

MOTIVATION AT WORK: WHICH MATTERS MORE, GENERATION OR MANAGERIAL LEVEL?

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The purpose of this study was to investigate whether generations differ in level of work motivation and whether differences in work motivation are better explained by managerial level than by generation. Data were collected from 3,440 working participants by using an online survey. Results indicate that managerial level better explains work motivation than does generation. Although Gen Xers, Late Boomers, and Early Boomers did differ in external and introjected work motivation, there was substantially more variance in work motivation explained by managerial level. Individuals at lower managerial levels had higher levels of external motivation than did those at higher managerial levels, whereas individuals at higher managerial levels had higher levels of intrinsic, identified, and introjected motivation. Understanding that work motivation appears to be more related to managerial level than it is to generation advances our knowledge of both generational differences and motivation at work. This knowledge assists practitioners by providing evidence that organizations should look to factors of level more than generation when acting to understand and improve employee motivation. Our study shows that in the current managerial working population work motivation is related to managerial level more than it is to generation.

Keywords: motivation, generations, organizational level, talent management, leadership

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Some organizational scholars have proposed that there are fundamental differences in the characteristics, values, attitudes, and behaviors of the generations (i.e., Baby Boomers, born 1946–1963, and Gen Xers, born 1964–1980) presently in the workplace (Appelbaum, Serena, & Shapiro, 2004; Smola & Sutton, 2002). They have argued that organizations must recognize these differences (Egri & Ralston, 2004; Jurkiewicz & Brown, 1998; Kopperschmidt, 2000; Yang & Guy, 2006) and suggested that failure to do so will compromise communication with employees and lead to lower levels of employee engagement and loyalty (Lancaster & Stillman, 2002; Zemke, Raines, & Filipczak, 2000).

In an effort to help organizations avoid the purportedly negative impact of generational differences, researchers have described generational differences in many work-related factors including work values (Smola & Sutton, 2002), job satisfaction (Kowske, Rasch, & Wiley, 2010), organizational commitment (Trimble, 2006), development and learning (Gentry, Griggs, Deal, & Mondore, 2009), attitudes toward change (Deal, 2004), leadership (Sessa, Deal, Kabacoff, & Brown, 2007), personality (Wong, Gardiner, Lang, & Coulon, 2008), and attitudes toward leisure (Twenge, Campbell, Hoffman, & Lance, 2010). To date, researchers have paid limited attention to generational differences in motivation for work (e.g., Cennamo & Gardner, 2008; Jurkiewicz, 2000), despite that members of younger generations are often described as lacking motivation (Hira, 2007; Myers & Sadaghiani, 2010). One recent meta-analysis found support for age-related differences in motivation (Kooij, De Lange, Jansen, Kanfer, & Differs, 2011) but offered a life span rather than a generational explanation. This inattention to generational differences in work motivation is particularly surprising given the importance of such motivation for employee performance (e.g., Gagné & Deci, 2005; Kanfer, Chen, & Pritchard, 2008; Locke & Latham, 2004).

It is interesting that existing research on generational differences at work that identifies differences among generations has rarely considered the effects of managerial level within the organization. This is somewhat surprising because level seems like an obvious confound because employees at higher levels are typically older than those at lower levels (Deal, 2007). Moreover, organizational level has been shown to be related to many of the variables examined in research on generational differences including job satisfaction (Aronson, Laurenceau, Sieveking, & Bellet, 2005), work expectations (Frame, Roberto, Schwab, & Harris, 2010), and organizational commitment (Trimble, 2006). In recent work by Hess and Jepsen (2009), the effects of generational cohorts and career stage differences in psychological contracts were simultaneously assessed, yielding more similarities than differences both for generational cohorts and career stages. However, no known work has teased out differences in motivation attributable to managerial level and generational cohort.

By neglecting to control for this confounding variable, results that appear to be generational differences could in fact be a result of organizational level differences. By focusing on generational differences in workplace attitudes and motivation if they do not actually exist, organizations may be at risk for designing talent management systems that are ineffective because they target solutions inaccurately. Only by disentangling generation from level can organizations identify where they need to put their efforts to improve motivation.

This study addresses these issues by examining whether there are generational differences in work motivation and by considering the effects of managerial level within the organization when testing for generational differences in motivation. We use the motivation framework provided by self-determination theory (SDT; Deci & Ryan, 1985, 2000) to study these differences. A large body of evidence has demonstrated the value of this framework for understanding motivation in a variety of settings including education, health care, and athletics (Deci & Ryan, 2000); it appears to be of substantial value for examining work motivation (e.g., Gagné & Deci, 2005; Grant & Berry, 2011; Judge, Bono, Erez, & Locke, 2005; Van den Broeck, Vansteenkiste, & De Witte, 2008).

SDT and Types of Motivation

Self-determination refers to self- (vs. other) caused action (Wehmeyer, Little, & Sargeant, 2009). Self-determined individuals are “authors” of their own behaviors; they experience their actions as

volitional, intentional, and self-initiated. Although the idea of self-determination is certainly not new (e.g., Deci & Ryan, 1985), organizational scholars have recently begun to emphasize its importance for optimal employee functioning and well-being at work (e.g., Gagné & Deci, 2005; Van den Broeck et al., 2008; Van den Broeck et al., 2011). This emphasis on self-determination at work is consistent with growing interest in positive psychology and positive organizational scholarship (e.g., Cameron & Caza, 2004).

Self-determination theory (Deci & Ryan, 1985, 2000; Gagné & Deci, 2005) is arguably the most widely recognized framework for understanding self-determination at work. SDT focuses on the maximization of human potential. It suggests that individuals seek psychological growth and strive to develop a coherent sense of self (i.e., wholeness, vitality) (Ryan & Deci, 2002). The theory posits that individuals' behaviors may range from nonself-determined to self-determined and suggests that functioning is enhanced when behaviors are more self-determined. The extent to which a particular behavior is self-determined is believed to be a function of the nature of the motivation underlying the behavior. SDT provides a taxonomy of motivational types and links these types to varying degrees of self-determination or autonomy (Gagné & Deci, 2005; Ryan & Deci, 2000). This taxonomy is particularly useful because it allows researchers to consider the type of motivation, not just the level of motivation (Gagné et al., 2010). The SDT taxonomy distinguishes between *intrinsic motivation* and *extrinsic motivation* (Gagné & Deci, 2005; Gagné et al., 2010; Ryan & Deci, 2000). Intrinsic motivation involves performing a work activity because it is inherently interesting, pleasurable, or satisfying; intrinsic motivation is the most self-determined form of motivation. Extrinsic motivation involves pursuing an activity for instrumental purposes rather than inherent pleasure or interest (Gagné et al., 2010; Vallerand & Ratelle, 2002). SDT identifies four types of motivation, which vary in the extent to which the activity has been internalized or "taken in" by the individuals.

The first and least self-determined type of motivation is *external motivation*, which entails pursuing an activity because of external contingencies such as pay, approval, or punishment (e.g., conducting research to get a promotion). The second form of motivation is *introjected motivation*. In introjected motivation, employees believe that they "should" engage in work activities but have not fully embraced the value of the activities. Individuals who are motivated by this form of motivation perform activities to comply with their inner "shoulds"; they strive to feel good about themselves—to maintain or enhance their egos (e.g., conducting research to meet one's own image of a good psychologist). Introjected motivation is somewhat more self-determined than external motivation. The third form of motivation is *identified motivation*. Identified motivation involves performing an activity because it is consistent with personal values and goals. In identified motivation, an activity is consciously valued and personally owned by the employee (e.g., conducting research because one values the knowledge produced by research). Identified motivation is more self-determined than introjected motivation; it represents a moderate level of autonomy. The fourth type of motivation is *intrinsic motivation*. Integrated motivation is fully self-determined; it occurs when an activity is highly valued and so much a part of the employee's self that it is habitual (Gagné et al., 2010). Integrated motivation is rarely assessed in SDT research.

Self-determination theory suggests that the type of motivation possessed by employees is a critical determinant of employee well-being and performance (Bono & Judge, 2003; Gagné & Deci, 2005). In theorizing about the effects of the motivational types, scholars often divide them into two groups consisting of (a) intrinsic motivation and identified motivation (more self-determined), and (b) external motivation and introjected motivation (less self-determined; e.g., Gagné & Deci, 2005; Sheldon & Elliot, 1998, 1999). They argued that identified motivation and intrinsic motivation are likely to be consistent with individuals' deep interests or values; they derived from the underlying or true self (Sheldon & Elliot, 1998, 1999). In contrast, external and introjected motivation result from external contingencies or internal pressures; they do not reflect the true self. The self-integrated nature of identified and intrinsic motivation is expected to lead to feelings of being "intensely alive and authentic" (Ryan & Deci, 2001, p. 147), which, in turn, boost employee well-being and enhance job attitudes and performance (Bono & Judge, 2003; Judge et al., 2005). Such benefits are not expected to result from the nonintegrated actions that derive from external and introjected motivation.

Existing research confirms these notions and substantiates the importance of the motivational types in the work place. For instance, research indicates that greater identified and intrinsic motivation relative to external and introjected motivation (i.e., represented by difference scores) is associated with more favorable employee outcomes including goal-progress creative performance, well-being, and job satisfaction (Bono & Judge, 2003; Judge et al., 2005; Otis & Pelletier, 2005; Richer, Blanchard, & Vallerand, 2002).

Although SDT scholars have traditionally condensed the four motivational types into two categories (and often used difference scores), researchers have recently noted that each of the motivational types is a distinct construct with potentially different consequences and for employees' cognition, affect, and behavior (Burton, Lydon, D'Alessandro, & Koestner, 2006; Gagné et al., 2010; Koestner & Losier, 2002). They have also suggested that combining the types may lead to a loss of information. Thus, in our study, we focus on each of the four distinct types of motivation.

Generational Cohorts

A generation is a group of people who have birth years in common, and therefore presumably experience significant public events at about the same point in their development (Strauss & Howe, 1991). Scholars have suggested that each generation's unique experiences during development lead to similarities in the characteristics, attitudes, beliefs, and behaviors of its members and ultimately create dissimilarities among the generations (Jurkiewicz & Brown, 1998; Kupperschmidt, 2000; Mannheim, 1972; Smola & Sutton, 2002; Strauss & Howe, 1991; Thau & Heflin, 1997). These dissimilarities among the generations are presumed to include differences in work attitudes and behavior (Strauss & Howe, 1991).

In this study, we focus specifically on the differences between Baby Boomers (early and late) and Generation X at work. These groups make up the bulk of the current workforce and have been the subject of a great deal of media attention. There are many beliefs about characteristics of these generations: some supported by research, some based on opinion, and some based on pure stereotyping. The large generation that was born after the end of World War II is called the Baby Boomers (born 1946–1963) and is often described as hierarchical, job focused, and highly motivated to climb the corporate ladder (Egri & Ralston, 2004; Kupperschmidt, 2000; Parker & Chusmir, 1990; Smola & Sutton, 2002; Strauss & Howe, 1991; Tulgan, 1995). This generation is so large and had such different experiences during early development (e.g., Eisenhower administration vs. Nixon administration; Elvis Presley vs. Woodstock; Korean War vs. Vietnam War) that some researchers have chosen to divide the generation in half at about 1954 because there was a dip in the birthrate at that time and therefore is a natural dividing point (Deal, 2007; Gentry et al., 2009; Kowske et al., 2010). The generation after the Baby Boomers (Boomers) is called Generation X (or Gen Xers), and begins when the birthrate declines in 1964, and ends in 1980. Gen Xers are typically described as independent, entrepreneurial, cynical, and antihierarchy (Craig & Bennett, 1997; De Meuse, Bergmann, & Lester, 2001; Egri & Ralston, 2004; Jurkiewicz & Brown, 1998; Kupperschmidt, 2000; Tulgan, 1995). Despite the pervasiveness of these views of Baby Boomers and Gen Xers, there is remarkably little empirical evidence that these stereotypes accurately describe the generations.

Many studies have reported large intergenerational differences in attitudes and values related to motivation between Gen Xers and Baby Boomers. For example, Smola and Sutton (2002) found that Baby Boomers think of work as being more central to their life than do Gen Xers. Greenhaus, Callanan, and Godshalk (2000) found that Gen Xers are less focused on symbols of occupational status than are Baby Boomers. Cennamo and Gardner (2008) found that Gen Xers expressed higher levels of status-oriented values than did Baby Boomers. Beutell and Wittig-Berman (2008) found that Boomers have higher life and job satisfaction, whereas Gen Xers have higher marital satisfaction.

At the same time, other research has revealed large similarities among the generations. Using data collected over 30 years so they could compare each generation's responses at the same age, Kowske et al. (2010) found that Early Baby Boomers, Late Baby Boomers, and Gen Xers were not substantially different in their levels of job satisfaction or their intention to turnover. Within the

information technology profession, Gen Xers and Baby Boomer were found to be similar in their thoughts on work involvement, work attachment, commitment to the organization, and commitment to the profession (Davis, Pawlowski, & Houston, 2006). Gentry et al. (2009) found that Early Baby Boomers, Late Baby Boomers, and Generation Xers currently in the workforce were substantially similar in their expectations and desires for development. In addition, Gentry, Griggs, Deal, Mondore, and Cox (2011) found that Baby Boomer and Gen X managers are more similar than different in the leadership competencies they believed are needed to succeed in their organizations and the level at which they are skilled at those competencies. Similarly, Deal (2007) found that Early Baby Boomers, Late Baby Boomers, and Gen Xers currently in the workforce were substantially similar in work attitudes, expectations of leadership, and desire for learning—unless they were from different levels in the organization. None of these studies addressed the issue of generational differences in motivation or whether organizational level was a more important covariate.

Two studies are suggestive of generational differences in work motivation, although they do not use the SDT motivation framework. Jurkiewicz (2000) investigated the relationship between generation and job attribute preferences, which were described as motivational factors. Using a cross-sectional sample of 278 public sector employees, Jurkiewicz found that Gen Xers were different from Baby Boomers on the desire to learn new things and to be free from supervision but similar in the desire to benefit society and make a high salary (among others). They did not control for organizational level in the analysis.

Recently, Cennamo and Gardner (2008) used a cross-sectional design to investigate the relationship between generational differences and different work motivations. They found that Boomers reported lower levels of status motivations than did Gen X and that Boomers and Gen Xers reported equivalent levels of freedom motivation. They also found that Boomers perceived greater alignment between their own work motivations and their organizations' reward systems than did Gen Xers. Though they did control for gender and organizational tenure in their analyses, they did not account for managerial level.

We extend the research done by Jurkiewicz (2000) and Cennamo and Gardner (2008) by using a cross-sectional design, examining a broader sample of employees from both the public and private sector, including Gen Xers and Boomers, and looking directly at work motivation through the theoretical lens of SDT while directly controlling for the effect of managerial level.

Level in the Organization

Although researchers often examine the effects of demographic characteristics, such as gender, race, nationality, age, and generation on employees' experiences in organizations, the influence of organization level, in general, or managerial level, in particular, is infrequently examined. For the past 75 years (beginning with Hoppock, 1935), the few researchers who have used organizational level as an explanatory factor have consistently shown that work attitudes such as job satisfaction vary systematically—and positively—with organizational level. None of the work has focused exclusively on differences among managerial levels. Most of the research on organizational level and work attitudes has been focused on job satisfaction and has shown that job satisfaction increases with organizational level (e.g., Aronson et al., 2005; Smith & Brannick, 1990). Other work (e.g., Frame et al., 2010) found that people at higher levels in organizations are more likely than are people at lower levels to see agentic behaviors and attitudes (i.e., being self-assertive or independent) as important for success.

A number of explanations for the positive relationships between organizational level and work attitudes and expectations have been hypothesized, including the presence of more engaging job characteristics, better rewards for performance, greater personal interest, and enhanced agency at higher levels of the organization (Frame et al., 2010; Robie, Ryan, Schmieder, Parra, & Smith, 1998). Though researchers have not arrived at agreement as to the exact mechanisms by which level is related to employees' attitudes, there is considerable evidence that such a relationship exists.

Given the relationship between organizational level and employee attitudes and the number of people of every generation filling the managerial ranks within organizations, managerial level is of

particular importance in research on generational differences in employees' attitudes because individuals at higher managerial levels of the organization are likely to be older and represent different generational cohorts than individuals at lower managerial levels. Some of the differences that researchers and others attribute to generation may in fact be a result of managerial level in the organization, rather than of generation. For instance, one recent study (Deal, 2007) found that managerial level in the organization, rather than generation, explained differences in the work attitudes, expectations of leadership, and desire for learning. Silents (born 1925–1945), Baby Boomers, and Gen Xers within the same managerial level had similar work attitudes, expectations of leadership, and desire for learning. Differences in work attitudes, expectations of leadership, and desire for learning were solely a result of managerial level in the organization; generation as a factor did not explain a significant portion of the variance.

SDT suggests that managerial level may be especially important in research on generational differences in work motivation. A key premise of SDT is that the type of motivation experienced by an individual is a function of the characteristics of the job (Gagné & Deci, 2005). Managerial positions that provide individuals with more opportunities for freedom and choice (e.g., encouraging initiative, providing some choice of assignments) are likely to enhance the extent to which individuals believe they can act in accordance with the self, thereby facilitating identified and intrinsic motivation (Gagné & Deci, 2005). In contrast, jobs that provide little sense of personal volition (e.g., controlling supervision, no choice of assignments) may discourage self-integrated action and evoke external and introjected motivation. Because higher level managerial jobs are more likely to provide greater freedom and personal choice than are lower level managerial jobs, SDT suggests that individuals who hold such jobs may be working in a context that facilitates more identified and intrinsic motivation and less external and introjected motivation (Deci & Ryan, 2000; Ryan & Deci, 2002).

The Present Study

Although there is substantial literature examining work attitudes as a function of generation, and some preliminary work in the area of generations and motivation (e.g., Cennamo & Gardner, 2008; Inceoglu, Segers, & Bartram, 2012; Jurkiewicz, 2000), researchers have not yet explored differences in external, introjected, identified, and intrinsic motivation among the generations currently working, nor have they identified whether generation or organizational level explains more of the variance in motivation. Given the importance of individuals' motives for their outcomes in organizations, it is important to explore generational differences in motivations for work. In examining these differences using a cross-sectional design, it is particularly critical to account for the effects of managerial level in the current working population. Research on generational differences at work has rarely considered the effects of managerial level within an organization, despite that managerial level is related to work attitudes and is likely to differ across generations. Managerial level may be especially important in research on work motivation as differences in the characteristics of jobs and jobholders across managerial levels may be associated with differences in work motivations.

Our study addresses these issues by examining whether generation or organizational level explains more of the variance in the four types of work motivation. We specifically hypothesize that:

Hypothesis 1: Managerial level will explain more variance in intrinsic motivation than will generation.

Hypothesis 2: Managerial level will explain more variance in identified motivation than will generation.

Hypothesis 3: Managerial level will explain more variance in external motivation than will generation.

Hypothesis 4: Managerial level will explain more variance in introjected motivation than will generation.

Method

Participants and Procedure

Participants were 3,440 individuals (1,723 men; 1,717 women) from more than 200 different organizations, who identified themselves as having been born in the United States. Respondents participated voluntarily in a web-based survey between March 2008 and December 2010. Participants were informed that results would be used for research purposes only. The survey included a series of questions about demographic and lifestyle characteristics, motivation, work attitudes, and beliefs about leadership.

Participants received the link to the survey as a result of their relationship with the Center for Creative Leadership. All participants received the option to download a book in thanks for their participation. Response rates are not available because the researchers are unable to determine how many people had access to the link, which was widely circulated and maintained on a website during data collection.

On average, participants were 46.1 year of age ($SD = 8.36$). The sample included 50.3% males and 49.7% females. Eighty-one percent of respondents indicated that their race was White; the remainder selected African American (8%), Asian (2%), Hispanic (2%), multiracial (2%), other (3%), or failed to respond (2%). Participants were well-educated; 40% had an undergraduate degree, and 45% had a graduate degree. Only 12% did not have at least an undergraduate degree. Approximately 1% did not provide educational information. A large majority (85%) worked in private-sector organizations (15% in public-sector organizations).

Measures

Generation. Respondents were asked to indicate their birth year. They were assigned to generations based on accepted generational birth-year ranges (e.g., Gentry et al., 2009; Kowske et al., 2010): Early Boomers (born 1946 to 1954), Late Boomers (born 1955 to 1963), and Generation Xers (born 1964 to 1980). Eighteen percent of respondents were Early Boomers, 35% were Late Boomers, and 47% were Gen Xers.

Managerial level. Managerial level was represented by five categories of management positions: *top*, such as chief executives, operating officers, presidents (10.9%); *executive*, such as vice presidents, directors, board-level professionals (23.8%); *upper middle*, such as department executives, plant managers, senior professionals (30.2%); and *middle*, such as office managers, professional staff, and midlevel administrators (35.2%). Respondents selected one of the categories.

Type of motivation. External, introjected, identified, and intrinsic motivation were each measured using the four subscales of Gagné et al.'s (2010) Motivation at Work Scale. Gagné et al. (2010) demonstrated the factor structure and discriminant validity of the scales with samples of workers in different industries. The scale included three items for each type of motivation. Participants indicated how well each of the items described why they were doing their job on a scale ranging from 1 (*not at all*) to 5 (*exactly*). A sample item for external motivation ($\alpha = .75$) is "I do this job because it allows me to make a lot of money." A sample item from the introjected motivation scale ($\alpha = .74$) is "I do this job because my work is my life and I don't want to fail." A sample item for identified motivation ($\alpha = .75$) is "I do this job because it fits my personal values." A sample item for intrinsic motivation ($\alpha = .84$) is "I do this job because I enjoy this work very much."

Results

Before exploring the relationship of managerial level and generation with type of motivation, we first determined whether respondents of different generations were normally distributed across managerial levels. A Pearson chi-square test indicated that the generations were not equally distributed across levels, Pearson $\chi^2(6) = 74.09, p < .001$. As shown in Table 1, members of older

Table 1
Distribution of Generations by Managerial Level: Percentage of Each Generation Within Managerial Level and Adjusted Residual (Adj. Res.)

Variable	Early Boomer		Late Boomer		Generation X	
	%	Adj. Res.	%	Adj. Res.	%	Adj. Res.
Top	17.6	5.9	11.6	1.0	7.8	-5.5
Executive	24.1	0.2	25.7	2.0	22.2	-2.1
Upper middle	21.7	-5.1	32.2	1.9	31.9	2.1
Middle/Professional	36.6	0.8	30.5	-4.2	38.1	3.4

generations were significantly more likely to be found at higher managerial levels than were members of younger generations.

To test whether the four types of motivation were distinct, we calculated intercorrelations among the four scales (see Table 2) and conducted a series of confirmatory factor analyses (CFAs) on data for the entire sample. We found that the fit of a four-factor CFA model was acceptable, despite a significant chi-square, $\chi^2(48) = 1289.59$, $p < .001$; comparative fit index (CFI) = .92; root-mean-square residual (RMR) = .08, root-mean-square error of approximation (RMSEA) = .09. Standardized factor loadings for the indicators ranged from .61 to .87; all were statistically significant ($p < .001$). We compared the fit of the four-factor model with the fit of alternative models in which the number of factors was reduced by combining various factors. The four-factor model fit the data better than (a) a two-factor model, $\Delta\chi^2(5) = 4403.27$, $p < .001$, consisting of intrinsic motivation and external motivation (i.e., external, introjected, identified motives), and (b) a two-factor model, $\Delta\chi^2(5) = 2370.88$, $p < .001$, consisting of less self-determined (i.e., external and introjected motives) and more self-determined motivation (i.e., identified and intrinsic motivation). The four-factor model fit was also superior to all possible three-factor models, $\Delta\chi^2(3)$ ranged from 413.93 to 2801.10. These results confirmed the superiority of the four-factor model and suggested that the four types of motivation were distinct factors.

In addition, we used stacked multigroup analysis to test for generational differences in the factor structure (Arbuckle & Wothke, 1999). To perform this analysis, we simultaneously estimated CFAs for each of the three generations, comparing the fit of a model in which the loadings of the factors on their measures were free to differ across generations with the fit of a model in which the loadings were constrained to be equal (identical) across the generations. The fit of the model without equality constraints, $\chi^2(144) = 1418.78$, $p < .001$ (CFI = .92, RMR = .09, RMSEA = .05) did not differ significantly from the fit of the model with such constraints, $\chi^2(160) = 1436.63$, $p < .001$ (CFI = .92, RMR = .09, RMSEA = .05); $\Delta\chi^2(16) = 17.85$, *ns*. These results support the most parsimonious model—that in which the factor loadings are equal across the generations.

We performed several analyses of variance (ANOVAs) to explore the research questions. A substantial body of research evidence (e.g., Konrad, Richie, Lieb, & Corrigall, 2000) indicates that there are differences in the importance that men and women attach to various job attributes (e.g.,

Table 2
Intercorrelations Among Dependent Variables: Complete Sample

Variable	1	2	3	4
1. External	—			
2. Introjected	.306**	—		
3. Identified	.039	.364**	—	
4. Intrinsic	-.130**	.281**	.690**	—

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

income, promotions), suggesting that gender may influence work motivation. Therefore, participant gender was included in the analysis as a control variable. There was not enough variation in racial category to include race in the analysis.

To test each hypothesis concerning the effects of generation on motives, we performed a 4 (top, executive, upper middle, middle/professional,) \times 3 (Early Boomers, Late Boomers, Gen Xers) \times 2 (males, females) ANOVA for each of the four types of motivation.

Because the large sample increased the likelihood that very small effects would yield statistically significant results using traditional cutoffs for significance (i.e., $p < .05$), we tested the observed power of each effect and calculated partial eta squared (percentage of variance explained, η_p^2). Consistent with published classification of effect sizes (e.g., Cennamo & Gardner, 2008; Clark-Carter, 1997), effects sizes (η_p^2) were classified as follows: $\eta_p^2 < .01$ is classified as small, .01 to .10 is classified as medium, and greater than .10 is classified as large. Though we report all statistically significant effects, consistent with Cohen (1988), we only treated effects as significant if the observed power was greater than or equal to .80. Post hoc tests of differences between the means (Tukey's HSD) were conducted.

Hypothesis 1: Level Will Explain More Variance in Intrinsic Motivation Than Will Generation

The ANOVA yielded no significant differences in intrinsic motivation by generation, $F(2, 3416) = 2.81$, *ns*, observed power = .55, $\eta_p^2 = .002$. (See Tables 3 and 4.) However, there were significant differences in intrinsic motivation by level, $F(3, 3416) = 38.9$, $p < .01$, observed power = 1.0, $\eta_p^2 = .033$, also meeting our power threshold of .8. Post hoc analyses revealed that those higher in the organization were more intrinsically motivated than those lower in the organization. (See Tables 5 and 6).

Hypothesis 2: Level Will Explain More Variance in Identified Motivation Than Will Generation

There were no significant differences by generation for identified motivation, $F(2, 3416) = 1.38$, *ns*, observed power = .30, $\eta_p^2 = .001$. (See Tables 3 and 4.) However, there were significant differences in identified motivation by level, $F(3, 3416) = 40.3$, $p < .01$, observed power = 1.0, $\eta_p^2 = .034$, also exceeding our power threshold of .8. Post hoc analyses revealed that those higher in the organization had higher levels of identified motivation than those lower in the organization. (See Tables 5 and 6).

Hypothesis 3: Level Will Explain More Variance in Introjected Motivation Than Will Generation

While the ANOVA revealed significant differences by generation for introjected motivation, $F(2, 3416) = 6.32$, $p < .01$, observed power = .9, $\eta_p^2 = .004$, post hoc tests did not show significant differences among generational groups. (See Tables 3 and 4.) There were significant differences in introjected motivation by level, $F(3, 3416) = 18.46$, $p < .01$, observed power = 1.0, $\eta_p^2 = .016$, also exceeding our power threshold of .8 and with a larger effect size than for generation. Post hoc

Table 3
Type of Motivation by Generation: Descriptive Results

Variable	External		Introjected		Identified		Intrinsic	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Early Boomer	2.96	0.9	2.83	1.04	3.7	0.89	3.80	0.94
Late Boomer	3.00	0.87	2.81	0.98	3.57	0.86	3.67	0.89
Generation X	3.06	0.91	2.9	0.99	3.65	0.80	3.65	0.88

Table 4
Differences by Generation: Analysis of Variance Results

Variable	<i>df</i>	<i>F</i>	η_p^2	<i>p</i>	Power
External	2, 3416	6.7	.004	<.01	.916
Introjected	2, 3416	6.32	.004	<.01	.900
Identified	2, 3416	1.38	.001	ns	.298
Intrinsic	2, 3416	2.81	.002	ns	.554

analyses revealed that those higher in the organization had significantly higher levels of introjected motivation than those lower in the organization. (See Tables 5 and 6).

Hypothesis 4: Level Will Explain More Variance in External Motivation Than Will Generation

The ANOVA revealed significant differences by generation for external motivation, $F(2, 3416) = 6.7$, $p < .01$, observed power = .916, $\eta_p^2 = .004$, but post hoc tests did not show significant differences among generational groups. (See Tables 3 and 4.) There were significant differences in external motivation by level, $F(3, 3416) = 8.77$, $p < .01$, observed power = .995, $\eta_p^2 = .008$, also exceeding our power threshold of .8 and with a larger effect size than for generation. Post hoc analyses revealed that those in top management positions in the organization had significantly lower levels of external motivation than those lower in the organization. (See Tables 5 and 6).

Discussion

Consistent with some published results (e.g., Cennamo & Gardner, 2008; Kowske et al., 2010), but contrary to claims of substantial differences among the generations in work attitudes (Craig & Bennett, 1997; De Meuse et al., 2001; Egri & Ralston, 2004; Jurkiewicz & Brown, 1998; Kopperschmidt, 2000; Parker & Chusmir, 1990; Smola & Sutton, 2002; Strauss & Howe, 1991; Tulgan, 1995), our analyses yielded few generational differences in type of motivation. Moreover, our results suggest that managerial level has a stronger relationship with work motivation within the current working population than does generation. Consistent with expectations, respondents from older generations were more likely to be at higher managerial levels than were respondents from younger generations, and level in the organization explained more variance in motivation than did generation for all four types of motivation (intrinsic, identified, introjected, and external).

Our results lead to several observations. First, older people tend to be at higher managerial levels in organizations than younger people. This likely will strike the reader as shockingly unsurprising.

Table 5
Type of Motivation by Managerial Level: Descriptive Results

Variable	External		Introjected		Identified		Intrinsic	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Top (T)	2.84 ^a	1.06	3.15 ^b	1.09	4.02 ^b	0.83	4.09 ^b	0.84
Executive (E)	3.01	0.87	2.95 ^c	0.93	3.73 ^c	0.80	3.77 ^d	0.88
Upper middle (UM)	3.03	0.85	2.81	0.95	3.60	0.78	3.64 ^e	0.86
Middle/Professional (MP)	3.08	0.89	2.74	1.03	3.50	0.88	3.54	0.91

^a Significantly different from E at $p < .05$; and UM & MP at $p < .01$. ^b Significantly different from E, UM, & MP, at $p < .01$. ^c Significantly different from UM & MP at $p < .01$. ^d Significantly different from UM at $p < .05$ & MP at $p < .01$. ^e Significantly different from MP at $p < .05$.

Table 6
Differences by Level: Analysis of Variance Results

Variable	<i>df</i>	<i>F</i>	η_p^2	<i>p</i>	Power
External	3, 3416	8.77	.008	<.01	0.995
Introjected	3, 3416	18.46	.016	<.01	1.00
Identified	3, 3416	40.3	.034	<.01	1.00
Intrinsic	3, 3416	38.94	.033	<.01	1.00

Though common sense, it is important to recognize and account for the unequal distribution of generations across managerial levels when examining generational differences because level has been shown to be predictive of workplace attitudes. Research on generational differences among currently working adults that gathers data at one point in time and does not control for level in the organization leaves a clear confounding variable uninvestigated and is at risk of attributing variance to generation that more rightly should be attributed to level in the organization. Given the clear confound of generation with level in the organization, generational differences should be accepted as a possible explanation only after controlling for level in the organization.

Second, people at different managerial levels express different amounts of the four types of motivation, although the differences explain a small portion of the variance in motivation. Though the effect sizes reported here are small (for introjected motivation and external motivation) to medium (for intrinsic motivation and identified motivation), it is useful to note that the percentage of variance explained is consistent with published articles that focus on generational differences in the workplace (e.g., Cennamo & Gardner, 2008; Dries, Pepermans, & De Kerpel, 2008).

Third, neither intrinsic motivation nor identified motivation was related to generation; the cohorts currently in the workplace report about equal levels of intrinsic and identified motivation. These findings are in direct conflict with the popular belief that younger generations are less intrinsically motivated and are more likely to be in jobs that are consistent with their personal values (identified motivation) than are older cohorts (Tulgan, 1995; Zemke et al., 2000). However, there are significant differences with moderate effect sizes by level in the organization, with people at higher levels expressing greater intrinsic and identified motivation.

This raises the interesting question of whether people rise within management of organizations because of the type of motivation they possess, or whether the type of work they do affects the nature of their motivation. With regard to the higher levels of intrinsic and identified motivation found at the upper levels of management within organizations, there are at least two possible explanations for the relationship. The first is that people who are more intrinsically motivated and find more meaning in their work (identified motivation) are more likely to be found at higher managerial levels in organizations because they work harder and care more about their work (and are therefore more likely to be promoted) than do people with lower levels of those motivations. A second equally plausible explanation is that being at a managerial level in the organizations where the job is interesting, you have a greater span of control, you can see the impact you are having on your organization, and the people around you allow you to be your true self, and, this results in greater joy and meaning in your work (intrinsic and identified motivation). With the data we currently have available, we cannot determine which of these explanations is most consistent with organizational reality, but both explanations are consistent with SDT.

A fourth interesting observation is that external motivation seems to be slightly lower for individuals at the top of the organization than it is for people in roles below that level. Differences in external motivation across levels may have been because of fundamental differences in job characteristics (such as pay) or jobholders as a function of level. Consistent with traditional need theories of motivation (e.g., Hull, 1943), top-level employees may express less external motivation because they have already established themselves financially and professionally and are less concerned with gaining rewards and approval. In contrast, individuals at lower levels may have had less opportunity to establish themselves, and therefore financial rewards may be more pertinent to

them. They also may be more concerned about garnering the approval of others in order to advance their careers.

The results for introjected motivation (though small) were surprising. As noted above, the autonomy and personal freedom available at upper levels of the managerial hierarchy should reduce the likelihood of actions that are not fully integrated into the self. Thus, introjected motivation, which is not fully self-integrated, should be lowest among upper level employees. To the contrary, however, we found that individuals at the top report more introjected motivation than all other levels, and executives report higher introjected motivation than upper middle and middle/professional managers.

The finding that higher level managers report more introjected motivation suggests that compared with professionals, employees at higher levels seem to be motivated by the need to view themselves as “winners” or feel good about themselves. One possible explanation is that the individuals who seek upper level managerial positions in organizations do so, in part, because they view achieving such positions as a way to feel good about themselves (Graves, Ruderman, Ohlott, & Weber, 2012). Upper level positions may provide substantial opportunities to demonstrate competence and, thus, may attract those who have a tendency toward introjected motivation. A second possible explanation is that top-level managers need to be more concerned about maintaining their reputations or being seen as winners than managers at lower levels. Top-level managers are highly visible; therefore, the social consequences of failure are likely substantially greater than at lower levels.

A third possible explanation for this finding is that the individuals who seek higher level positions are inherently different than those who do not. Introjected motivation has a strong component of ego involvement; individuals possess a self-evaluative focus and seek to demonstrate their own competence by gaining positive and avoiding negative judgments of their abilities (Deci & Ryan, 2000; Nicholls, 1984). Thus, individuals at higher managerial levels may be more competitive people who have a greater need to view themselves as winners. They may have a high need for power or achievement (McClelland, 1985) and may seek to fulfill these needs through their work at higher managerial levels. Introjected motivation also has a strong component of compulsive striving and appears to be associated with workaholic tendencies (Graves et al., 2012; van Beek, Taris, & Schaufeli, 2011; Van den Broeck et al., 2011). Individuals who are likely to be promoted to demanding higher management positions may well have workaholic tendencies that facilitate introjected motivation.

It is also possible that some of the actions and behaviors required at higher managerial levels conflict with managers’ personal preferences. Top management positions are extremely demanding, and there may be role demands that do not satisfy managers’ personal values and interests. However, individuals who achieve higher managerial levels understand that they must fulfill these role demands if they are to be successful, even if the demands are inconsistent with their personal values. This would lead to higher levels of introjected motivation in comparison with people at lower managerial levels, who may not be subjected to as many role demands that are inconsistent with their personal preferences.

Though some role demands may be inconsistent with managers’ personal preferences, at the same time they may also be engaging in more work that is consistent with their personal preferences than do managers at lower levels. In this study, we found that individuals at higher managerial levels appear to express more of these forms of self-integrated motivation than those at lower managerial levels. This finding is consistent with the notion that higher level jobs offer a greater sense of autonomy or personal volition than do lower level managerial jobs, which results in greater identified and intrinsic motivation.

Limitations

Some limitations of the present research should be noted. Respondents self-selected to participate through the CCL website, so they are all likely interested in leadership and self-development, which may make them different from the general managerial population. All respondents were in managerial positions of some kind and were highly educated, so they are not representative of the

population at large. Also, the data are all self-reported and were collected at one time, which precludes causal inferences.

The sample consisted of people of different generations who are currently working. As in other published work in the area (e.g., Cennamo & Gardner, 2008; Jurkiewicz, 2000), we are not able to untangle the effects of generation, age, and time. For instance, we cannot compare what people of different generations thought when they were the same age, or reach any conclusions about generational shifts over time. We can only compare what currently working managers from different generations say at the present time, whatever their life stage, maturation level, or age. This means that at this point in time managers cannot assume that any differences among generations are result of stable generational characteristics. Instead, the differences need to be interpreted by managers in light of the life stage of the generation involved. Future research should seek to determine the impact of these three alternative factors so that managers can better understand the cause of issues that may arise and can address them more effectively.

Another limitation is the exclusion of Millennials from our analyses. We were unable to include Millennials because our Millennial sample was too small. Therefore the results only reflect the working population that is currently over 32 years of age.

Our study was able to consider the effects of gender, but we were unable to account for the influence of other demographic factors (e.g., organizational tenure, job tenure) that might covary across generations or managerial levels because we do not have the data available. Including such demographic factors would have enhanced our ability to isolate the effects of generation and level. Finally, because our sample all comes from the United States, we cannot identify whether the current pattern holds for generations in other countries.

Implications and Future Research

There is an important implication of this work for the study of generational differences. Conclusions drawn about generational differences may very well change if the proper control variables, such as managerial level, are included. There are also implications for practice. Recognizing that managerial level is a better predictor of motivation than generation should result in organizations focusing their energy on designing programs and policies based on level rather than on erroneously perceived differences in generations. Organizations are better off designing around level; for example, a Gen Xer in a senior management position (e.g., director) may be motivated differently than a Gen Xer in a middle management position and that motivation has nothing to do with their generation.

As mentioned earlier, one of the interesting questions our work raises is whether people get to the top of management within organizations because of the type of motivation they possess, or whether the type of work they do affects the nature of their motivation. Future research should examine whether people get to the top because they identify with and love their work, whether upper level employees identify with and love their work because the characteristics of a job higher in the organizational hierarchy fits them well, and whether this changes as a result of generation. One particularly defensible way to do this would be to conduct longitudinal studies over decades that include large samples that are representative of each generational cohort. Data collected intermittently over decades from the same sample would allow us to test competing hypotheses and help us to determine whether changes in motivation, level in the organization, and attitudes are a result of generation, age, life stage, maturation level, or environment. For example, we could directly test whether interest and identification with a specific type of work resulted in promotions and job success or whether promotions and job success resulted in increased interest and identification with the work. Similarly, we could identify the degree to which motivational changes resulted from generational cohorts versus patterns connected with life stages.

Because results from this sort of longitudinal research will not be available in the immediate future, researchers should work now to detangle generation from other possible explanatory factors such as life stage, as we have done here with level in the organization. It would be particularly useful for organizations to better understand the relationship between individual motivation and advancing in organizations because it has implications for selection, engagement, retention, promotion, and organizational values—all of which in turn affect the organization's bottom line.

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