire.

Table 1

Demographic Information by Generation

	Baby Boomers (<i>n</i>)	%	Generation X (<i>n</i>)	%	Millennials (<i>n</i>)	%
<i>Gender</i>						
Male	40	36	57	35.4	28	30.1
Female	67	60.4	89	55.3	49	52.7
Missing	4	3.6	15	9.3	16	17.2
<i>Highest level of education</i>						
Some high school	4	3.6	1	0.6	1	1.1
High school	22	19.8	10	6.2	6	6.5
Some college	12	10.8	11	6.8	6	6.5
College degree	20	18	40	24.8	18	19.4
Some university	15	13.5	5	3.1	18	19.4
University degree	22	19.8	47	29.2	23	24.7
Masters degree	11	9.9	27	16.8	6	6.5
Doctoral degree	1	0.9	5	3.1	0	0
Missing	4	3.6	15	9.3	15	16.1
<i>Sector</i>						
Public	15	13.5	30	18.6	23	24.7
Private	95	85.6	120	74.5	60	64.5
Missing	1	0.9	11	6.8	10	10.8
<i>Employment type</i>						
Full-time	96	86.5	131	81.4	52	55.9
Part-time	9	8.1	8	5	22	23.7
Missing	6	4.5	22	10.6	19	17.2
<i>Employment status</i>						
Permanent	84	75.7	126	78.3	38	40.9
Contingent	10	9	10	6.2	38	40.9
Independent contractor	9	8.1	6	3.7	0	0
Self-employed	2	1.8	1	0.6	0	0
Missing	6	5.4	18	11.2	17	18.3
<i>Organizational tenure (years) (M, SD)</i>	12.52	11.42	5.73	5.09	1.84	1.41

Note. Data do not include the six participants from the Silent Generation, the three participants whose generation was unknown, and the four participants who were unemployed.

These employees received a memo, attached to their pay stubs, that contained a brief introduction to the purpose of the research and the logistics for picking up a copy of the questionnaire (see Appendix A), thereby increasing the anonymity of research participation. Hardcopy questionnaires had the consent information as the first page, which also contained enough information to forgo a separate debriefing page (see Appendix C). The return of the completed questionnaire implied consent to participate. Following the consent information, participants were presented with the survey questions (see Appendix D). Participants were asked to return the questionnaire via the attached postage-paid envelope, which was sent directly to the researcher at Carleton University. Two weeks after the initial survey distribution, a reminder memo was sent out to all potential participants (see Appendix F).

Employees at the high tech and real estate firms completed the questionnaire online. A representative from Human Resources at each of the organizations sent out an email to all employees on the researcher's behalf, ensuring that the employees' contact information remained confidential. The email contained a brief introduction to the purpose of the research and a link to the online survey (see Appendix B). Participants clicked on the external URL link to Survey Monkey to complete the questionnaire. Each organization had a unique survey URL and no password was required for access. When participants accessed the survey website, the first page contained the consent information for the study (see Appendix C). The consent information was the same as that given to participants receiving hardcopy versions of the questionnaire to ensure that both groups of participants received the same amount of information on the study prior to completing the questionnaire. Participants clicked on the "consent" button in order to continue with

the research, and were then directed to the questionnaire (see Appendix D). If participants clicked the “do not consent” button, they were automatically redirected to the debriefing page. Participants were able to move throughout the questionnaire with ‘Next’ and ‘Previous’ buttons. Participants could choose to skip questions, in keeping with their rights of voluntary participation. After completion of the questionnaire, participants were presented with the debriefing page (see Appendix E). Two weeks following the initial email distribution, a reminder email was sent out to all participants asking those who had not already completed the questionnaire to do so, if they wished (see Appendix G). Of the 208 participants from the specific organizations, 18% were from the high tech firm, 33% were from the hotel chain, 35% were from the real estate firm, and 14% were from the truck dealership. The response rate of participants recruited through organizations ranged from 8.5% to 25% (see Table 2), and the overall response rate for all participants recruited through organizations was 12.24%.

The second sampling technique was a snowball sample, which was added to supplement the number of participants due to the lower than expected response rates from the organizations. For this technique, the researcher sent out an email to personal contacts inviting them to participate in the study and asking them to forward the email invitation to other employed people that they knew. The email contained a brief introduction to the purpose of the research and a link to the online survey (see Appendix H). In addition, the research invitation and link to the online survey was posted on Carleton University’s student website (<http://www2.carleton.ca/students/>) in an attempt to recruit Millennials in particular (see Appendix J).

Table 2

Response rate by Organization and Generational Category

Generation	No. of responses	Response rate (%)
High tech firm (150 employees)		
Baby Boomers	9	23.68%
Generation X	27	71.05%
The Millennials	2	5.26%
Total	38	25.33 %
Hotel chain (800 employees)		
Baby Boomers	22	32.35%
Generation X	21	30.88%
The Millennials	25	36.76%
Total	68	8.50%
Real estate firm (500 employees)		
The Silent Generation	5	6.94%
Baby Boomers	32	44.44%
Generation X	26	36.11%
The Millennials	9	12.50%
Total	72	14.40%
Truck dealership (250 employees)		
The Silent Generation	1	3.33%
Baby Boomers	17	56.67%
Generation X	11	36.67%
The Millennials	1	3.33%
Total	30	12 %

For those recruited through the snowball sampling, the survey was only available online. When participants accessed the survey website, the first page was the consent information for the study. If they clicked on the “consent” button in order to continue with the research, they were directed to the questionnaire. If participants clicked the “do not consent” button, they were automatically redirected to the debriefing page, and unable to complete the survey questions. No reminder email was sent out to participants in the snowball sample given the nature of the recruitment technique. The snowball sampling resulted in an additional 170 participants in the sample including 33 Baby Boomers, 77 Generation X, and 60 Millennials.

A summary of the research findings was posted on the researcher's webpage (www.mlittau.com) for participants to access and was also sent to each organization as promised in return for allowing access to their employees. Participants were informed in the consent form and the debriefing form of how they could obtain a copy of the research report (i.e., by checking the online website or by contacting the researcher directly to receive a hardcopy via the mail).

Measures

Generational category. In order to assess the generational category to which participants belonged, they were asked to indicate whether they were born between 1925 and 1942 (i.e., the Silent Generation); between 1943 and 1960 (i.e., the Baby Boomers); between 1961 and 1981 (i.e., Generation X); or from 1982 and onward (i.e., the Millennials).

Generational markers. In order to empirically test the general values, beliefs and characteristics that are said to be representative of each generation, a series of generational marker questions were developed for each of the four generations (6 items for Generation X and 4 each for the other generations). Using five-point Likert-type scales, participants were asked to indicate how much each of the statements were reflective of themselves (1= not at all like me and 5 = very much like me). The Silent Generation should be represented by items such as *I tend to live by the "Golden Rule"-- do unto others as you would have others do unto you*. The Baby Boomers should have resonated most to items such as *I feel that status symbols (e.g., cars, corner offices) are an important means of setting me apart from others*. Generation X should have most strongly endorsed items such as *I prefer to rely on my own efforts to get ahead as*

opposed to relying on or expecting assistance from my family or other societal institutes (e.g., government.) Finally, the Millennials should have been most likely to endorse items such as *I find that I am generally focused on myself*. All of the items were developed for the present research except for two items taken from Turner and Valentine's (2001) Cynicism Scale (i.e., "Outside of my immediate family, I don't really trust anyone" and "When you come right down to it, it is human nature never to do anything without an eye to one's own profit"). See Appendix D for all of the generational marker questions. The generational marker questions were developed as single-item measures of the various theoretical characteristics of each generation and thus scale reliabilities were not calculated.

Affective organizational commitment. To assess emotional attachment to one's organization, the six-item affective commitment scale by Meyer and Allen (1997) was used. Items were measured on 5-point Likert scales ranging from 1 (strongly disagree) to 5 (strongly agree) on questions such as "I really feel as if this organizations problems are my own." In the current study this measure had good internal consistency ($\alpha = .85$).

Normative organizational commitment. In order to assess commitment that arises from an internalized normative pressure (e.g., moral duty), the six-item normative commitment scale devised by Meyer and Allen (1997) was used. Items were measured on 5-point Likert scales ranging from 1 (strongly disagree) to 5 (strongly agree) on questions such as "I would feel guilty if I left my organization now." This measure had good internal consistency ($\alpha = .87$).

Work values. Work values were assessed using seven items from the work values inventory developed by Lyons (2004) to address the importance placed on 1)

opportunities to learn new skills; 2) opportunities for advancement within one's career; 3) having the ability to influence organizational outcomes; 4) being provided with challenging work; 5) doing work that is personally fulfilling; 6) having work-life balance; and 7) having management that provides feedback. Two supplementary items were developed specifically for this study to assess the values associated with team work and work that allowed for personal flexibility. Respondents were asked to indicate on 5-point Likert scales the importance of each of these work values (1 = unimportant to me and 5 = very important to me).

Subjective measure of person-work environment fit. A subjective measure of person-work environment fit was used to investigate fit on specific work value – work environment dimensions. Subjective fit is assessed indirectly by comparing the participant's answers on individual characteristics and on environmental characteristics (Kristof-Brown et al., 2005). In order to evaluate subjective person–work environment fit for each of the nine work value dimensions in the current study, the work value items were modified to reflect participants' current experiences in their jobs (e.g., “Doing work that provides you with a personal sense of accomplishment” was changed to “My work provides me with a personal sense of accomplishment”). The introductory text was also modified to ask participants on 5-point Likert scales how characteristic each of the descriptors was of their current work (1 = very uncharacteristic and 5 = very characteristic) as opposed to how important these various aspects of work were to them.

Subjective person-work environment fit for each of the nine work value dimensions was represented by difference scores calculated from the importance placed on each of the nine work values and the perceived presence of that characteristic in the

work environment. Absolute values were used as the direction of the difference was not at issue; the focus was on whether a difference existed (Kristoff, 1996; Vancouver & Schmitt, 1991). Perfect fit was represented by zero (i.e., no difference between the importance placed on the work value and the presence of that characteristic in the work environment) and poorer fit was represented by greater difference scores.

Perceived person-job fit and perceived person-organization fit. Perceived fit, a direct global assessment of one's fit with his or her work environment, was assessed using two three-item instruments designed by Cable and DeRue (2002). Participants were asked to indicate how well they felt they fit with their job and their organization on five-point Likert scales (1 = not at all and 5 = being very much so). Both perceived person job-fit and person-organization fit measures had good internal consistency ($\alpha = .92$ and $\alpha = .94$, respectively).

Demographics. A work demographic questionnaire was used to obtain information about participants' current job, tenure, type of employment (e.g., permanent, temporary, or causal), and full-time versus part-time job status. A personal demographics questionnaire asked for participants' age, gender, ethnicity, marital status, and highest level of education. Participants from the snowball sample were also asked for the town or city in which they currently worked and whether they worked in the public or private sector (see Appendix I).

Descriptive statistics and correlations for the main study variables (i.e., affective and normative commitment, work values, and person-work environment fit dimensions) are presented in Table K1 and Table K2 in Appendix K.

Results

Preliminary Analyses

Data Screening

Data were screened for out-of-range values and univariate and multivariate outliers, and to evaluate the assumptions of normality, linearity, homoscedasticity, and multicollinearity. Three participants were excluded from analyses as it was not known to which generational category they belonged. A review of the employment status and type of employment questions also resulted in the detection of three Millennials and one Generation X who were not employed and were, therefore, excluded from subsequent analyses. There were 34 univariate outliers (i.e., z-scores greater than +/- 3.29) across the nine work values in each of the three generational categories and 5 univariate outliers for organizational tenure; all univariate outliers were excluded from subsequent analyses. There were no multivariate outliers for the variables based on the $p < .001$ criterion for Mahalanobis distance. The assumptions for normality, linearity, homoscedasticity, and multicollinearity were met for all variables. With the removal of the 34 outliers, the three participants who did not give a generational category and the four unemployed participants, the total sample was 331.

Missing data were minimal and missing at random (i.e., ignorable non-responses as indicated by a significant Little's MCAR test and insignificant separate variance t – tests among all variables with greater than 5 % missing data). Casewise deletion was used to deal with missing data. Homogeneity of variance and covariance was checked for all analysis of variance (ANOVA) and multivariate analysis of variance (MANOVA), and were all deemed acceptable unless otherwise noted. The presence of homogeneity of

variance/covariance also indicated that the unequal sample sizes in the subsequent analyses were not problematic.

Organizational Effects

Due to the nature of the sampling technique, in which participants were drawn from five different organizations and a snowball sample, a chi-square analysis was conducted to assess whether there were differences in the number of Baby Boomers, Generation X, and Millennials present in each group. Although there were differences in the representation of the different generations in each organization and snowball sample, $\chi^2(8) = 54.76, p < .001$ (see Table 3), this result should be interpreted cautiously as two cells had fewer than five people. The hotel chain had the largest proportion of Millennials, whereas the high tech firm and the truck dealership had the lowest proportion. On the other hand, the real estate firm and the truck dealership had the highest proportion of Baby Boomers and the high tech firm had the highest proportion of Gen Xers. These findings suggested it would be necessary to investigate possible organizational differences in organizational commitment, work values, and person-work environment fit to ensure that any observed generational differences are not simply reflective of the broader work environment as opposed to generational differences.

Differences in organizational commitment between the five organizations and the snowball sample were assessed with a one-way MANOVA conducted on the composite dependent variable organizational commitment, composed of affective and normative commitment. Based on Wilks' lambda, there was a main effect of organization on organizational commitment, $F(8, 694) = 7.01, p < .001$, partial $\eta^2 = .08$, observed power = .99.

Table 3

*Percentage of each Generational Category in Sampled Organizations and the Snowball**Sample*

	Baby Boomers	Generation X	The Millennials	Total <i>N</i>
	<i>n</i>	<i>n</i>	<i>n</i>	
	% by group	% by group	% by group	
Snowball sample	32 19.5%	76 46%	56 34%	164
Real estate firm	32 48%	26 39%	9 13%	67
High tech firm	9 24%	27 71%	2 5%	38
Truck dealership	17 59%	11 38%	1 3%	29
Hotel chain	21 31%	21 31%	25 37%	67
Total	111 30 %	161 44 %	93 26 %	365

In order to further investigate the main effect of organization on organizational commitment, Hotellings T^2 was used to asses all possible pairwise comparisons (see Table L1 in Appendix L). Tukey's post hoc tests were then used to investigate which organizations differed on each of the individual dependent variables (see Table 4). The post hoc tests revealed that participants from the high tech company had significantly lower affective and normative commitment compared to participants from all of the other organizations, whereas participants from the truck dealership had significantly higher affective and normative commitment compared to those from the hotel chain and the snowball sample. Conversely, participants from the snowball sample had significantly lower normative commitment compared to those from the real estate company.

Table 4

Descriptive Statistics for Affective and Normative Commitment by Organization

Organization	<u>Affective commitment</u>			<u>Normative commitment</u>		
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>
Snowball sample	3.32 _{a,f}	.90	158	3.05 _{a,f,g}	.96	158
Real estate firm	3.62 _b	.72	64	3.44 _{b,g}	.69	64
High tech firm	2.63 _{a,b,c,d}	.87	37	2.40 _{a,b,c,d}	.81	37
Truck dealership	3.86 _{c,e,f}	.78	29	3.74 _{c,e,f}	.76	29
Hotel chain	3.30 _{d,e}	.83	65	3.10 _{d,e}	.86	65

Note: Means having the same subscript are significantly different at $p < .05$.

To examine organization-specific differences in employee work values, a one-way MANOVA was conducted on the composite dependent variable, work values, which was composed of nine individual work values (opportunities to learn new skills; opportunities for advancement within one's career; having the ability to influence organizational outcomes; being provided with challenging work; work that allows for personal flexibility; doing work that is personally fulfilling; having work-life balance; being provided with opportunities for teamwork; and having management that provides feedback). Based on Wilks' lambda, there was a main effect of organization on work values, $F(36, 1,159.70) = 2.14, p < .001$, partial $\eta^2 = .06$, observed power = .99. In order to further investigate the main effect of organization on work values, Hotellings T^2 was used to assess all possible pairwise comparisons (see Table L2 in Appendix L) and Tukey's post hoc tests were used to investigate which organizations differed on each of the individual work values (see Table 5). Participants from the hotel chain and the snowball sample placed greater importance on opportunities for advancement in one's career compared to the high tech firm, participants from the truck dealership placed greater importance on the ability to influence organizational outcomes compared to participants at the high tech firm, and participants from the truck dealership placed

greater importance on having opportunities for team work compared to those from the real estate firm.

Table 5

Descriptive Statistics for Work Values by Organization

Work values	Snowball sample <i>M</i> (<i>SD</i>)	Real estate firm <i>M</i> (<i>SD</i>)	High tech firm <i>M</i> (<i>SD</i>)	Truck dealership <i>M</i> (<i>SD</i>)	Hotel chain <i>M</i> (<i>SD</i>)
Learn new skills	4.54 (0.64)	4.45 (0.65)	4.44 (0.56)	4.54 (0.64)	4.50 (0.65)
Advancement in one's career	4.38 _c (0.76)	4.05 (0.85)	3.84 _{a,b,c} (0.99)	4.39 _b (0.74)	4.34 _a (0.87)
Influence organization outcomes	3.90 (0.86)	3.75 (0.88)	3.56 _a (1.05)	4.25 _b (0.80)	3.79 (0.87)
Challenging tasks	4.44 (0.65)	4.35 (0.66)	4.53 (0.62)	4.54 (0.58)	4.44 (0.62)
Personal flexibility	4.24 (0.66)	4.45 (0.62)	4.31 (0.59)	4.04 (0.92)	4.24 (0.67)
Work-life balance	4.61 (0.65)	4.45 (0.59)	4.63 (0.55)	4.79 (0.50)	4.56 (0.67)
Teamwork	3.47 (1.06)	3.27 _a (0.99)	3.56 (0.95)	3.96 _a (1.23)	3.69 (1.00)
Feedback	4.29 (0.74)	4.28 (0.80)	4.00 (0.95)	4.32 (0.82)	4.37 (0.71)
Personally fulfilling work	4.50 (0.62)	4.60 (0.56)	4.31 (0.69)	4.68 (0.55)	4.43 (0.72)
<i>n</i>	140	60	32	28	62

Note. Means having the same subscript are significantly different at $p < .05$.

Finally, organizational differences in the nine person-work environment fit dimensions were evaluated through nine one-way ANOVAs conducted on the absolute values of the difference scores calculated from the importance placed on each work value and the perceived presence of that characteristic in the work environment (see Table 6; the closer the value to zero, the better the fit. Conversely, the further the value from zero, the poorer the fit). Key differences were observed between participants from the high tech firm, the snowball sample, and the real estate firm for fit on opportunities to learn

new skills. There were also differences between the real estate firm and the high tech firm and the truck dealership for fit on opportunities for advancement in one's career, and the real estate firm and the high tech firm, the hotel chain, and the snowball sample for fit on having personally fulfilling work.

With clear differences between organizations for organizational commitment and employee work values, it was necessary to include organization as a control variable in the main analyses. Further, the results of the ANOVAs on values fit indicated that it was necessary to include organization as a control variable for analyses involving person-work environment fit for 1) opportunities to learn new skills; 2) opportunities for advancement in one's career; and 3) having personally fulfilling work.

Effect of Employment Status on Organizational Commitment and Work Values

Because employment status (i.e., permanent versus contingent work) could affect organizational commitment (de Gilder, 2003), it needed to be investigated as a potential confound for participants who were employed by an organization (i.e., permanent employees, contingent employees, and real-estate agents as opposed to those who were self-employed). A one-way MANOVA was conducted on the composite dependent variable organizational commitment, which yielded a main effect of employment status, $F(4, 630) = 3.37, p < .01, \text{partial } \eta^2 = .02, \text{observed power} = .85$. In order to further investigate the main effect of employment status on the organizational commitment variable, Hotellings T^2 was used to assess all possible pairwise comparisons (see Table L3 in Appendix L).

Table 6

Organizational Effects on Person-Work Environment Fit Dimensions

	snowball sample	Real estate firm	High tech firm	Truck dealership	Hotel chain	F (df)	partial η^2	power
PE fit: Learn new skills	0.96 _a	0.59 _b	1.63 _{a,b}	0.93	1.17	5.81*** (4, 321)	.07	.98
PE fit: Advancement in one's career	1.12	0.71 _{a,b}	1.33 _b	1.38 _a	1.02	2.74* (4, 325)	.03	.75
PE fit: Influence organization outcomes	1.02	0.92	0.88	0.72	0.92	0.68 (4, 325)	.01	.22
PE fit: Challenging tasks	0.87	0.65	1.00	0.69	0.92	1.11 (4, 325)	.01	.35
PE fit: Personal flexibility	0.75	0.63	0.60	1.10	0.61	2.31 (4, 319)	.03	.67
PE fit: Work-life balance	0.82	0.68	0.83	0.69	0.81	0.35 (4, 317)	.00	.13
PE fit: Teamwork	0.84	0.72	1.08	0.97	0.89	0.99 (4, 323)	.01	.31
PE fit: Feedback	1.27	1.25	1.51	1.64	1.17	0.98 (4, 321)	.01	.34
PE fit: Personally fulfilling work	1.01 _b	0.50 _{a,b,c}	1.23 _a	0.79	1.14 _c	4.17** (4, 320)	.05	.92

Note. PE fit = Person-work environment fit; Means having the same subscript are significantly different at $p < .05$. * $p < .05$, ** $p < .01$, *** $p < .001$.

Using Tukey's post hoc tests to investigate which employment statuses differed on each of the individual dependent variables (see Table 7), it was found that permanent employees and real estate agents had significantly greater affective commitment compared to contingent employees. Thus, employment status was used as a control variable in later analyses on generational differences in affective commitment.

A one-way MANOVA was also conducted to test whether there was a significant effect of employment status (i.e., permanent employees, contingent employees, real-estate agents, and self-employed) on work values, however, this analysis revealed no significant differences, $F(27, 862.19) = 0.94, p = .555, \text{partial } \eta^2 = .03, \text{observed power} = .81$.

Table 7

Descriptive Statistics for Affective and Normative Commitment by Employment Status

Employment status	Affective commitment			Normative commitment		
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>n</i>
Permanent employees	3.39 _b	.88	247	3.16	.95	247
Contingent employees	3.01 _{a,b}	.89	58	2.85	.77	58
Real estate agents	3.81 _a	.53	14	3.38	.65	14

Note. Means having the same subscript are significantly different at $p < .05$.

Effect of Tenure on Organizational Commitment

Consistent with previous research (Meyer, Bobocel, & Allen, 1991), longer organizational tenure was significantly related to affective commitment, $r = .19, p < .01$ and normative commitment, $r = .14, p < .05$. Accordingly, organizational tenure was used as a control variable in subsequent analyses on generational differences in organizational commitment.

Gender Effects on Work Values

Because some researchers (e.g., Lyons, Duxbury, Higgins, 2005; Meglino & Ravlin, 1998) have suggested that gender is an important factor in value orientation, the effect of gender on work values was assessed to establish whether it was a necessary control variable. A one-way MANOVA was conducted on the composite dependent work values variable and based on Wilks' lambda, an effect of gender was observed, $F(9, 301) = 1.98, p < .05$, partial $\eta^2 = .06$, observed power = .85. In order to investigate the individual work values on which males and females differed, a series of univariate F -tests were run using a Bonferonni's correction to control the chance of committing a type one error (adjusted alpha = .005; see Table L4 in Appendix L). The results indicated that females placed significantly greater importance on doing work that is personally fulfilling compared to males, $F(1, 309) = 8.13, p < .005$, partial $\eta^2 = .03$, observed power = .81 (see Table 8). Thus, it was necessary to use gender as a control variable in the analysis on generational differences in the importance placed on doing work that is personally fulfilling.

In sum, the preliminary analyses indicated that it would be necessary to control for organization, employment status, and organizational tenure when assessing the effects of generation on affective and normative organizational commitment, and that it would be necessary to control for organization and gender when assessing generational differences in certain work values.

Table 8

Descriptive Statistics for Work Values by Gender

Work value	Male <i>M</i> (<i>SD</i>)	Female <i>M</i> (<i>SD</i>)
Learn new skills	4.41 (0.70)	4.55 (0.59)
Advancement in one's career	4.15 (0.91)	4.31 (0.80)
Influence organization outcomes	3.87 (0.87)	3.83 (0.90)
Challenging tasks	4.36 (0.69)	4.47 (0.60)
Personal flexibility	4.23 (0.69)	4.29 (0.68)
Work-life balance	4.49 (0.69)	4.63 (0.59)
Teamwork	3.43 (1.07)	3.56 (1.06)
Feedback	4.13 (0.86)	4.36 (0.72)
Personally fulfilling work	4.37 _a (0.69)	4.58 _a (0.58)
<i>n</i>	116	195

Note. Means having the same subscript are significantly different at $p < .05$.

Generational Differences in Organizational Commitment

The primary purpose of the current study was to explore whether a poor person-work environment fit, directly associated with generation-specific work values, could be a contributing factor to the hypothesized generational differences in organizational commitment. In order to test the hypothesis that the Millennials would have lower affective and normative commitment relative to Generation X and the Baby Boomers, a one-way MANOVA was conducted on the composite dependent variable organizational commitment, composed of affective and normative commitment, followed by two hierarchical regressions, for each of affective and normative commitment, in which the

possible confounds of organization, employment status, and organizational tenure could be controlled². The MANOVA was conducted first to identify generation effects before controlling for external influences.

According to Wilks' lambda for the MANOVA, there was a main effect of generation on the composite dependent variable organizational commitment, $F(4, 698) = 4.14, p < .01, \text{partial } \eta^2 = .02, \text{observed power} = .92$. Hotellings T² was used to assess all possible pairwise comparisons for generation and organizational commitment (see Table M1 in Appendix M), followed by Tukey's post hoc tests to investigate which generations differed on affective and normative commitment (see Table 9). Accordingly, the Millennials and Generation X had significantly lower affective commitment compared to the Baby Boomers, but there was no difference in affective commitment between Generation X and the Millennials. With respect to normative commitment, Generation X had significantly lower normative commitment compared to the Baby Boomers; however, there was no difference between the Millennials and the Baby Boomers and between the Millennials and Generation X on normative commitment.

Table 9

Descriptive Statistics for Affective and Normative Commitment by Generation

Generation	Affective commitment			Normative commitment		
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>n</i>
Baby Boomers	3.61 _{a,b}	.80	109	3.31 _a	.88	109
Generation X	3.25 _b	.95	156	2.99 _a	.96	158
Millennials	3.17 _a	.83	88	3.08	.89	88

Note. Means having the same subscript are significantly different at $p < .05$.

² Separate regressions were used as opposed to a multivariate analysis of covariance (MANCOVA) because there were different potential confounds for affective and normative commitment. Hierarchical multiple regressions were used instead of separate analysis of covariance (ANCOVAs) due to violation of the homogeneity of regression assumption required for ANCOVA (i.e., the absence of any interactions between the IV and the covariates).

Given that the preliminary analyses indicated that organizational commitment could be influenced by organization, employment status, and work tenure, to further explore the strength of the association of generation and organizational commitment, two hierarchical multiple regressions were run, controlling for these work-related variables. In order to include the categorical variable of generation in regression analyses, dummy coding was required. In order to dummy code the categorical variable of generation, in which there were three groups (i.e., Baby Boomers, Generation X, and the Millennials), two dummy coded variables were needed (i.e., with k groups there are $k-1$ coded variables; Pedhazur, 1997). The first dummy coded variable was labeled “Generation X” and the second “the Baby Boomers”. For the “Generation X” variable, every participant who was a member of Generation X was coded as 1, while all others were coded as 0. For “the Baby Boomers” variable, all participants who were Baby Boomers were coded as 1, while all others were coded as 0. Participants belonging to the Millennial generation were coded as 0 across both the “Generation X” and “the Baby Boomer” dummy coded variables and thus acted as the comparison group (i.e., Generation X compared to the Millennials and the Baby Boomers compared to the Millennials; Pedhazur, 1997). Organization and employment status were also dummy-coded for use as control variables, where appropriate.

First, affective commitment was regressed on generation to investigate whether the Millennials had lower affective commitment compared to Generation X and the Baby Boomers while controlling for employment at the truck dealership and the high tech firm relative to the other organizations, employment status, and organizational tenure, which were identified in the preliminary analyses section as potential confounds (see Table 10).

In the first block, the four control variables were entered into the regression accounting for 14.6% of the variance in affective commitment (adjusted $R^2 = .14$, $SE = 0.83$). The dummy-coded generation variables were added in the second block with a significant ΔR^2 of .02. Thus, after controlling for potential confounds, the Millennials were significantly more likely to report lower affective commitment compared to the Baby Boomers, which supported the first hypothesis. There was no significant difference between the Millennials and Generation X, consistent with the results from the MANOVA, however contrary to what was expected.

Table 10

Hierarchical Multiple Regression of Affective Commitment on Generation

Predictor Variables	β	t	sr^2	ΔR^2
Block 1				
Truck dealership ^a	.11	1.96*	.01	
High tech firm ^b	-.28	-5.23***	.08	
Contingent employment status ^c	-.14	-2.52**	.02	
Organizational tenure	.12	2.03*	.01	
Block 2				
Truck Center ^a	.09	1.69	.01	
High tech firm ^b	-.28	-5.11***	.07	
Contingent employment status ^c	-.13	-2.08*	.01	
Organizational tenure	.05	0.83	.00	
Generation X ^d	.03	0.40	.00	
Baby Boomers ^e	.17	2.07*	.01	.02*

Dummy coding: ^a truck dealership= 1; snowball sample, real estate firm, high tech firm, and hotel chain = 0. ^b high tech firm = 1; snowball sample, real estate firm, truck dealership, and hotel chain = 0. ^c contingent employees = 1; permanent employees, real estate agents, and self-employed = 0. ^d Generation X = 1; Millennials = 0.

^e Baby Boomers = 1; Millennials = 0.

* $p < .05$, ** $p < .01$, *** $p < .001$

Normative commitment was then regressed on generation to investigate whether the Millennials differed in their normative commitment relative to the Baby Boomers and Generation X after controlling for organizational membership and organizational tenure (see Table 11). The control variables (i.e., membership at the truck dealership and the

high tech firm, recruitment via to the snowball sample, and organizational tenure, as identified in the preliminary analyses section as possible extraneous influences) were entered into the first block of the regression accounting for 13.7% of the variance in normative commitment, adjusted $R^2 = .13$, $SE = 0.87$. Generation was added in the second block, $\Delta R^2 = .004$, $p = n.s.$ Thus, after controlling for potential confounds, the Millennials did not differ significantly from the Baby Boomers and Generation X on normative commitment, contrary to expectations.

Table 11

Hierarchical Multiple Regression of Normative Commitment on Generation

Predictor Variables	β	t	sr^2	ΔR^2
Block 1				
Truck dealership ^a	.12	2.13*	.01	
High tech firm ^b	-.31	-5.55***	.08	
Snowball sample ^c	-.13	-2.14*	.01	
Organizational tenure	.08	1.58	.01	
Block 2				
Truck Center dealership ^a	.12	2.02*	.01	
High tech firm ^b	-.31	-5.37***	.08	
Snowball sample ^c	-.11	-1.91	.01	
Organizational tenure	.05	0.85	.00	
Generation X ^d	.03	0.42	.00	
Baby Boomers ^e	.09	1.13	.00	.004

Dummy coding: ^a truck dealership = 1; real estate firm, high tech firm, the hotel chain, and the snowball sample = 0. ^b high tech firm = 1; real estate firm, hotel chain, the truck dealership, and the snowball sample = 0. ^c snowball sample = 1; real estate firm, high tech firm, truck dealership, and the hotel chain = 0. ^d Generation X = 1; Millennials = 0.

^e Baby Boomers = 1; Millennials = 0.

* $p < .05$, ** $p < .01$, *** $p < .001$

In sum, the Millennials differed from the Baby Boomers only with respect to their affective commitment and not their normative commitment. Contrary to the hypothesis, Generation X and the Millennials appeared to have similar levels of affective and normative commitment.

Generational Differences in Work Values

In order to assess the hypothesis that there would be generational differences in individual work values, such that the Millennials would assign significantly greater importance to 1) opportunities to learn new skills; 2) opportunities for advancement within one's career; 3) ability to influence organizational outcomes; 4) being provided with challenging work; 5) work that allows for personal flexibility; 6) doing work that is personally fulfilling; 7) having work-life balance; 8) being provided with opportunities for teamwork; and 9) having management that provides feedback relative to Generation X and the Baby Boomers, a one-way MANOVA was conducted on the composite work values dependent variable. Four hierarchical multiple regressions were also conducted following the MANOVA for the four work values with possible confounds identified in the preliminary analyses section (i.e., organization and gender) so that such external influences could be accounted for.

For the MANOVA, based on Wilks' lambda, there was a main effect of generation, $F(18, 622) = 4.10, p < .001, \text{partial } \eta^2 = .11, \text{observed power} = .99$. In order to further investigate the main effect of generation on the work values variable, a series of Hotellings T^2 were used to assess all possible pairwise comparisons (see Table M2 in Appendix M). The Tukey's post hoc tests, used to investigate how the generations differed on each of the nine work values (see Table 12), revealed differences on two work values, opportunities for advancement in one's career and teamwork. The Millennials placed significantly greater importance on opportunities for advancement in one's career compared to Generation X and the Baby Boomers and Generation X also placed significantly greater important on opportunities for career advancement compared to the

Baby Boomers. Although the Baby Boomers placed greater importance on team work relative to Generation X, there were no differences between the Millennials and the older two generations for the value of team work.

The preliminary analyses had revealed that the work values of 1) importance placed on opportunities for advancement in one's career; 2) ability to influence organizational outcomes; 3) opportunities for team work; and 4) doing work that is personally fulfilling could be affected by gender or organizational membership. Therefore, four separate hierarchical regressions were conducted to assess whether the same pattern of generational differences and similarities were present for these work values while controlling for other influences. Regressions were not run for the remaining five work values because with no identified confounds, there was no need to control for external influences.

For the hierarchical multiple regression of opportunities for advancement, the control variable of employment in the high tech firm, identified as a potential confound in the preliminary analyses section, was entered in the first block accounting for 2.7% of the variance (adjusted $R^2 = .02$, $SE = 0.91$). Generation was added in the second block and had a significant ΔR^2 of .06. Consistent with the results of the MANOVA, the Millennials placed significantly greater importance on opportunities for advancement in their career compared to the Baby Boomers and Generation X, even after taking into account other influences (see Table 13).

Table 12

Descriptive Statistics for Work Values by Generation

Work value	Baby Boomers	Generation X	Millennials
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)
Learn new skills	4.41 (0.73)	4.51 (0.59)	4.62 (0.56)
Advancement in one's career	3.99 _a (0.85)	4.26 _a (0.88)	4.59 _a (0.59)
Influence organization outcomes	4.01 (0.88)	3.81 (0.91)	3.73 (0.85)
Challenging tasks	4.47 (0.61)	4.46 (0.64)	4.36 (0.66)
Personal flexibility	4.33 (0.71)	4.26 (0.63)	4.19 (0.74)
Work-life balance	4.50 (0.69)	4.63 (0.58)	4.62 (0.63)
Teamwork	3.79 _a (1.10)	3.40 _a (1.03)	3.44 (0.97)
Feedback	4.32 (0.75)	4.19 (0.86)	4.40 (0.63)
Personally fulfilling work	4.59 (0.60)	4.49 (0.63)	4.42 (0.67)
<i>n</i>	100	144	78

Note. Means having the same subscript are significantly different at $p < .05$.

Table 13

Hierarchical Multiple Regression of the Value of Career Advancement on Generation

Predictor Variables	β	<i>t</i>	sr^2	ΔR^2
Block 1				
High tech firm ^a	-.49	-3.07*	.03	
Block 2				
High tech firm ^a	-.45	-2.84*	.02	
Generation X ^b	-.29	-2.34*	.01	
Baby Boomers ^c	-.62	-4.77***	.06	.06***

Dummy coding: ^a high tech firm = 1; truck dealership, real estate firm, hotel chain, and the snowball sample = 0. ^b Generation X = 1; Millennials = 0. ^c Baby Boomers = 1; Millennials = 0.

* $p < .05$, ** $p < .01$, *** $p < .001$

Next, the ability to influence organizational outcomes was regressed on employment in the high tech firm, identified in the preliminary analyses section as a potential extraneous influence, in the first block, which accounted for 1.4 % of the variance (adjusted $R^2 = .01$, $SE = 0.94$). Generation was added in the second block with a nonsignificant ΔR^2 of .01. Therefore, the Millennials, after taking into account other influences, did not place significantly greater importance on the ability to influence organizational outcomes compared to Baby Boomers and Generation X (see Table 14).

A third hierarchical multiple regression was conducted for the importance placed on doing work that is personally fulfilling in which the control variable gender, found to be a potential confound in the preliminary analyses section, was entered into the first block accounting for 2.2% of the variance (adjusted $R^2 = .02$, $SE = 0.65$). Generation was added in the second block with a nonsignificant ΔR^2 of .01, indicating that after controlling for potential confounds, the Millennials still did not place significantly greater importance on doing work that is personally fulfilling compared to the Baby Boomers and Generation X (see Table 15).

Finally, being provided with opportunities for teamwork was regressed on employment in the real estate firm, identified as a possible extraneous influence in the preliminary analyses section, in the first block accounting for 1.3 % of the variance (adjusted $R^2 = .01$, $SE = 1.07$) and generation in the second block, with a significant ΔR^2 of .034. Thus, contrary to the results of the MANOVA on work values by generation, after controlling for organization, the Millennials placed significantly less importance on having opportunities for teamwork relative to the Baby Boomers. There were, however, no significant differences between Generation X and the Millennials (see Table 16).

Table 14

Hierarchical Multiple Regression of the Value of Ability to Influence Organizational Outcomes on Generation

Predictor Variables	β	t	sr^2	ΔR^2
Block 1				
High tech firm ^a	-.36	-2.18*	.01	
Block 2				
High tech firm ^a	-.37	-2.15*	.01	
Generation X ^b	.07	0.55	.00	
Baby Boomers ^c	.24	1.73	.01	.01

Dummy coding: ^a high tech firm = 1; truck dealership, real estate firm, hotel chain, and the snowball sample = 0. ^b Generation X = 1; Millennials = 0. ^c Baby Boomers = 1; Millennials = 0.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 15

Hierarchical Multiple Regression of the Value of Work that is Personally Fulfilling on Generation

Predictor Variables	β	t	sr^2	ΔR^2
Block 1				
Females ^a	.20	2.67**	.02	
Block 2				
Females ^a	.20	2.68**	.02	
Generation X ^b	.11	1.19	.00	
Baby Boomers ^c	.18	1.84	.01	.01

Dummy coding: ^a Gender: females = 1; males = 0. ^b Generation X = 1; Millennials = 0. ^c Baby Boomers = 1; Millennials = 0.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 16

Hierarchical Multiple Regression of the Value of Opportunities for Teamwork on Generation

Predictor Variables	β	t	sr^2	ΔR^2
Block 1				
Real estate firm ^a	-.32	-2.12*	.01	
Block 2				
Real estate firm ^a	-.41	-2.66**	.02	
Generation X ^b	-.08	-0.51	.00	
Baby Boomers ^c	.38	2.38*	.02	.03**

Dummy coding: ^a real estate firm = 1; truck dealership, high tech firm, hotel chain, and the snowball sample = 0. ^b Generation X = 1; Millennials = 0. ^c Baby Boomers = 1; Millennials = 0.

* $p < .05$, ** $p < .01$, *** $p < .001$

In sum, out of the nine work values, the Millennials differed from the older generations on only two work values, rather than all nine work values hypothesized to be more important to the Millennials than other generations. The Millennials placed significantly greater importance opportunities for advancement within one's career compared to the Baby Boomers and Generation X. Contrary to expectations, however, the Millennials placed significantly less importance on teamwork compared to the Baby Boomers.

Effect of Generation on Subjective Person-Work Environment Fit

The third hypothesis was that there would be generational differences in person-work environment fit such that the Millennials would have lower person-work environment fit for each of the nine work values thought to be unique to the Millennials. That is, the Millennials would be more likely to endorse each of these values relative to the other generations and less likely to report that their organization enabled the fulfillment of those values. However, given that there were only generational differences

for the value placed on opportunity for advancement in one's career and for teamwork, tests of generational differences in person-work environment fit were limited to these two work values.

A one-way ANCOVA was conducted on the difference score for the work value – work environment fit dimension *opportunities for advancement in one's career* to assess whether the Millennials had lower fit compared to other generations while controlling for employment at the real estate firm, identified as a potential confound in the preliminary analyses. Based on the ANCOVA, there was no significant effect of generation on person-work environment fit when controlling for organizational membership, $F(2, 326) = 0.10, p = .903$, partial $\eta^2 = .00$, observed power = .07 (see Table 17; numbers closer to zero indicate better fit). Thus, the Millennials did not have lower person-work environment fit compared to Generation X and the Baby Boomers for opportunities for advancement, despite highly endorsing this value.

Table 17

Descriptive Statistics for Person-Work Environment Fit for Opportunities for Advancement in One's Career by Generation

Generation	<i>M</i>	<i>SD</i>	Adjusted <i>M_a</i>	<i>SE</i>	<i>n</i>
Baby Boomers	1.00	1.07	1.04	.11	108
Generation X	1.11	1.11	1.10	.09	146
Millennials	1.11	1.21	1.06	.13	76

^a Adjusted mean after controlling for covariate organizational membership at the real estate firm versus all of the other organizations.

Next, a one-way ANOVA on difference scores for the work value – work environment fit dimension *opportunities for teamwork* was conducted to assess whether the Millennials had lower fit compared to other generations. Based on the ANOVA, there was no significant effect of generation on person-work environment fit for opportunities

for teamwork, $F(2, 325) = 0.86$, $p < .05$ partial $\eta^2 = .01$, observed power = .20 (see Table 18). The mean difference scores by generation for the remaining seven person-work environment fit dimensions for the work values in which there were no generational differences can be found in Appendix M (see Table M3).

Table 18

Descriptive Statistics for Person-Work Environment Fit for Opportunities for Teamwork by Generation

Generation	<i>M</i>	<i>SD</i>	<i>n</i>
Baby Boomers	.84	.88	107
Generation X	.94	.97	145
Millennials	.78	.91	76

In sum, contrary to hypothesis, the Millennials did not have lower person-work environment fit compared to the older generations on the two value dimensions tested. Despite the finding that the Millennials placed significantly greater value on having opportunities for advancement in their careers and significantly less value on opportunities for teamwork, there were no differences in the degree of fit with the work environment. As a result of the findings that there were no differences in person-work environment fit for work values for the Millennials versus the other generations, it was not possible to test the hypothesis that the presence of person-work environment fit on the specific value dimensions would partially mediate the association between generation and organizational commitment. Thus, the lower affective commitment reported by the Millennials could not be explained by generation-specific work values and a work environment that failed to meet their needs (i.e. low person environment fit).

*Additional Analyses**Generational Effects on Perceived Person-Job Fit and Perceived Person-Organization**Fit*

Although there was little support for the idea that incongruence between the work environment and the work values held by the Millennials could explain their lower affective commitment, it was thought that there may be generational differences in perceived person-work environment fit derived from a personal, direct assessment of fit with the work environment. Two ANOVAs were conducted to evaluate the effect of generation on both perceived person-*job* fit and on perceived person-*organization* fit.

A one-way ANOVA of generational differences in perceived person-job fit revealed a main effect of generation, $F(2, 333) = 8.40, p < .001$, partial $\eta^2 = .05$, observed power = .96. Tukey's post hoc tests indicated that the Millennials had significantly lower perceived person-job fit relative to the Baby Boomers (see Table 19).

Table 19

Descriptive Statistics for Perceived Person – Job Fit by Generation

Generation	<i>M</i>	<i>SD</i>	<i>N</i>
Baby Boomers	3.85 _a	0.83	106
Generation X	3.74	0.99	150
Millennials	3.30 _a	1.06	80

Note. Means having the same subscript are significantly different at $p < .05$.

Next, generational differences in perceived person-organization fit were assessed with a one-way ANOVA, which revealed a marginally significant main effect of generation, $F(2, 349) = 2.90, p = .057$, partial $\eta^2 = .02$, observed power = .56. Tukey's post hoc tests indicated that the Millennials had marginally significantly lower perceived person-organization fit compared to the Baby Boomers ($p = .058$). There were no other significant generational differences on perceived person-organization fit (see Table 20).

Table 20

Descriptive Statistics for Perceived Person – Organization Fit by Generation

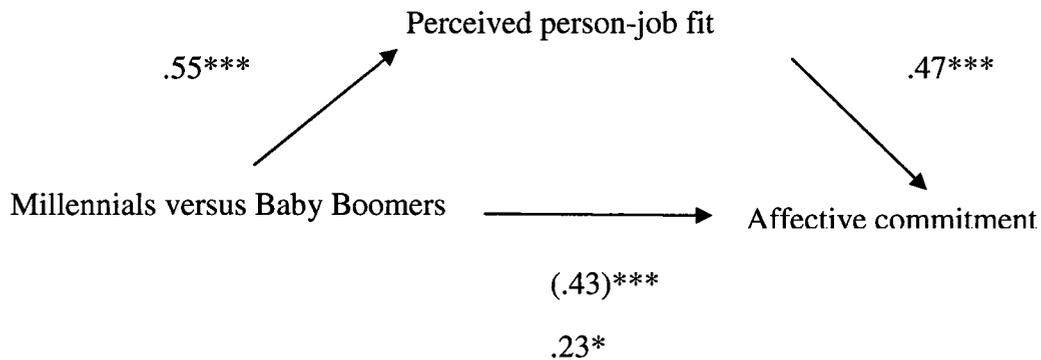
Generation	<i>M</i>	<i>SD</i>	<i>N</i>
Baby Boomers	3.38 _a	0.97	107
Generation X	3.15	1.04	158
Millennials	3.05 _a	1.00	87

Note. Means having the same subscript are significantly different at $p < .05$.

As a result of the significant generational differences in person-job fit, an exploratory mediation analysis was conducted in which perceived person-job fit was tested as a potential mediator of the generation – commitment relation³. With differences in commitment and in perceived person-job fit limited to the Millennials and the Baby Boomers, Generation X was excluded from the analysis. Dummy coding was used for the categorical generation variable such that the Millennials were dummy coded as 0 and the Baby Boomers as 1. The causal steps approach (Baron & Kenny, 1986) was used to assess the mediating role of person-job fit in the generation – affective commitment relation. In order to determine if mediation is present, four steps must be met: 1) the predictor must be significantly related to the outcome variable; 2) the predictor must be significantly related to the mediator; 3) the mediator must be significantly related to outcome variable when controlling for the predictor; and 4) there must be a decrease in the strength of the association between the predictor and outcome variable when controlling for the mediator. As can be noted in Figure 1, there appears to be a partial mediation (see Table N1 in Appendix N for the results for each of the four steps to determine mediation).

³ Due to the presence of only a marginally significant difference between the Baby Boomers and the Millennials on perceived person-organization fit, it was decided that further analysis on the mediating effect of perceived person-organization fit on the generation – commitment relation was not warranted at this time given that this analysis was only exploratory in nature.

Figure 1

The Mediator Effect of Person- Job Fit on Generation and Affective Commitment

Note: unstandardized regression coefficients are reported.

^aMillennials = 0; Baby Boomers = 1

* $p < .05$, ** $p < .01$, *** $p < .001$

Given that the causal steps approach does not directly assess whether the mediation effect is statistically significant (rather it is inferred by meeting the four criteria), the Sobel test and the bootstrapping method were used as follow on tests to directly test the significance of the mediation effect. Using Preacher and Hayes' (2004) macro for SPSS, the Sobel test and the bootstrapping confidence intervals (i.e., a non-parametric alternative to estimating the size of the mediation effect and testing its significance; Preacher & Hayes, 2004) were calculated. Based on the Sobel test, the mediation effect was statistically significant, $B = -0.12$, $SE = 0.04$, $z = -3.55$, $p < .001$. The significant mediation effect was also supported by the 95% bootstrapped confidence interval, which did not contain zero, $CI = -0.20$ to -0.06 . Thus, the Millennials' lower affective commitment relative to that of the Baby Boomers could be partially explained by their lower perceived person-job fit.

Differences on Generational Marker Questions

In addition to assessing generational differences in work values, a series of ANOVAs was conducted on the generational marker questions that were developed to test the general values, beliefs, and characteristics of each generation. The purpose of these questions was to explore whether the generations hold the values and beliefs generally ascribed to them to offer additional support to the conclusions drawn regarding the presence or absence of a generational effect on work values and attitudes (i.e., organizational commitment). It was expected that each generation would have significantly greater scores on each of their respective generational marker questions relative to the other generations (see Tables 21-23).

Table 21

ANOVA Results and Descriptive Statistics for Baby Boomer Generational Marker Questions

	Baby Boomers <i>M</i> (<i>SD</i>) <i>n</i>	Gen X <i>M</i> (<i>SD</i>) <i>n</i>	Millennials <i>M</i> (<i>SD</i>) <i>n</i>	<i>F</i> (<i>df</i>)	partial η^2	power
Like status symbols	1.96 _a (1.16) <i>n</i> = 110	2.07 (1.04) <i>n</i> = 160	2.39 _a (1.23) <i>n</i> = 93	3.83* (2, 360)	.02	.69
Believe loyalty to organization is key to advancement	3.75 _a (1.11) <i>n</i> = 108	3.32 _{a,b} (1.22) <i>n</i> = 161	3.72 _b (1.05) <i>n</i> = 93	5.85** (2, 359)	.03	.87
Feel people are inherently good	3.99 _{a,b} (0.75) <i>n</i> = 109	3.69 _a (0.96) <i>n</i> = 160	3.49 _b (1.04) <i>n</i> = 92	7.62*** (2, 358)	.04	.95
Believe that most situations work out for the best	3.77 _a (0.98) <i>n</i> = 108	3.83 (0.87) <i>n</i> = 159	4.07 _a (0.85) <i>n</i> = 93	3.25* (2, 357)	.02	.62

Notes. Means having the same subscript are significantly different at $p < .05$.

* $p < .05$, ** $p < .01$, *** $p < .001$.

Contrary to expectations, each of the generations typically was not more likely to endorse statements considered to be reflective of the values or characteristics of their generation. For example, the Baby Boomers were less likely to endorse status symbols compared to the Millennials and did not differ from the Millennials in the degree to which they agreed that loyalty is the key to advancement in an organization and in their belief that people are inherently good. The fact the Millennials felt that loyalty is the key to advancement in organizations is contrary to the anecdotal accounts of the Millennials. The Baby Boomers also did not differ from Generation X in their belief that most situations will work out for the best, a finding that is inconsistent with the assumption that Generation Xers are very cynical.

Table 22

ANOVA Results and Descriptive Statistics for Generation X Generational Marker Questions

	Baby Boomers <i>M</i> (<i>SD</i>) <i>n</i>	Gen X <i>M</i> (<i>SD</i>) <i>n</i>	Millennials <i>M</i> (<i>SD</i>) <i>n</i>	<i>F</i> (<i>df</i>)	partial η^2	power
Believe humans do not do anything without an eye to profit	2.06 _{a,b} (0.99) <i>n</i> = 109	2.57 _a (0.99) <i>n</i> = 161	2.87 _b (1.15) <i>n</i> = 91	16.20*** (2, 358)	.08	.99
Believe that they cannot trust anyone outside of their family	2.02 (1.10) <i>n</i> = 107	2.29 (1.15) <i>n</i> = 161	2.21 (1.31) <i>n</i> = 92	1.75 (2, 357)	.01	.37
Believe that self-development and marketability are the key to advancement within an organization	4.06 (0.99) <i>n</i> = 108	4.11 (0.85) <i>n</i> = 160	4.02 (0.82) <i>n</i> = 93	0.34 (2, 358)	.00	.10
Prefer to rely on their own efforts	4.43 (0.94) <i>n</i> = 109	4.42 (0.81) <i>n</i> = 161	4.29 (0.88) <i>n</i> = 92	0.80 (2, 359)	.00	.19

Notes. Means having the same subscript are significantly different at $p < .05$.

* $p < .05$, ** $p < .01$. *** $p < .001$.

Opposite to expectations, Generation X was not more likely to endorse a belief that they cannot trust anyone outside of their family, prefer to rely on their own efforts, or believe that self-development and marketability are the key to advancement within an organization. Whereas Generation X should have been most likely to believe that humans do not do anything without an eye to profit, they did not differ significantly from the Millennials. Similarly, although, the Millennials scored significantly higher than the Baby Boomers on three of the Millennial markers (i.e., Are 'me' focused, believe that if they want something, they should have it, and feel that if the organization does not give them what they want, then they will leave) they did not score significantly higher than Generation X. However, caution needs to be used when interpreting these results as these items were developed for this study and require further validation.

Table 23

ANOVA Results and Descriptive Statistics for the Millennials Generational Marker Questions

	Baby Boomers <i>M</i> (<i>SD</i>) <i>n</i>	Gen X <i>M</i> (<i>SD</i>) <i>n</i>	Millennials <i>M</i> (<i>SD</i>) <i>n</i>	<i>F</i> (<i>df</i>)	partial η^2	power
Have realistic expectations in life	4.41 _b (0.68) <i>n</i> = 110	4.30 _a (0.70) <i>n</i> = 159	4.06 _{a,b} (0.88) <i>n</i> = 93	5.55** (2, 359)	.03	.85
Are 'me' focused	2.39 _a (0.95) <i>n</i> = 110	2.58 (0.89) <i>n</i> = 159	2.86 _a (0.98) <i>n</i> = 93	5.95** (2, 359)	.03	.88
Believe that if they want something, they should have it	2.73 _{a,b} (1.21) <i>n</i> = 109	3.18 _a (1.06) <i>n</i> = 160	3.32 _b (1.11) <i>n</i> = 93	8.02*** (2, 359)	.04	.96
Feel that if the organization does not give them what they want, then they will leave	3.08 _{a,b} (1.35) <i>n</i> = 109	3.53 _a (1.14) <i>n</i> = 161	3.76 _b (1.06) <i>n</i> = 93	8.81*** (2, 360)	.05	.97

Notes. Means having the same subscript are significantly different at $p < .05$.

* $p < .05$, ** $p < .01$. *** $p < .001$.

Discussion

The Effect of Generation on Organizational Commitment

The purpose of the current study was to investigate whether the Millennials had lower affective and normative commitment compared to the Baby Boomers and Generation X, and if this was the case, to explore whether this lower commitment could be explained by generation-specific work values and a work environment that did not fit with the values of the Millennials. Consistent with popular speculation (Brusilow, 2008; Katz, 2008; Safer, 2007), the Millennials in this sample were more likely to report lower levels of affective commitment (i.e., emotional attachment to their organization) compared to the Baby Boomers, but contrary to expectations their affective commitment was not significantly lower than that of Generation X. Hence, although there appears to be an effect of generation on affective commitment, it is not specific to the Millennial generation, but rather characteristic of the younger generations in general.

It is highly unlikely that the lower affective commitment of the Millennials could be attributed solely to their recent entrance into the workforce, a time when commitment is generally the lowest (Meyer, et al., 1991; Meyer & Allen, 1987), because their affective commitment was lower even after controlling for organizational tenure. The finding that both the Millennials and Generation X had similarly low levels of affective commitment compared to the Baby Boomers possibly may be related to a distrust of institutions resulting from exposure to organizational downsizing and restructuring faced by their parents (Howe & Strauss, 1993) or the changing the nature of work, two factors that have yet to be fully explored.

In the current economic context, workers change jobs frequently and the average tenure for each job has been decreasing because of the pressures faced by companies requiring them to re-size their workforce in order to remain competitive (Judy & D'Amico, 1997). The frequency of job changes is also likely affected by changes in career paths, from a traditional to a boundaryless career, in which the traditional career was linear and focused on the progressive steps up the organizational hierarchy compared to the boundaryless career that is defined by continuous and other lateral changes in careers and jobs (Arthur & Rousseau, 1996; Littleton, Arthur, & Rousseau, 2000). As a result of such changes, commitment to one's employer does not have the opportunity to fully materialize.

Corporate restructuring and downsizing has also modified the nature of the psychological contract (Rousseau & Wade-Benzoni, 1995), which is a set of mutual expectations held by both employee and employer about the employment relationship. Traditionally, the psychological contract has been relational, such that the implicit contract is based on long-term mutual commitment relationship; as a result of the kind and frequency of organizational change, more recently employees have formed transactional psychological contracts that are based on a shorter-term exchange of benefits and services (Rousseau, 1989; Rousseau & Wade-Benzoni, 1995). Under the old relational contracts employees exchanged loyalty for job security, whereas under the new transactional contract employees exchange performance for rewards (i.e., salary), training, and skill development so that they remain marketable (Rousseau, 1989; Rousseau & Wade-Benzoni, 1995). The transactional nature of the psychological contract

is related to weaker affective and normative commitment compared to the relational contract (McInnis, Meyer, & Feldman, 2009). Thus, as a result of the transactional nature of the psychological contract, Generation X and the Millennials may not count on much from their employers beyond an immediate paycheque and consequently do not have the same attachment to their organization as a result.

The pattern of results observed for normative commitment (i.e., sense of obligation to remain with the organization; Allen & Meyer, 1990) was somewhat different than those observed for affective commitment. That is, contrary to expectations, the Millennials did not have the lowest mean level of normative commitment. Indeed, the only difference in normative commitment was that Baby Boomers reported higher levels of normative commitment relative to Generation X respondents. Although despite not being statistically significant, the Millennials' level of normative commitment was more similar to that of Generation X than to the Baby Boomers, suggesting that lower normative commitment is characteristic of the younger generations in much the same way as for affective commitment. The difference in normative commitment between the older and younger generations suggests that normative commitment may, in part, be attributable to generational differences, possibly related to the socialization of reciprocity. That is, the Baby Boomers may still be responding from a social norm of reciprocity (Allen & Meyer, 1993; Gouldner, 1960), such that when they receive benefits from an organization it activates the need to reciprocate, which is enacted as loyalty to that organization.

Alternatively, the Millennials' and Generation X's lower normative commitment relative to the Baby Boomers may also be explained by the changes in the psychological

contract; the younger generations may not feel the same sense of obligation to remain with their organization because they have seen firsthand the lack of commitment that the organization has to their employees as evidenced by the ever-present downsizing and restructuring activities. Overall, the finding that the Millennials did not differ from Generation X in their level of affective and normative commitment suggests that the Millennials' work attitudes are not as different from the older generations as initially anticipated and has been suggested by the popular business literature (Brusilow, 2008; Katz, 2008; Lancaster & Stillman, 2002; Safer, 2007).

Although the results of the current study suggest that lower organizational commitment is characteristic of the younger generations when compared to the Baby Boomers, the absence of a significant difference between the Millennials and Generation X on affective and normative commitment in the present research is contrary to the results of previous research. Patalano (2008), whose study investigated differences in organizational commitment between Generation X and the Millennials, found that the Millennials had significantly lower levels of both affective and normative commitment compared to Generation X. It is possible that the differences between Patalano (2008) and the present study may relate to participant sampling. Participants in the present research included employees from many organizations, whereas participants in Patalano's (2008) study were all employees from within a single organization. Patalano's (2008) finding that the commitment levels between Generation X and the Millennials differed may have resulted from the unique characteristics and the culture of that particular organization and the employees that it attracted. According to Schneider's (1987; Schneider, Goldstein, & Smith, 1995) Attraction-Selection-Attrition model, organization

members are attracted to, selected by, and sometimes depart from organizations on the basis of their fit (or lack thereof) with the organization's characteristics and orientations. Accordingly, over time, organizational members come to resemble their organizations with respect to characteristics such as personal orientations and values. Without the inclusion of additional organizations, it is unclear as to whether Patalano's (2008) findings are reflective of an organization-specific effect or a generation effect.

Additionally, it is worth noting that Patalano (2008) did not control for organizational tenure and therefore cannot speak to whether the Millennials in the sample had lower commitment due to true generational effects or due to their recent entry into the workplace, a time when commitment is generally the lowest (Meyer, et al., 1991; Meyer et al., 2002). Given that the present research sampled employees from different organizations, controlled for unique organizational effects, and organizational tenure, there is greater support for the idea that low levels of affective and normative commitment are characteristic of the younger generations in general as opposed to simply a phenomenon unique to the Millennials as was demonstrated by Patalano (2008).

The Effect of Generation on Work Values

The second purpose of the current study was to assess whether the Millennials had unique work values relative to the older generations. Contrary to expectations, generational differences in work values were limited to two out of the nine assessed work values. Consistent with expectations, the Millennials placed significantly greater importance, relative to the other generations, on opportunities for advancement within one's career; however, contrary to anticipation they placed significantly lower importance on having opportunities for teamwork in the workplace compared to the Baby

Boomers. According to Twenge and Campbell (2009), the Millennials have an “I am special” and “look at me” mentality that has resulted from self-esteem boosting that was characteristic of the way their parents focused attention on them, from new technologies such as Facebook and You Tube that continue the self-promotion and self-focus, and from reality television shows such as American Idol, which promote the idea of instant fame. Growing up in a society that has socialized this generation into believing that each person is special and that fame is something that each person could, and should achieve, often without struggle, may also affect the Millennials’ expectation for advancement in their career. Receiving instant recognition for one’s innate abilities is expected and such recognition at work comes through promotions, which reinforce feelings of importance and place the focus of attention on the individual. Teamwork, however, results in fewer opportunities for individual attention because success is attributed to the group as opposed to just one person. Thus, it is not surprising that the Millennials place lower value on teamwork as it is not congruent with their self-focus and need for attention, whereas place greater importance on promotions because it is congruent with the attitude.

It is interesting that the three generations were equally likely to value opportunities to learn new skills, having the ability to influence organizational outcomes, being provided with challenging work, having work that allows for personal flexibility, doing work that is personally fulfilling, having work-life balance, and having management that provides feedback, opposite to the anecdotal suggestions (Brusilow, 2008; Katz, 2008; Safer, 2007; Sujansky, 2002). The finding that the Millennials held highly similar work values with the older generations is consistent with the results of past research that focused on differences between the Baby Boomers and Generation X, in

which the number of differences in work values were much fewer than the number of similarities (e.g., Jurkiewicz, 2000; Lee, 2007).

The differences that were revealed in the present study between the Millennials' work values and the work values of the older generations were found at the level of individual work values (e.g. value assigned to pay) rather than at the level of categories of work values (e.g., extrinsic-related work values). With so few differences between the Millennials and the older generations on the individual level work values, there would be even fewer differences on the higher order groupings had categories of work values been assessed. This suggests that Cennamo and Gardner's (2008) and Lyons' (2004) divergent findings for the importance the Millennials placed on freedom-related work values, extrinsic work values, altruistic work values, and social work values are not attributable to the type of work value measured, if categories of values are used rather than individual work values, as originally alluded to in the introduction. Despite the presence of some generational differences in work values in individual research studies (Cennamo & Gardner, 2008; Licata, 2007; Lyons, 2004), the absence of consistent generational differences when the studies are compared suggests that shared experiences (i.e., growing up in a similar time period) may not influence one's work values as much as originally thought. Rather, personal experiences (Rokeach, 1973) and other factors such as organizational culture (Goldstein & Smith, 1995) and gender (Meglino & Ravlin, 1998) also likely combine to play a noteworthy role in the development of one's work values. With the Millennials holding similar work values to the older generations in the current study, it is likely that generational differences in work values are overstated in the news and popular business literature.

The Effect of Generation on Person-Work Environment Fit

The third purpose of the current study was to investigate whether generational differences in work values contributed to generational differences in person-work environment fit for specific work value dimensions, and whether such differences play a part in an increased or decreased organizational commitment for each of the generations. Despite the finding that the Millennials placed significantly greater value on having opportunities for advancement in their careers and significantly less value on opportunities for teamwork, there were no generational differences in the degree of fit with the work environment. As a result, the lower affective commitment reported by the Millennials could not be explained by generation-specific work values and a work environment that failed to meet their needs (i.e. low person environment fit) as was originally hypothesized.

Although there appeared to be no effect of generation on specific work value – work environment fit, it was clear that there were generational differences in overall sense of person-job fit and person-organization fit. The Millennials were more likely to feel that their needs were not met by their job compared to the Baby Boomers. The finding that the Millennials had lower perceived fit than the Baby Boomers is consistent with the suggestion by Westerman and Yamamura (2007) that the younger generations are more likely to be aware of a work environment that does not fulfill their needs and matches what they want at work. The Millennials' increased awareness of their lack of fit may be attributed to their upbringing in which they were socialized to believe that they are special (Twenge & Campbell, 2009) and have developed an expectation that they should have a good fitting job as a result. It is probable that the Millennials are less likely

to tolerate incongruence on any number of factors within their work context because they feel as though they deserve the best. Indeed, it appears that a global perception of fit is taken into account by the Millennials and many different factors such as skills, needs, preferences, values, personality traits, and goals, which can result in incongruence between the person and the job or the organization (Boxx et al., 1991; Chatman, 1989; Judge & Bretz, 1992; Posner, 1992; Vancouver, Millsap, & Peters, 1994; Vancouver & Shmitt, 1991; Verquer, Beehr, & Wagner, 2003) are considered. Thus, compared to the Millennials who have lower perceived fit, the Baby Boomers may have more realistic expectations about the extent to which they should have a good fit with their work environment.

The current study also found that a perception of a lack of fit with one's job mediated differences in affective commitment between the Baby Boomers and the Millennials, consistent with previous research that has demonstrated that poor fit contributes to lower organizational commitment (Boxx, Odom, & Dunn, 1991; Chatman, 1991; Davis, 2006). The Millennials were more likely to perceive that their needs were not met by their job compared to the Baby Boomers, which, in turn, resulted in the Millennials' lower organizational commitment compared to the Baby Boomers. The presence a partial mediation effect of perceived fit on the generation – commitment relation suggests that other factors, such as perceived organizational justice, also contribute to the Millennials' lower affective commitment compared to the Baby Boomers.

Perceived organizational justice refers to perceptions of fairness of the outcomes with an organization (i.e., distributive justice) such as pay selection and promotion

decisions or the perceptions of fairness surrounding the processes by which the outcomes are determined (i.e., procedural justice; Cohen-Charash & Spector, 2001). One example especially pertinent to the Millennials may be perceived fairness surrounding promotional decisions due to the high importance that the Millennials assign to having opportunities for advancement in their career. Typically, promotions come with increased organizational tenure and experience, something that is more likely to be characteristic of the Baby Boomers and not the Millennials, leaving the younger cohort feeling as though the process of awarding organizational outcomes such as promotions are unfair. When one considers that past research has found that perceived organizational injustice is consistently linked to decreased organizational commitment (Colquitt, Conlon, Wesson, Porter, & Yee Ng, 2001), it seems probable that generational differences in perceived organizational injustice with respect to the process of obtaining a promotion may be a contributing factor in the differences between the Millennials and the Baby Boomers' level of affective commitment. Perceptions of injustice in the workplace not only result in employees who are less committed to their organization, but also in greater intention to leave their organization (Colquitt, Conlon, Wesson, Porter, & Yee Ng, 2001). Thus, the high value that the Millennials place on opportunities for advancement in their career may prove to be problematic for organizations and their promotional policies if the goal is to prevent employee turnover, especially of those employees belonging to the Millennial generational category.

Alternatively, from a developmental perspective, the Millennials may lack commitment to their organization compared to the Baby Boomers because they are in a transitory stage between adolescence and adulthood, referred to as emerging adulthood,

characterized by frequent change and exploration of different life directions (Arnett, 1998, 2000). Emerging adulthood is a life stage new to the Millennial generation, characterized by a delayed transition into adulthood, largely stemming from an increased time period spent in post secondary education, which in turn delays other adult transitions, including marriage and parenthood (Clark, 2007; Myles, 2005). The result is a period defined by exploration and that is unstable as people try out different possibilities and learn from their experiences before making long-term commitments (Arnett, 2006). Consequently, with a lack of stability in their life, the Millennials may simply feel as though they need to explore their options and do not see their time with their employer as permanent, but rather only one experience in a mass of experiences. Indeed, Arnett (2006) has reported that instability in work is a hallmark of those in the emerging adulthood stage and that most emerging adults hold their job for less than a year, searching for the best job to match their interests and abilities. Although this would suggest that life stage might better explain the Millennials' lower affective commitment, as opposed to a generation effect, it is important to note that emerging adulthood is a new life stage, experienced by only the Millennials thus far, and may be part of the cohort effect of the Millennials and not pertinent to subsequent generations.

Generational Characteristics and Stereotypes

Despite the discussion surrounding the potential reasons for the presence of differences in the Millennials' affective commitment relative to the Baby Boomers, it is important to remember that the Millennials did not differ from Generation X on affective commitment and normative commitment and held work values that were similar than different from those of the Baby Boomers and Generation X. These results, when taken in

concert, challenge the significance and importance of a generation effect on explaining work values and work attitudes such as organizational commitment. If one looks to the results of the generational marker questions from the current study that tested the basic general values and characteristics thought to be representative of each generation, there is little additional support for the significance of a generation effect. Although there were differences between the generations, the pattern of results based on the stereotypical generalizations for the generations was not in the expected direction. The Baby Boomers are often said to be very optimistic and to like status symbols (Lancaster & Stillman, 2002), but the results of the current study suggest that these are more likely to be endorsed by the Millennials. Whereas holding a belief that loyalty is the key for advancement is generally said to be representative of the Baby Boomers (Lancaster & Stillman, 2002), in the current study both the Baby Boomers and the Millennials were more likely to believe that loyalty is the key to getting ahead in an organization. This is an interesting finding as it suggests that despite the lack of commitment that the Millennials have to their organization, they still recognize the value of loyalty and staying with a company, suggesting that the Millennials' lack of commitment may very well be reflective of the changing nature of work, and if the context was different, they may be loyal.

Similarly, although Generation X is often characterized as preferring to rely on their own efforts as opposed to those of anyone else or other societal institutions, as being highly cynical (Lancaster & Stillman, 2002), and believing that self-development and marketability are the key to advancement within an organization (Daboval, 1998), they were not more likely to endorse these items relative to the other generations. Finally,

although the current study found support for the stereotype that the Millennials are self-focused, entitled (i.e., feel that if they want something they should have it; Twenge, 2006), and believe that if the organization does not give them what they want, they will leave (Katz, 2008; Safer, 2007), these were also characteristic of Generation X. Such beliefs may play a role in the lack of organizational commitment reported by the younger two generations compared to the Baby Boomers in the current study.

Overall, despite the premise of generational theory and speculations on differences in generational characteristics (e.g., Katz, 2008; Lancaster & Stillman, 2002; Howe & Strauss, 2000), the results of the present study suggest that such differences are mainly stereotypes which is in keeping with Giancola's (2006) observation that "the generational approach may be more popular culture than social science" (p.33). While shared historical experiences may play somewhat of a role in shaping one's values and characteristics, it appears that the significance of a generation may not be as great as is generally believed. However, it is important to keep in mind that the generational marker questions used in the current study were developed specifically for this study and thus have not been formally validated. Until future research is conducted that is able to replicate these findings, the ability to draw sound conclusions surrounding the accuracy of the generational stereotypes and the importance of the generation effect is limited.

In light of the overall findings of the current study, in which there was not strong evidence that the Millennials differed greatly from the older generations, it is worthwhile to consider that the increased media attention and speculation on the work values and attitudes of the Millennials may simply be the result of their recent entrance into the workforce as opposed to reflective of actual generational differences. This seems to be

the trend with the emergence of any new generation into the workplace as before the Millennials, there was also speculation on the characteristics of Generation X compared to the Baby Boomers and the Silent Generation (Wallace, 2001). For example, popular business literature speculated that Generation X, when they entered the workforce, were unorthodox, rebellious, a challenge to manage, and uncommitted (Sellers & Sample, 1994). The characterizations of each new generation as different from the older generation may result from the fact that generations are social groups (Eyerman & Turner, 1998), and like other social groups, each generation tries to differentiate themselves from the other group (i.e., 'us' versus 'them'; Tajfel, 1981). Thus, just as Generation X was labeled, the Millennials may also be facing similar stereotypes simply because they are the new 'them.'

Study Limitations

The present study found important results suggesting that, in the workforce, the generations tend to be more similar than different; however, as with all research, the present study has some limitations that may have affected the results and the conclusions that can be drawn. In the current study, cross-sectional data were used to investigate generational differences in work values and work attitudes, which may be problematic because any observed differences between generations may be attributed to three possible explanations, as opposed to simply a generational effect including 1) age effects (i.e., differences as a result of the developmental process in which values, opinions, and attitudes change due to different life stages or career stages); 2) generational effects (i.e., differences as a result of selective exposure to historical events in the formative years); or 3) time period effects (i.e., differences as a result of the historical situation at the time in

which the data were collected; Cavalli, 2004). In light of this limitation, due to time limits and financial constraints, cross-sectional data were the only available option for the current study. Although the cross-sectional data challenges the ability to attribute any observed differences to a generation effect as opposed to an age or time-period effect, the findings can offer the preliminary evidence needed to justify a future longitudinal study. Based on the results of the current study, in which there was minimal evidence of a generation effect, further longitudinal research would likely not be worthwhile. However, had the current study found noteworthy differences between the generations, longitudinal research would be warranted to rule out age effects and/or time period effects and solidify the conclusions drawn surrounding the effect on generation on work values and attitudes. Thus, despite the inability of cross-sectional studies to offer evidence of causality, they do offer the necessary preliminary insights for the phenomenon under investigation to warrant further longitudinal research.

The way in which the current study approached the investigation of generational effects must also be noted as a limitation. That is, in the current study, generational categories were defined a priori based on the suggestion of popular literature that has yet to receive empirical verification. Thus, the defining years of each generational categories may not be accurate. However, given that the purpose of the current study was to assess the validity of generational stereotypes presented in the media, the pre-existing generational categories had to be used. The lack of generational differences observed may be the result of incorrect classification of generations as opposed to evidence of no generation effect. Future research should seek to use an inductive approach, in which individuals are grouped together a posteriori based on the similarity of their work values

and work attitudes. In this approach, the presence of individuals close in age sharing similar values would be indicative of a generational group, and this would also enable verification of the defining date ranges of each generational category, which to date have differed depending on the author (e.g., Adams, 1997; Strauss & Howe, 1991).

Another potential limitation of the current study was the non-representative sample of Millennials that resulted from the fact that only the oldest Millennials are currently in the workforce. This not only limited the number of working Millennials from which to draw a sample, but also reduced the generalizability of the results to the Millennial generation as a whole. Consequently, the work attitudes and work values of the Millennials found in the current study are limited to the oldest members of this generation. Also, given that older members of a given generation are said to have more similarities with members of the generation that came before them (i.e., are 'on the cusp'; Lancaster & Stillman, 2002), the small number of differences found between the Millennials and the older generations in the current study may be attributable to the older Millennials being more similar to the cohort before them (i.e., Generation X) as opposed to an absence of a generational effect.

It is noteworthy that this is one of the first studies to use an employed sample of Millennials as opposed to a university sample of Millennials. The use of students versus employed Millennials may result in different research findings because the experience of working may differentially influence an individual's reflection on what they value in the workplace, something that likely cannot be done accurately in a non-work environment such as a university setting. Future research, at a time when more members of the

Millennial generation are present in the workforce, will allow for a more accurate representation of the Millennials' work values and work attitudes.

Additionally, the sample of Millennials used in the current study may also be unrepresentative due to inherent differences in those who completed the survey versus those who did not. This point, while pertinent to all research and to all generations sampled in the present research, is likely even more applicable to the Millennials in the current study because non-response appeared to be the generational trend for the Millennials, as indicated by the low number of responses from the Millennials within each organization. Those who participated in the current study may hold different values and beliefs relative to those who did not, resulting in a potentially inaccurate description of the work attitudes and values of the Millennials in general.

Due to the Millennials' low response rate, additional methods of recruiting were required to obtain a satisfactory number of respondents from this generational category. This included the addition of a snowball sampling strategy, as well as posting an invitation to participate on the university's student home page, specifically targeting working Millennials from the student population. With little control over who participated in the snowball sample and targeting working Millennials from the student population, it is likely that a number of the Millennial respondents were working and attending post-secondary education. This may have affected the work values of the Millennials included in the current study because employed students may view themselves as a student first and an employee second compared to employees who were no longer in school and identify with being an employee first. Differential identification with one's job versus other life spheres may impact work values and work attitudes.

In addition to the problematic response rate of the Millennials, the overall non-response rate for each organization sampled in the current study was quite high. The highest response rate obtained in the current study was 25%, lower than the anticipated 40% response rate per organization, which suggests that the overall sample of respondents from the organizations was not necessarily representative of the employees within the organizations. The response rates from each of the organizations may have been influenced by the industry from which the organizations were in and the general type of positions staffed (i.e., blue-collar versus white-collar jobs). The two industries with the lowest response rate, the transport truck sales and services industry and the hospitality industry, would be more likely to employ blue-collar positions. Employees filling such positions may be less receptive to a survey due to their limited experience with academic research. Alternatively, the highest response rate was found in the high tech industry, where majority of the positions would likely be white-collar, which may have resulted in greater appreciation of research and willingness to participate.

Finally, while the current study attempted to minimize the effect of extraneous influences such as organizational membership, employment type, organizational tenure, and gender, it must be noted that there were many additional potential confounds that could not be controlled, including such factors as education, socio-economic status, profession, status within the organization, and rural versus urban dwelling. Due to the nature of the sample size, the extent to which all possible confounds could be controlled was limited. The inability to control for all external influences may have affected the validity of the findings, however, this limitation is not unique to the current study; rather it is characteristic of most applied research.

Overall, the findings of the present research, which did not provide strong evidence for a generation effect, must be interpreted in light of the above limitations, especially those limitations surrounding the sample of Millennials used in the current study and the extraneous influences that could not be controlled. Thus, future research on this phenomenon is necessary in order to replicate and support the results of the current study. Overall, despite these limitations, the current study has added to the literature on the Millennials' work values and work attitudes, while having received some empirical attention, has largely been under-investigated.

Practical Implications and Conclusions

With the media publicity that has occurred as a result of the recent entrance of the Millennials into the workplace, it was necessary to investigate whether the suggested work values and attitude stereotypes of the Millennials were accurate. Understanding the differences and similarities between generations is important for Human Resource Management looking to improve recruitment, productivity, and retention in the workplace, and for psychologists looking to further their understanding of the personal factors that may contribute to the nature of interpersonal dynamics such as conflicts within the workplace. Additionally, the findings from this study offer important evidence for challenging the significance of a generation effect, important to sociologists and demographers.

The results of this study indicate that the portrayal in the popular management literature and media of the Millennials as the least committed generation maybe unfounded and that a lack of loyalty better describes both the Millennials and Generation X compared to the Baby Boomers. Similarly, the purported differences between the

Millennials' work values and those of the older generations appear to be overstated as the Millennials were only found to differ from the older generations on two of the nine work values portrayed by the media to be uniquely characteristic of the Millennials.

Differences in such work values did not result in generational differences in person-work environment fit and were not a factor in explaining the Millennials' low commitment.

With generational differences in perceived fit with one's job, it will be important for organizations to clearly communicate values and priorities with employees and ensure that the employees feel as though their needs are being met. Discussing values and expectations with staff and devising action plans to obtain a better degree of fit will help improve perceptions of fit with the work environment, as well as contribute to improved organizational loyalty. While this will be an especially important practice for the Millennials, it is also essential for all generations as perceptions of inadequate fit, irrespective of cohort, result in negative organizational outcomes.

Overall, based on the results of the current study, in which there was limited support for a generation effect on work values and work attitudes, it is important for organizations seeking to embrace diversity to also realize the commonalities between employees of different ages and generations. It may be best for organizations to ensure that individual needs are being met and are of top priority rather than developing human resource policies built around the assumption that there are generational differences in work attitudes and work values when such differences are small. Regardless of generational affiliation, employees all move through similar life stages and thus share the same concerns and needs as they progress. Organizations looking for guidelines on which to base their human resource policies on may be better suited to focus their recruitment, productivity, and retention efforts at career stages as opposed to generational differences.

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Appendix A
Memo to Employees

Dear Staff,

We have recently given permission to a Masters student from Carleton University to offer our employees the opportunity to participate in her research on generational differences in work attitudes and work values. Below you will find information on the survey, should you wish to participate.

*Sincerely,
[Name of company contact]*

Hello,

I am a second year Masters student at Carleton University studying Organizational Psychology. I am currently in the process of completing my Master's thesis research on generational differences in work values and work attitudes.

I would like to invite you to participate in my research.

Participation involves completing one survey that should take approximately 15-20 minutes to complete. You will be asked questions about your work values, attitudes, and experiences.

Paper copies of the survey are available at [insert location] for you to pick up and complete. There will be a self-addressed, postage affixed envelope for you to mail your completed survey to me.

Please note that your participation is completely voluntary. It will not have any bearing on any work evaluations or assignments. Your supervisors will not know if you choose not to partake in this study. Also, in order to protect your anonymity, your name will not be associated with your responses.

A final report of the research will be provided to your organization, and will also be made available to you.

Should you have any questions please feel free to contact me at mlittau@connect.carleton.ca or by phone at 613-520-2600, ext.1034.

Your participation would help me out a lot! I am looking forward to working with you.

Sincerely,
Melissa Littau &
Dr. Janet Mantler (Advisor)
Carleton University

Appendix B
Introductory Email to Employees

Dear Staff,

We have recently given permission to a Masters student from Carleton University to offer our employees the opportunity to participate in her research on generational differences in work attitudes and work values. Below you will find an introductory email and the link to the survey, should you wish to participate.

*Sincerely,
[Name of company contact]*

Hello,

I am a second year Masters student at Carleton University studying Organizational Psychology. I am currently in the process of completing my Master's thesis research on generational differences in work values and work attitudes.

I would like to invite you to participate in my research.

Participation involves completing one survey that should take approximately 15-20 minutes to complete. You will be asked questions about your work values, attitudes, and experiences.

The link for the survey is provided at the end of this email.

Please note that your participation is completely voluntary. It will not have any bearing on any work evaluations or assignments. Your supervisors will not know if you choose not to partake in this study. Also, in order to protect your anonymity, your name will not be associated with your responses.

A final report of the research will be provided to your organization, and will also be made available to you.

Should you have any questions please feel free to contact me at mlittau@connect.carleton.ca or by phone at 613-520-2600, ext.1034.

Your participation would help me out a lot! I am looking forward to working with you.

Sincerely,

Melissa Littau &
Dr. Janet Mantler (Advisor)
Carleton University

[Insert link to survey]

Appendix C Participant Information

Generational Differences in Work Values and Work Attitudes

The Research

The purpose of this research is to investigate claims made in the media about generational differences in work values (i.e., preferences at work), and organizational commitment. While there has been much speculation about generational differences in the work place, there has been very little research to confirm or refute these anecdotal claims. The current study will ask you a variety of questions pertaining to your feelings toward your organization and your work values. Additional questions ask you about your work environment, your future plans, and general demographic questions (i.e., age, gender). It should take about 15-20 minutes to complete the questionnaire.

Anonymity/confidentiality

The data collected in the study are strictly confidential. Please do not put any identifying markers on your completed questionnaire – this ensures that there is no way to identify you with your responses. All of the information you provide will be kept in strict confidence. Your organization will be given a final report of the study, but all information will be reported for the overall groups – no individuals can be identified in the report. Your organization will *not* have access to the information we collect.

Your rights

You are under no obligation to complete this survey. Completion of this survey implies consent. If there are questions that you do not wish to answer, please skip them. Your data will be stored at Carleton University for a minimum of 5 years and will be made available to Carleton University Research Ethics Committees if required for their review process. Please note that you may *not* withdraw your data from the research once you have submitted the completed questionnaire. This is because the results from this study are completely anonymous and there is no way to identify any particular individual.

The research team

The research team includes Melissa Littau (613- 520-2600, ext.1034; email: mlittau@connect.carleton.ca) and Dr. J. Mantler (613-520-2600, ext. 4173).

The results

A report of this study will be made available to your organization. If you would like to know the results of the survey, a report will be made available on the primary researcher's personal website (www.mlittau.com) by the end of July 2009. Results from this study may also be used in conference presentations, academic publications, and press releases.

For more information

For more information about the study, please contact Melissa Littau at Carleton University, 613- 520-2600, ext.1034 or by email at mlittau@connect.carleton.ca. You may also contact Dr. Janet Mantler at Carleton University, 613-520-2600, ext. 4173.

This study has been approved by the Carleton University Ethics Committee for Psychological Research. Should you have any concerns about your ethical treatment in this study, please contact Dr. Avi Parush of the Carleton University Ethics Committee for Psychological Research at 613-520-2600 ext. 6026 or Dr. A. Forth, Associate Chair, Department of Psychology, at 613-520-2600 ext. 1267.

Although we do not anticipate that any of the questions we asked should cause you pain or anxiety, if you feel the need to talk to someone about an issue that emerged while you were completing this questionnaire, you can contact your family physician for a referral to counselling services. If you live in the Ottawa (ON) area, you could call the Distress Centre of Ottawa and Region at (613) 238-3311. If you live in Saskatoon (SK), you could call the Saskatoon Crisis Intervention Service at (306) 933-6200. If you live in North Battleford (SK), you could call the North Battleford Crisis Line at 1-866-567-0055. If you live in Waskesiu Lake (SK), you could call the Prince Albert Mobile Crisis Unit Cooperative at (306) 764-1011. If you live in Edmonton (AB), you could call The Support Network's Distress Line at (780) 482-4357. If you live in Thunder Bay (ON), you could call the Thunder Bay Crisis Response Service at (807) 346-8282.

Appendix D Questionnaire

Generational Category

The current study is interested in generational differences. In order to assess which generational category you belong to please choose the appropriate grouping that contains the year you were born.

I was born between:

- 1925 and 1942
- 1943 and 1960
- 1961 and 1981
- from 1982 and onward

Generational Markers

Please indicate how reflective the following statements are of you. 1 means that this statement is not at all like you and 5 means that this statement is very much like you.

The Silent Generation

- 1- I tend to live by the "Golden Rule" -- do unto others as you would have others do unto you.
- 2- If somebody does something for me, I feel that I must return the favour.
- 3- I tend to have faith that the government, the church, and the military are looking after the best interests of the country and myself.
- 4- I think of myself as being fairly traditional.
- 5- I believe it is important to stick with past tradition.
- 6- I believe that it is one's duty to work.

The Baby Boomers

- 1- I feel that status symbols (e.g., cars, corner offices) are an important means of setting me apart from others.
- 2- I believe that loyalty is the key for advancement within an organization.
- 3- I generally believe that people are inherently good.
- 4- I think that most situations work out for the best in the end.

Generation X

- 1- I believe that self-development and marketability are the keys for advancement within an organization.

- 2- I prefer to rely on my own efforts to get ahead as opposed to relying on or expecting assistance from my family or other societal institutes (e.g., government).

Items from the Cynicism Scale

- 3- Outside of my immediate family, I don't really trust anyone.
- 4- When you come right down to it, it is human nature never to do anything without an eye to one's own profit.

The Millennials

- 1- I feel that have realistic expectations in life.
- 2- I find that I am generally focused on myself.
- 3- I believe that if I really want something, I should be able to have it.
- 4- If my organization does not provide me with what I want or treat me as I expect to be treated, I will leave.

Affective Commitment Scale

Thinking about your current job and organization, please rate the following statements on a scale of 1 to 5 , with 1 being strongly disagree, and 5 being strongly agree.

1. I would be very happy to spend the rest of my career with this organization.
2. I really feel as if this organization's problems are my own.
3. I do not feel like "part of the family" at my organization.
4. I do not feel "emotionally attached" to this organization.
5. This organization has a great deal of personal meaning for me.
6. I do not feel a strong sense of belonging to my organization.

Normative Commitment Scale

Thinking about your current job and organization, please rate the following statements on a scale of 1 to 5 , with 1 being strongly disagree, and 5 being strongly agree.

1. I do not feel any obligation to remain with my current employer.
2. Even if it were to my advantage, I do not feel it would be right to leave my organization now.
3. I would feel guilty if I left my organization now.
4. This organization deserves my loyalty.
5. I would not leave my organization right now because I have a sense of obligation to the people in it.
6. I owe a great deal to this organization.

Work Values Inventory

The items below represent values that people consider to be important in their work. People use these values in making important decisions about their jobs and careers. They are not all considered to equally important and different people place importance on different values. Please read through each of the items below and indicate how important each item is to you on a scale from 1 to 5. 1 indicates that the job characteristic is unimportant to you and 5 indicates that the job characteristic is very important to you.

1. Having the opportunity to continuously learn and develop new knowledge and skills.
2. Having the opportunity for advancement in your career.
3. Having the ability to influence organizational outcomes
4. Working on tasks and projects that challenge your abilities.
5. Doing work that you find personally fulfilling.
6. Working in an environment that allows you to balance your work life with your private life and family responsibilities.
7. Having management that provides timely and constructive feedback about your performance.
8. Doing work in a team.
9. Doing work that allows for personal flexibility.

Work Environment Characteristics

Thinking about your current work, please indicate how characteristic each of the following statements are of your work on a scale from 1 to 5. 1 indicates that this is not very characteristic of your work and 5 indicates that this is very characteristic of your work.

1. My work offers opportunities to continuously learn and develop new knowledge and skills.
2. There are opportunities for advancement in my career.
3. My work influences organizational outcomes.
4. My work allows me to work on tasks and projects that challenge my abilities.
5. I find my work personally fulfilling.
6. My work allows me to balance my work life with my private life and family responsibilities.
7. The management at my work provides timely and constructive feedback about my performance.
8. My work allows me to work in a team.
9. My work allows for personal flexibility.

Perceived Person –Job Fit Scale

Thinking about your current job and organization, please each of the following statements on a scale from 1 to 5, with 1 being not at all and 5 being very much so.

1. There is a good fit between what my job offers me and what I am looking for in a job,
2. The attributes that I look for in a job are fulfilled very well by my present job.
3. The job that I currently hold gives me just about everything that I want from a job.

Perceived Person–Organization Fit Scale

Thinking about your current organization, please each of the following statements on a scale from 1 to 5, with 1 being not at all and 5 being very much so.

1. The things that I value in life are very similar to the things that my organization values.
2. My personal values match my organization's values and culture.
3. My organization's values and culture provides a good fit with the things that I value in life.

Work Demographics

The next series of questions asks about your employment status. This will enable us to assess differences in employment status between professions.

1. Which of the following job categories best describes your current job:
 - Management
 - Marketing
 - Human Resources
 - Administrative Services
 - Sales
 - Trades (e.g., Mechanic)
 - Service Industry (e.g., Kitchen Staff, Waitress/Waiter, Housekeeping)
 - Engineering
 - Other
2. How many years have you been employed by this organization (including all jobs that you may have held)?
3. How long have you been working in your current job?
4. How would you best describe your employment?
 - Part time

- Full time
- Contract / Temporary
- Other

Personal Demographics

5. Age
___years
6. Gender
___Male
___Female
7. Ethnicity (e.g., Caucasian , African American, Middle Eastern)

8. Are you a first generation Canadian?
___Yes, I was the first member of my family to come to Canada.
___No, my grandparents or parents were the first to come to Canada.
9. What is your marital status
___Single
___Divorced
___Married
___Common Law
___Widow
10. What is your highest level of education?
___Elementary school
___High school
___Community college (Diploma)
___University General (3 year Degree)
___University Honours Degree (4 years degree)
___Masters Degree
___Doctoral Degree

Appendix E
Online Debriefing
Generational Differences in Work Values and Work Attitudes

Thank you for your time and effort in participating in this study.

The purpose of this research was to investigate claims made in the media and ‘pop’ literature about generational differences in work values (i.e., preferences at work). Up until now, the workforce has only been composed of three generations; the Silent Generation (born 1925-1942), the Baby Boomers (born 1943-1960), and Generation X (born 1961-1981). Recently, with the entrance of a fourth generation (the Millennials, born 1982 and onwards), there has been much speculation about generational differences in work values and the impact that this will have on organizations. However, there has been very little research done to confirm or refute these anecdotal claims. This study asked you a variety of questions pertaining to your job preferences in order to assess if each generation holds a unique set of work values.

In addition to differences in work values, it has been suggested by the media that the younger generations are not as loyal to their organization when compared to older generations. The second purpose of this study was to determine the validity of these statements, and to investigate if and why such differences might exist.

It is also possible that regardless of one’s generation, if a person’s work values do not match his or her work environment, this person would be less loyal to that company.

The results from this study may have important implications for future human resource policies in different organizations. This may include the development of human resource policies that effectively attract, retain and train members of each generation.

A final report of the findings will be posted on my website, www.mlittau.com, by July 2009. Alternatively, you can contact me for a hardcopy version.

Thank you again for participating in this study. It was a pleasure to work with you. If you have any questions in the future regarding this study, do not hesitate to contact me.

Sincerely,
Melissa Littau

For More Information

For more information about the study, please contact Melissa Littau at Carleton University, 613- 520-2600, ext.1034 or by email at mlittau@connect.carleton.ca. You may also contact Dr. Janet Mantler at Carleton University, 613-520-2600, ext. 4173.

This study has been approved by the Carleton University Ethics Committee for Psychological Research. Should you have any concerns about your ethical treatment in this study, please contact Dr. Avi Parush of the Carleton University Ethics Committee for

Psychological Research at 613-520-2600 ext. 6026 or Dr. A. Forth, Associate Chair, Department of Psychology, at 613-520-2600 ext. 1267.

Although we do not anticipate that any of the questions we asked should cause you pain or anxiety, if you feel the need to talk to someone about an issue that emerged while you were completing this questionnaire, you can contact your family physician for a referral to counselling services. If you live in the Ottawa (ON) area, you could call the Distress Centre of Ottawa and Region at (613) 238-3311. If you live in Saskatoon (SK), you could call the Saskatoon Crisis Intervention Service at (306) 933-6200. If you live in North Battleford (SK), you could call the North Battleford Crisis Line at 1-866-567-0055. If you live in Waskesiu Lake (SK), you could call the Prince Albert Mobile Crisis Unit Cooperative at (306) 764-1011. If you live in Edmonton (AB), you could call The Support Network's Distress Line at (780) 482-4357. If you live in Thunder Bay (ON), you could call the Thunder Bay Crisis Response Service at (807) 346-8282.

Appendix F
Reminder Memo to Employees

Hello,

This memo is a follow up in regard to the research that I am currently conducting on generational differences in work values and work attitudes that you have been invited to participate in.

If you have already completed the questionnaire, and put it in the mail please accept my thanks.

If you have not yet had a chance to complete the survey but would like to, there is still time! Paper copies of the questionnaire package are available at the following location [insert location] that you may pick up and complete. There will be a self-addressed, postage affixed envelope for you to mail your completed questionnaire package to me.

Should you have any questions please feel free to contact me at mlittau@connect.carleton.ca or by phone at 613-520-2600, ext.1034.

Your participation will help me out a lot!

Sincerely,

Melissa Littau &
Dr. Janet Mantler (Advisor)
Carleton University

Appendix G
Reminder Email to Employees

Hello,

This email is a follow up in regard to the research that I am currently conducting on generational differences in work values and work attitudes that you have been invited to participate in.

If you have already completed the questionnaire please accept my thanks.

If you have not yet had a chance to complete the survey but would like to there is still time! The survey will remain on the website for another two weeks.

Should you have any questions please feel free to contact me at mlittau@connect.carleton.ca or by phone at 613-520-2600, ext.1034.

Your participation will help me out a lot!

Sincerely,

Melissa Littau &
Dr. Janet Mantler (Advisor)
Carleton University

[Insert link to survey]

Appendix H
Snowball Sample Recruitment Email

Hello,

I am a second year Masters student at Carleton University studying Organizational Psychology. I am currently in the process of completing my Master's thesis research on generational differences in work values and work attitudes.

I would like to invite you to participate in my research. The link for the survey is provided at the end of this email.

Participation involves completing an on-line survey that should take approximately 15-20 minutes. You will be asked questions about your work values, attitudes, and experiences. In order to protect your anonymity, your name will not be associated with your responses.

I am looking to recruit as many participants as possible. If you could forward this email to any employed people that you know, it would be much appreciated and greatly help my research.

You can obtain a summary of the research findings by visiting my webpage (www.mlittau.com) in July 2009. Alternatively, if you would prefer a hardcopy version, please email me or phone me.

Should you have any questions please feel free to contact me at mlittau@connect.carleton.ca or by phone at 613-520-2600, ext.1034.

Your participation would help me out a lot! I am looking forward to working with you.

Sincerely,

Melissa Littau &
Dr. Janet Mantler (Advisor)
Carleton University

[Insert link to survey]

Appendix I
Snowball Sample Additional Work Demographic Questions

1. In which town or city do you currently work?

2. Do you work in the public or private sector?

_____Public sector

_____Private sector

Appendix J
Web Page Recruitment Notice

Are you currently working and born after 1980? We are conducting a survey on generational differences in work attitudes and work values and are in need of Millennial participants willing to complete a 15 minute on-line survey about your work values, attitudes, and experiences. Click on the link to access the survey

[Insert link to survey]

Make sure your generation is included!!

Should you have any questions please feel free to contact us by email (mlittau@connect.carleton.ca) or by phone at 613-520-2600, ext.1034.

Melissa Littau and Dr. Janet Mantler

Appendix K
Descriptive Statistics for Main Study Variables

Table K1

Descriptive Statistics for Main Study Variables

Study variable	<i>M</i>	<i>SD</i>	<i>n</i>
Work value: learn new skills	4.52	0.63	343
Work value: advancement in career	4.19	0.92	340
Work value: Influence organizational outcomes	3.81	0.94	347
Work value: Challenging tasks	4.42	0.67	346
Work value: Personal flexibility	4.24	0.71	335
Work value: Work-life balance	4.59	0.64	333
Work value: Team work	3.49	1.08	340
Work value: Feedback	4.26	0.79	342
Work value: Personally fulfilling work	4.48	0.67	337
Affective commitment	3.34	0.89	353
Normative commitment	3.11	0.93	355
PE fit: learn new skills	1.01	1.08	326
PE fit: advancement in career	1.07	1.12	330
PE fit: Influence organizational outcomes	0.94	0.94	330
PE fit: Challenging tasks	0.84	0.98	330
PE fit: Personal flexibility	0.72	0.83	324
PE fit: Work-life balance	0.78	0.94	322
PE fit: Team work	0.87	0.91	328
PE fit: Feedback	1.31	1.26	326
PE fit: Personally fulfilling work	0.95	1.06	325

Note: PE fit = Person-work environment fit.

Table K2
Correlation Matrix for Main Study Variables

Study variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1- Work value: learn new skills																				
2- Work value: advancement in career	.39**																			
3- Work value: Influence organizational outcomes	.34**	.41**																		
4- Work value: Challenging tasks	.57**	.30**	.41**																	
5- Work value: Personal flexibility	.15**	.21**	.27**	.16**																
6- Work value: Work-life balance	.18**	.22**	.07	.15**	.28**															
7- Work value: Team work	.28**	.21**	.37**	.23**	.19**	.13**														
8- Work value: Feedback	.32**	.26**	.33**	.33**	.10	.14*	.27**													
9- Work value: Personally fulfilling work	.35**	.22**	.26**	.33**	.28**	.19**	.16**	.28**												
10- Affective commitment	-.01	.08	.27**	.12*	.09	-.04	.16**	.14*	.17**											
11- Normative commitment	.05	.11	.24**	.17**	.02	-.04	.11	.11	.17**	.70**										
12 - PE fit: learn new skills	.20**	.11*	.00	.13*	-.05	.09	-.07	.06	-.01	-.44**	-.35**									
13- PE fit: advancement in career	.06	.18**	-.00	-.04	-.03	.15**	-.09	-.03	.04	-.28**	-.20**	.45**								
14 - PE fit: Influence organizational outcomes	.11	.02	.12*	.03	-.03	.01	-.09	.10	.04	-.22**	-.19**	.29**	.16**							
15 - PE fit: Challenging tasks	.14*	.02	-.03	.21**	-.06	.07	-.10	.04	.06	-.39**	-.25**	.61**	.63**	.26**						
16- PE fit: Personal flexibility	.08	.06	-.04	.05	-.07	.06	-.04	-.02	.03	-.19**	-.15**	.30**	.23**	.15**	.24**					
17 - PE fit: Work-life balance	.10	.03	-.05	.04	-.17**	.02	-.13*	-.04	-.00	-.12*	-.15**	.23**	.16**	.09	.16**	.39**				
18 - PE fit: Team work	-.13*	-.14*	-.25**	-.19**	-.04	.06	-.43**	-.16**	-.05	-.15**	-.14*	.10	.10	.03	.10	.16**	.12*			
19 - PE fit: Feedback	.15**	.03	.09	.09	-.03	.05	-.04	.33**	.12*	-.29**	-.28**	.34**	.19**	.29**	.22**	.19**	.16**	.08		
20 - PE fit: Personally fulfilling work	.05	.03	-.09	.06	-.06	.09	-.08	-.07	.11*	-.51**	-.41**	.58**	.36**	.26**	.61**	.28**	.24**	.14*	.30**	

* $p < .05$, ** $p < .01$, *** $p < .001$.

Appendix L
Additional Tables from Preliminary Analyses in the Results Section

Table L1

*Results of the Hotellings T^2 for all Organization Pairwise Comparisons on the Composite
 Dependent Variable Organizational Commitment*

Pairwise comparison	<i>F</i> (<i>df</i>)	partial η^2	Power
Snowball sample versus real estate firm	4.61** (2, 219)	.04	.78
Snowball sample versus high tech firm	9.87*** (2, 192)	.09	.98
Snowball sample versus truck dealership	7.06** (2, 184)	.07	.93
High tech firm versus real estate firm	25.68*** (2, 98)	.34	.99
High tech firm versus truck dealership	24.64*** (2, 63)	.44	.99
High tech firm versus hotel chain	9.21*** (2, 99)	.16	.97
Real estate firm versus hotel chain	3.43 (2, 126)	.05	.64
Truck dealership versus hotel chain	6.27** (2, 91)	.12	.89
Snowball sample versus hotel chain	0.77 (2, 220)	.01	.09
Real estate firm versus truck dealership	1.77 (2, 90)	.04	.36

Note. To control for the increased probability of committing a type 1 error, the minimum alpha used to determine significance for each pairwise comparison was .01 (i.e., .15 / number of comparisons; Stevens, 2002).

** $p < .01$, *** $p < .001$

Table L2

Results of the Hotellings T^2 for all Organization Pairwise Comparisons on the Composite

Dependent Variable Work Values

Pairwise comparison	<i>F</i>	partial η^2	Power
Snowball sample versus real estate firm	2.25 (9, 190)	.10	.89
Snowball sample versus high tech firm	3.09** (9, 162)	.15	.97
Snowball sample versus truck dealership	1.92 (9, 158)	.10	.82
High tech firm versus real estate firm	2.55** (9, 82)	.22	.92
High tech firm versus truck dealership	2.98** (9, 50)	.35	.94
High tech firm versus hotel chain	1.50 (9, 84)	.14	.67
Real estate firm versus hotel chain	2.25 (9, 112)	.15	.88
Truck dealership versus hotel chain	1.73 (9, 80)	.16	.75
Snowball sample versus hotel chain	0.67 (9, 192)	.03	.32
Real estate firm versus truck center	4.66*** (9,78)	.35	.99

Note. To control for the increased probability of committing a type 1 error, the minimum alpha used to determine significance for each pairwise comparison was .01 (i.e., .15 / number of comparisons; Stevens, 2002).

** $p < .01$, *** $p < .001$

Table L3

Results of the Hotellings T^2 for All Employment Status Pairwise Comparisons on the Composite Dependent Variable Organizational Commitment

Employment status	<i>F</i>	partial η^2	power
Permanent versus contingent employees	4.44** (2, 302)	.03	.76
Permanent employees versus real estate agents	1.76 (2, 258)	.01	.37
Contingent employees versus real estate agents	5.33** (2, 69)	.13	.82

Note. To control for the increased probability of committing a type 1 error, the minimum alpha used to determine significance for each pairwise comparison was .05 (i.e., .15 / number of comparisons; Stevens, 2002).

** $p < .01$, *** $p < .001$

Table L4

Results of Univariate F-tests on Gender Differences in Work Values

Work value	<i>F</i> (df)	<i>p</i>	partial η^2	power
Personally fulfilling work	8.13 (1, 309)	.005***	.03	.81
Learn new skills	4.00 (1, 309)	.046	.01	.51
Feedback	6.65 (1, 309)	.01	.02	.73
Advancement in career	2.68 (1, 309)	.103	.01	.37
Influence organizational outcomes	0.15 (1, 309)	.702	.00	.07
Challenging work	1.96 (1, 309)	.162	.01	.29
Personal flexibility	0.46 (1, 309)	.498	.00	.10
Work-life balance	3.57 (1, 309)	.06	.01	.47
Team work	1.06 (1, 309)	.304	.00	.18

Note. The adjusted alpha for determining significance after Bonferroni's correction was .005.

*** $p < .005$

Appendix M
**Additional Tables from the Generational Differences in Organizational
 Commitment and Work Values Results Section**

Table M1

Results of the Hotellings T^2 for All Generation Pairwise Comparisons on the Composite

Dependent Variable Organizational Commitment

Generation	<i>F</i>	partial η^2	power
Millennials versus Baby Boomers	2.38*** (2, 194)	.07	.94
Millennials versus Generation X	1.06 (2, 241)	.01	.23
Generation X versus Baby Boomers	5.12** (2, 262)	.04	.82

Note. To control for the increased probability of committing a type 1 error, the minimum alpha used to determine significance for each pairwise comparison was .05 (i.e., .15 / number of comparisons; Stevens, 2002).

* $p < .05$, ** $p < .01$, *** $p < .001$

Table M2

Results of the Hotellings T^2 for All Generation Pairwise Comparisons on the Composite

Dependent Variable Work Values

Generation	<i>F</i>	partial η^2	power
Millennials versus Baby Boomers	8.139*** (9, 168)	.30	.99
Millennials versus Generation X	2.63** (9, 212)	.10	.94
Generation X versus Baby Boomers	3.38*** (9, 234)	.12	.98

Note. To control for the increased probability of committing a type 1 error, the minimum alpha used to determine significance for each pairwise comparison was .05 (i.e., .15 / number of comparisons; Stevens, 2002).

* $p < .05$, ** $p < .01$, *** $p < .001$

Table M3

Mean Person-Work Environment Fit Scores by Generation for the Seven Work Values in Which There Were No Generational Differences

Person-Work Environment Fit (PE fit)	Baby Boomers <i>M</i> (<i>SD</i>)	Generation X <i>M</i> (<i>SD</i>)	The Millennials <i>M</i> (<i>SD</i>)
PE fit: Learn new skills	0.88 (0.96)	1.05 (1.10)	1.09 (1.20)
PE fit: Influence organizational outcomes	0.86 (0.90)	0.96 (0.98)	1.03 (0.94)
PE fit: Challenging tasks	0.72 (0.92)	0.80 (0.91)	1.06 (1.14)
PE fit: Personal flexibility	0.74 (0.83)	0.69 (0.84)	0.72 (0.79)
PE fit: Work-life balance	0.69 (0.93)	0.77 (0.90)	0.93 (1.00)
PE fit: Feedback	1.27 (1.25)	1.32 (1.30)	1.33 (1.19)
PE fit: Personally fulfilling work	0.85 (0.90)	0.89 (1.08)	1.21 (1.19)

Appendix N
Additional Tables from the Additional Analyses Results Section

Table N1

Testing the Mediator Effect of Person-Job Fit on Generation and Affective Commitment

Step	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>t</i>
Step 1				
Outcome: Affective commitment				
Predictor: Generation ^a	.43	.12	.26	3.70***
Step 2				
Outcome: Person-job fit				
Predictor: Generation ^a	.55	.14	.28	3.99***
Step 3				
Outcome: Affective commitment				
Mediator: Person-job fit	.47	.05	.54	8.80***
Predictor: Generation ^a	.24	.10	.14	2.34*

^a Millennials = 0; Baby Boomers = 1.

* $p < .05$, ** $p < .01$, *** $p < .001$.