

## A COMPARISON AMONG WORKER TYPES USING A COMPOSITES APPROACH AND MEDIAN SPLITS

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*The current study examined Spence and Robbins' (1992) worker types in terms of correlates of workaholism (e.g., work-life imbalance, obsessive-compulsive behavior). A survey was administered to professionals, who were then classified into different worker types following the traditional median-split technique. The data were also analyzed with three composite variables that capture the worker types in a continuous fashion. The results of the correlation analysis with the composites were similar to those obtained with the median-split approach. Specifically, workaholics had higher levels of work-life imbalance than work enthusiasts, whereas unengaged workers and relaxed workers had low levels; workaholics and positively engaged workers had high levels of obsessive-compulsive behavior, whereas work enthusiasts, unengaged workers, and relaxed workers showed low levels.*

Key words: worker types, composites approach, median-split, obsessive-compulsive behavior, work-life balance

Although workaholism is not a disorder recognized by the *Diagnostic and Statistical Manual of Mental Disorders* (DSM), over the past three decades it has become a popular term that describes individuals who have an uncontrollable need to work constantly. The term has grown in familiarity and has been used progressively more often in the media, on the Internet, and in the empirical literature since Oates (1971) first created the term *workaholic* to describe a person whose enhanced necessity to work impedes multiple life functions.

In North America, particularly among highly educated individuals, there has been a rise in hours worked (and overtime) because of increased responsibilities and heavier workloads, thereby leading to higher levels of stress. Workaholism can also hinder interpersonal relationships and lead to marital dissatisfaction (Carroll, Robinson, & Flowers, 2002; Porter, 2001). Additionally, workaholism can be counterproductive through a decline in either productivity or the quality of performance (Garson, 2005). Workaholism is also associated with adverse physiological and psychological health outcomes (e.g., Worrall, Cooper, & Campbell, 2000), enhanced fatigue (Rosa, 1995), and burnout (Barnett, Gareis, & Brennan, 1999).

Workaholics, especially managers, exhibit behavioral tendencies that

can influence others in the organization, such as always checking on their employees' performances (Graves, Ruderman, & Ohlott, 2006). In addition, some components of workaholism are related to organizational deviance (Galperin & Burke, 2006). Coworkers may avoid workaholics because of potential conflicts, which may in turn create a ripple effect—spreading the same behavior tendencies throughout the organization (Graves et al., 2006). Although workaholism has become a colloquial term, it is for all these reasons that theorists have called for more scientific research on this very important concept.

### Worker Types

Workaholism researchers have recently suggested the importance of distinguishing among *types* of workers (e.g., Aziz & Zickar, 2006). These distinctions have a bearing on our understanding of workaholism (Bonebright, Clay, & Ankenmann, 2000). Thus, we report an in-depth investigation of worker types as proposed by Spence and Robbins (1992; see Table 1), examining them in terms of correlates of workaholism (e.g., work-life imbalance, hours worked). Based on high and low scores on work involvement, work drive, and work enjoyment, Spence and Robbins identified six worker types. In this article, we present a new way to study Spence and Robbins' worker types, without the loss of power that accompanies the median-split approach they used.

Table 1  
*Spence and Robbins' (1992) Worker Types*

Worker type	Work involvement	Work drive	Work enjoyment
Workaholic	High	High	Low
Positively engaged worker	High	High	High
Work enthusiast	High	Low	High
Relaxed worker	Low	Low	High
Disenchanted worker	Low	High	Low
Unengaged worker	Low	Low	Low

*Workaholics* spend a considerable amount of time thinking about and engaging in work, but they do not really enjoy working, thereby leading to strife in their relationships with family, friends, coworkers, and members of the community. Due to this work-life imbalance, they can experience a great deal of stress and health problems. Workaholics are perfectionists and have a difficult time delegating tasks. They might not engage in social interactions around the workplace, but they tend to be fairly productive.

*Positively engaged workers* work a lot, spend a great deal of time thinking about work, and simply love the act of working. However, this devotion to work can lead to health problems and conflict with family members, friends, and coworkers. In essence, such individuals are always doing something in the office, are highly energetic, have positive affect, and are ideal employees.

The *work enthusiast* does a lot of work and enjoys it but does not place much value in work quality. In turn, this person is not stressed out and is fairly balanced, thereby offsetting the physical and mental health effects from working long hours. Such individuals are always present and "bubbly"

but are likely to make mistakes and get involved in office politics.

*Relaxed workers* have high levels of emotional well-being, few psychosomatic complaints, and very low work–family conflict. They typically work a few more hours per week than the other nonworkaholic types, even though they feel very little pressure to work and are not motivated by their salaries.

The *disenchanted worker* is the most troubled of the nonworkaholic types and experiences very low life satisfaction and little sense of purpose in life. Despite typically working the least number of hours of all the typologies, this worker type has poor psychological outcomes, is highly stressed, and has no motivation to work.

*Unengaged workers* experience moderate levels of life satisfaction and sense of purpose in life. They do not feel a lot of pressure at work, which leads to minimal stress and health complaints. Working only the hours required of them, unengaged workers have no motivation to work and are complacent with their careers.

### Spence and Robbins' Classification of Worker Types

Spence and Robbins' (1992) measure is the most widely applied assessment of worker types (Porter, 1996). Their scale is comprised of work involvement, work drive, and work enjoyment. *Work involvement* represents the amount of time and energy a person dedicates to work-related activities, both on and off the job. *Work drive* reflects an individual's internal compulsion to work, regardless of external rewards. *Work enjoyment* is simply the positive feelings and emotional satisfaction provided by work.

Spence and Robbins' (1992) measure has often been used in psychological research to investigate the relationship between worker-type components (work involvement, work drive, work involvement) and personality factors (e.g., extraversion, conscientiousness; Burke, Matthiesen, & Pallesen, 2006), workplace deviance (Galperin & Burke, 2006), and organizational climate (e.g., work pressure, supervisor support; Johnstone & Johnston, 2005). Their measure has demonstrated acceptable reliability and factor structures that support their three facets (Burke, Richardsen, & Martinussen, 2002).

### Current Study

Given the reliance on the median-split technique in previous studies, it is important that some of its associated problems be discussed. The traditional median-split technique is problematic for a few reasons (Irwin & McClelland, 2003). First, there is a loss of power because of the increase in missing data, as demonstrated in our study, and the increase in the likelihood of Type II error resulting from classifying individuals in the middle group in the same way as those at the low or high end of the spectrum. Additionally, if there are curvilinear relationships in the data, the median-split technique can fail to detect such relationships. It is important to clarify that the median-split technique, in and of itself, does not result in fewer participants. However, the worker types as defined here *must* exclude some participants because there can be combinations of work involvement, work drive, and work enjoyment that fall outside of the worker-type categories.

Essentially, we explored Spence and Robbins' (1992) worker types using

two different methods and added to the existing literature in several ways. First, until now, there have not been any studies attempting to compare work stress among different worker types; hence, we explored this domain. Second, we augmented the current research by investigating different worker types in terms of factors thought to be associated with workaholism. Third, we used a composites approach to investigate Spence and Robbins' worker types, which allowed us to overcome the previously mentioned problems associated with using median splits.

Bonds-Raacke (2006) encouraged the use of cluster analysis in areas of psychology other than clinical. Although their three-cluster solution found a cluster that matched Spence and Robbins' (1992) conceptualization of the workaholic, Aziz and Zickar (2006) stressed the importance of considering definable worker types in future research. Because few systematic attempts have been made to empirically identify Spence and Robbins' worker types, especially in organizational samples, the current study's primary goal was to further explore different worker types in terms of correlates of workaholism. Relations between each worker type and other factors associated with workaholism, namely, work-life imbalance, obsessive-compulsive behavior (OCB), work stress, and total weekly work hours, were examined using both the traditional (median-split) methods of Spence and Robbins and a new composites approach (see the Method section). A more narrow focus on these variables helps verify past findings and clarifies the relations between worker types and correlates of workaholism.

### Work-Life Imbalance

Kirchmeyer (2000) viewed work-life balance as the even distribution of time, energy, and commitment across all life domains. Marks and MacDermid (1996) saw it as a reflection of how individuals orient themselves across different roles in life. Based on these viewpoints, Greenhaus, Collins, and Shaw (2003) defined work-family balance as "the extent to which an individual is equally engaged in, and equally satisfied with, his or her work role and family role" (p. 513).

These definitions share the commonality that balance is equal experiences in work and family roles. However, if family is taken as the central feature in the nonwork domain, other aspects of nonwork life (e.g., spiritual activities) are neglected. Hence, Fisher, Bulger, and Smith (2009) created the term *work-life imbalance*, in which "imbalance" refers to an occupational stressor based on lost resources of time, energy, and feelings toward work and personal life. In this article, we use the term *work-life imbalance* instead of *work-family imbalance*.

Although Aziz and Zickar (2006) found workaholism to be negatively correlated with work-life balance, the only study to date that has examined worker types and work-life balance was conducted by Bonebright et al. (2000). Their results showed that although the mean work-life conflict score was slightly higher for workaholics than for positively engaged workers, the difference between them was not statistically significant. However, both workaholics and positively engaged workers experienced significantly more work-life conflict than nonworkaholics (i.e., anyone who is not classified as a positively engaged worker or a workaholic; thus, a nonworkaholic could be a work enthusiast, an unengaged worker, a relaxed worker, or a disenchant-

worker). We sought to build on the findings of Bonebright et al. by further examining the relationship between worker types and work-life balance using a composites approach.

**Hypothesis 1:** Positively engaged workers will have higher levels of work-life imbalance than workaholics, who in turn will have higher levels than work enthusiasts. Unengaged workers, relaxed workers, and disenchanting workers, all of whom are low on work involvement, will have low levels of work-life imbalance.

### **Obsessive-Compulsive Behavior**

Per the DSM, obsessive-compulsive disorder (OCD) is a common psychological disorder that is characterized by intrusive thoughts, repetitive behaviors, or a combination of both. Symptoms of OCD can be alienating, time consuming, and often cause severe emotional and economic loss. On the other hand, OCB is typically used in an informal way to describe someone who is meticulous, perfectionistic, rigid, and detail oriented. Such people find changes in routine and unexpected situations to be stressful (Morey, 1991). Although these signs are often present in OCD, a person who exhibits them does not necessarily have the disorder. Burke (2001) advocated the inclusion of OCB in future studies on worker types. Though not examined empirically, Naughton (1987) proposed that workaholicism develops as a result of high job involvement coupled with OCB. Furthermore, Naughton suggested that workaholics may not perform well because of their preoccupation with such ritualistic, time-consuming behavior as double-checking work that has already been completed. He also speculated that individuals might use work as a way to reduce feelings of anxiety or guilt. Accordingly, there is reason to think that OCB will be associated with work drive.

Mudrack (2004) sought to expand upon Naughton's speculations and investigated whether workaholicism was the product of job involvement and OCB. Obsessive-compulsive behavior was viewed as multidimensional, consisting of such traits as obstinacy, superego, and perseverance. Results indicated that workaholicism was highest in the presence of high job involvement, high obstinacy, and high superego.

The research by Naughton (1987) and Mudrack (2004) suggests that OCB will be greatest in those individuals who are high on both work involvement and work drive. In terms of Spence and Robbins' (1992) types, those are the workaholics and positively engaged workers.

**Hypothesis 2:** Workaholics and positively engaged workers will have higher levels of OCB than other types of workers.

### **Work Stress**

Work stress is the degree to which one's job is seen to have harmful effects on one's physical and mental health. Jex, Beehr, and Roberts (1992) investigated how participants interpreted occupational stress items. Results showed that respondents usually viewed "stress" to be comprised of strains (responses to the work environment) and stressors (characteristics of the actual work environment). Breznitz and Goldberger (1993), however,

discussed the situational dependency related to measures of stressors and strains. Therefore, Stanton, Balzer, Smith, Parra, and Ironson (2001) developed a measure of work stress that was not tied to specific stressors or strains, thereby being widely applicable given that relevant stressors and strains might vary among professions, industries, cultures, and so forth. Stanton et al. provided psychometric and validity evidence of their Stress in General (SIG) scale in three diverse samples of workers. In the current study stress was conceptualized as an overall experience and thus the SIG, which measures general work stress, was utilized.

Excessive time devoted to work is typically related to stress. Burke (2000) and Aziz and Zickar (2006) found that workaholics experience greater stress and stress-related illnesses (e.g., fatigue, anxiety) than nonworkaholics. In a sample of managers and professionals, Burke found that workaholics reported poorer psychological well-being, thus implying that they experience greater stress, given that stress translates into more anxiety, which in turn results in poor health.

Similarly, Spence and Robbins (1992) found that workaholics suffered significantly more from stress-related health problems than did the other worker types. They also found that work stress was positively correlated with work involvement and work drive. Perhaps workaholics create their own stress and self-select themselves into more demanding occupations. Regardless, workaholics report high levels of stress, although there have not yet been any studies comparing work stress among different worker types.

**Hypothesis 3:** Due to their high work drive, workaholics, positively engaged workers, and disenchanting workers will have higher levels of work stress than work enthusiasts, unengaged workers, and relaxed workers.

## Method

### Participants

Like in Bailey and Snyder (2007), who sought to have a working sample, individuals who were enrolled in college were not eligible to participate in the current study. Thus, a convenience sample of 199 employees from a broad range of professional organizations (e.g., consulting firms, hospitals, and universities) participated in the study. Specifically, 199 of the 300 surveys that were initially distributed to contact persons affiliated with professional organizations were returned. The resulting response rate was 66%, which is fairly high in this field of research. No incentive was provided for survey completion.

Frequency analyses showed that the sample was comprised of men (32%) and women (68%) and included employees from both senior management (15%) and nonmanagerial positions (45%). Age was assessed in terms of groups, whereby 27% of the participants were under the age of 25, 11% were between 26 and 30 years, 13% were between 31 and 35 years, 5% were between 36 and 40 years, and 44% were over the age of 40. Additionally, 58% of the participants were married, 36% were single, and 54% had children. Organizational tenure also was measured in terms of

groups, whereby 28% of the participants had been in their current positions for less than 1 year, 15% for 1 to 2 years, 19% for 3 to 4 years, 16% for 5 to 9 years, 9% for 10 to 14 years, and 12% for over 15 years. The average number of hours worked per week was assessed in terms of groups, whereby 18% of the participants worked under 35 hours, 21% worked 36 to 40 hours, 17% worked 41 to 45 hours, 13% worked 46 to 50 hours, 11% worked 51 to 55 hours, 11% worked 56 to 60 hours, and 8% worked over 60 hours. Income bracket was divided into four groups, with 27% of participants falling into the less than \$20,000 range, 43% of the participants falling into the \$20,000 to \$49,999 range, 24% of the participants falling into the \$50,000 to \$99,999 range, and 4% of the participants falling into the greater than \$100,000 range. Approximately 87% of the sample was Caucasian American, 6% African American, 3% Latin American, 3% Asian/Pacific Islander, and 1% Native American.

## Procedure

Two members of the research team recruited participants through contact persons associated with professional organizations and currently employed in the field. Study participants came from a broad range of professional organizations (e.g., consulting firms, hospitals, and universities). A written, self-report survey assessing the variables of interest and demographics was administered face to face by the contact person in a business setting. Self-report instruments are useful in assessing psychological concepts because perceptions of psychological constructs (e.g., work stress, OCB) are internal and essentially lie in the eye of the beholder (Helfritz et al., 2006). Confidentiality was maintained throughout the study by the use of identification numbers, and study participation was completely voluntary. Survey completion took approximately 15 minutes.

## Measures

**Worker types.** Spence and Robbins' (1992) 25-item measure was used to assess work involvement, work drive, and work enjoyment. Each facet consists of its own set of items, and each item is assessed on a response format ranging from 1 (*very untrue of me*) to 5 (*very true of me*). A sample work involvement item is "I like to use my time constructively both on and off the job." A sample work drive item is "I often feel that there's something inside me that drives me to work hard." A sample work enjoyment item is "Most of the time my work is very pleasurable." Cronbach's alpha was .72 for work involvement, .82 for work drive, and .88 for work enjoyment.

**Work-life imbalance.** Fisher et al.'s (2009) 15-item scale was used to assess work-life imbalance. A six-point scale was used and response options ranged from 1 (*not at all*) to 5 (*almost all the time*); 6 (*not applicable*) was coded as a missing value. A high score represents more work-life imbalance. A sample item is "I struggle with trying to juggle both my work and non-work responsibilities." A Cronbach's alpha of .93 was obtained.

**Obsessive-compulsive behavior.** The 8-item OCB subscale of Morey's (1991) Personality Assessment Inventory was used to assess OCB. The response scale ranged from 1 (*false, not at all true*) to 4 (*very true*). The OCB subscale is comprised of items pertaining to self-control, hyperattentiveness to detail, performance of rituals, and perfectionism. A sample item is "I have

to do some things a certain way or I get nervous.” A Cronbach’s alpha of .72 was obtained.

**Work stress.** The 16-item Stress In General scale developed by Stanton et al. (2001) was employed to assess overall work stress. Items consist of a descriptive word, asking participants to rate their work stress on a three-point scale from 0 (*no*) to 3 (*yes*), with 1.5 as *unknown*. Sample items include words such as “hectic” and “overwhelming.” A Cronbach’s alpha of .92 was obtained.

**Hours worked.** Respondents indicated the total number of hours per week they worked on the job (including outside of work): 1 = 35 hours or less, 2 = 36 to 40 hours, 3 = 41 to 45 hours, 4 = 46 to 50 hours, 5 = 51 to 55 hours, 6 = 56 to 60 hours, and 7 = more than 60 hours.

## Statistical Analysis

**Median splits.** Spence and Robbins (1992) used dichotomized scores on their three facets to classify participants into a particular worker type. Based on high ( $>$  median) or low ( $\leq$  median) scores on work involvement ( $Mdn = 24$ ), work drive ( $Mdn = 24$ ), and work enjoyment ( $Mdn = 31$ ), participants were placed within one of the six Spence and Robbins worker-type categories. For example, individuals scoring above the median on all three dimensions were classified as positively engaged workers, whereas those scoring below the median on all dimensions were unengaged workers. Workaholics scored above the median on work involvement and work drive and below the median on work enjoyment. Relaxed workers were the opposite of workaholics—they scored below the median on work involvement and work drive but above the median on work enjoyment.

Cases that did not fit into any of Spence and Robbins’ (1992) worker types ( $N = 37$ ) were dropped from the analyses where such classification was employed. Therefore, with median splits, 163 surveys were used (i.e., 54% of the surveys were usable). In sum, 9% ( $n = 14$ ) of the participants were work enthusiasts, 18% ( $n = 30$ ) were workaholics, 27% ( $n = 44$ ) were positively engaged workers, 26% ( $n = 42$ ) were unengaged workers, 13% ( $n = 21$ ) were relaxed workers, and 7% ( $n = 12$ ) were disenchant workers.

**Composites approach.** To capture the essence of Spence and Robbins’ (1992) notion of worker types, the data were also analyzed with three composite variables that captured the six worker types in a continuous fashion (i.e., no median splits). With the composites approach, we were able to use data from all participants who were not missing data. We decided to incorporate such an approach into the study because it makes for a much stronger, unique contribution given that no other researcher has used such composites. Therefore, the results could be considered to validate this new approach to worker types.

Composite 1 is *positive engagement*, computed by summing standardized work involvement, standardized work drive, and standardized work enjoyment. High scores represent being a positively engaged worker; low scores represent being an unengaged worker. Composite 2 is *work enthusiasm*, computed by summing standardized work involvement and standardized work enjoyment and then subtracting standardized work drive. High scores represent being a work enthusiast; low scores represent being a disenchant worker. Composite 3 is *workaholism*, computed by summing standardized

work involvement and standardized work drive and then subtracting standardized work enjoyment scores. High scores represent being a workaholic; low scores represent being a relaxed worker.

## Results

Intercorrelations and descriptive statistics are presented in Table 2. Positive correlations were found among all three of Spence and Robbins' (1992) facets. Furthermore, significantly positive correlations were found between hours worked and work-life imbalance, obsessive-compulsive behavior, and work stress. Additionally, a significantly positive correlation was found between work stress and work-life imbalance. Also, significantly positive correlations were found between work involvement and hours worked, work-life imbalance, obsessive-compulsive behavior, and work stress. In addition, significantly positive correlations were found between work drive and hours worked, work-life imbalance, obsessive-compulsive behavior, and work stress. Finally, significantly positive correlations were found between work enjoyment and obsessive-compulsive behavior and hours worked.

Table 2  
*Correlations Among All Study Variables*

Variable	WLIB	OCB	Hours	Work stress	WINV	WDRV	WENJ
WLIB	.93						
OCB	.18*	.72					
Hours	.37**	.18*	--				
Work stress	.47**	.09	.42**	.92			
WINV	.18*	.24**	.32**	.16*	.72		
WDRV	.37**	.33**	.20**	.18*	.48**	.82	
WENJ	-.01	.14*	.24**	-.08	.27**	.33**	.88
<i>M</i>	2.66	19.93	3.41	23.26	24.28	23.76	31.91
<i>SD</i>	.80	4.26	1.90	14.52	5.30	5.75	7.01
Range	1-5	8-32	--	0-48	8-40	7-35	10-50

*Note.* Entries on main diagonal are Cronbach's alpha. WLIB = work-life imbalance; OCB = obsessive-compulsive behavior; WINV = work involvement; WDRV = work drive; WENJ = work enjoyment.

\* $p < .05$ . \*\* $p < .001$ .

## Median Splits

The Ryan-Einot-Gabriel-Welch procedure (REGWQ) was used to compare group means, capping familywise error at .05 (see Table 3). Although often accompanied by an analysis of variance, the REGWQ is a pairwise comparison technique that does not require a prior significant ANOVA, holds familywise error at or below its nominal level regardless of the results of the ANOVA, has more power than other commonly employed techniques, and can be used as a replacement for an ANOVA. Results showed that worker types were significantly related to work-life imbalance, OCB, and total weekly work hours but not to work stress.

**Table 3**  
*Group Means (SD) on the Validation Variables*

Correlate	Worker type					
	Relaxed worker	Work enthusiast	Positively engaged worker	Unengaged worker	Workaholic	Disenchanted worker
WLIB	2.18 <sup>a</sup> (0.72)	2.50 <sup>a</sup> (0.74)	2.63 <sup>a</sup> (0.78)	2.43 <sup>a</sup> (0.69)	3.16 <sup>b</sup> (0.70)	3.23 <sup>b</sup> (0.84)
OCB	18.52 <sup>a</sup> (4.96)	18.36 <sup>a</sup> (4.50)	21.41 <sup>b</sup> (3.99)	18.62 <sup>a</sup> (4.39)	21.66 <sup>b</sup> (3.00)	19.42 <sup>ab</sup> (3.09)
Hours	3.24 <sup>ab</sup> (1.61)	3.64 <sup>ab</sup> (2.13)	4.41 <sup>a</sup> (1.96)	2.60 <sup>b</sup> (1.48)	3.10 <sup>b</sup> (1.79)	3.00 <sup>b</sup> (1.86)
Stress	18.79 <sup>a</sup> (13.46)	24.86 <sup>a</sup> (12.05)	23.39 <sup>a</sup> (12.87)	21.64 <sup>a</sup> (15.84)	25.95 <sup>a</sup> (16.01)	27.38 <sup>a</sup> (15.48)
N	21	14	44	42	30	12

*Note.* REGWQ was conducted, holding a familywise error at a maximum of .05. Means in the same row that share a letter in their superscripts are not significantly different at  $p < .05$ . WLIB = work-life imbalance; OCB = obsessive-compulsive behavior.

The REGWQ test partially supported Hypothesis 1 in that workaholics had higher levels of work-life imbalance than work enthusiasts; however, positively engaged workers did not have higher levels of work-life imbalance than workaholics. Additionally, as expected, unengaged workers and relaxed workers had low levels of work-life imbalance, although disenchanted workers had similar levels of work-life imbalance as workaholics. The REGWQ test supported Hypothesis 2 in that workaholics and positively engaged workers had significantly higher levels of OCB than all other groups except disenchanted workers. Finally, the REGWQ test revealed no significant differences in work stress among the different worker types, thereby refuting Hypothesis 3. As shown below, this is likely a Type II error resulting from the low power associated with the median-split procedure.

In sum, both disenchanted workers and workaholics had high work-life imbalance. Both workaholics and positively engaged workers had high OCB, but unlike workaholics, positively engaged workers had good work-life balance. Like positively engaged workers, work enthusiasts and relaxed workers had good work-life balance, but they did not share the positively engaged worker's OCB. The unengaged workers were exactly that, unengaged, scoring low on all of the variables on which the groups differed significantly. Finally, positively engaged workers worked significantly more hours per week than unengaged workers, disenchanted workers, and workaholics. However, given that the composite approach is more accurate, one should be cautious about making conclusions based on the median-split analyses.

### Composites Approach

As shown in Table 4, high work-life imbalance seems more strongly associated with high scores on the workaholism composite ( $r = .43$ ) than with high scores on the positive engagement composite ( $r = .19$ ); thus Hypothesis 1 is partially supported. Also, work-life imbalance was associated with low scores on the work enthusiasm composite (i.e., disenchantment;  $r = -.22$ ). Obsessive-compulsive behavior was significantly associated with the workaholism composite ( $r = .25$ ) and the positive engagement

composite ( $r = .32$ ); thus there was complete support for Hypothesis 2. Additionally, the workaholism composite was significantly correlated with work stress ( $r = .26$ ), as expected under Hypothesis 3. Finally, hours worked was significantly associated with all three composites (see Table 4).

Table 4

*Correlations Between the Composite Variables and the Validation Variables*

Variable	WLIB	OCB	Stress	Hours
PosEng	.19**	.32**	.12	.34**
WkEnth	-.22**	.04	-.06	.27**
WkAholc	.43**	.25**	.26**	.17*

*Note.* PosEng = positive engagement; WkEnth = work enthusiasm; WkAholc = workaholism; WLIB = work-life imbalance; OCB = obsessive-compulsive behavior. \* $p < .05$ . \*\* $p < .001$ .

In sum, being positively engaged rather than unengaged was significantly associated with work-life imbalance (small- to medium-sized effect), OCB (medium), and hours worked (medium). Being enthusiastic at work rather than disenchanted was significantly associated with work-life imbalance (negative and small to medium) and hours worked (small to medium). Being a workaholic rather than a relaxed worker was significantly associated with work-life imbalance (medium to large), OCB (medium), hours worked (small to medium), and work stress (medium).

Multiple regression analysis was used as a correlational analysis, with the added benefit of examining relationships between the worker types and a particular factor while controlling for the other factors. As shown in Table 5, all three multiple correlation coefficients ( $R$ ) were statistically significant, ranging from .52 to .59. As would be expected given the intercorrelations among the validation variables, the beta weights were most often smaller in magnitude than were the zero-order correlations of the validation variables with the composite variables.

Table 5

*Multiple Regression Analysis of the Relationships Between the Composite Variables and the Validation Variables*

Variable	$R$	WLIB	OCB	Stress	Hours
PosEng	.56**	.24**	.21**	.02	.19**
WkEnth	.59**	-.25**	-.03	.04	.31**
WkAholc	.52**	.36**	.24**	.00	.04

*Note.* Table entries for the validation variables are standardized  $\beta$  weights. PosEng = positive engagement; WkEnth = work enthusiasm; WkAholc = workaholism; WLIB = work-life imbalance; OCB = obsessive-compulsive behavior. \*\* $p < .001$ .

## Discussion

There are many noteworthy strengths of this article. First, attention was given to worker types rather than just focusing on workaholics versus non-workaholics. Second, a new approach to conceptualizing worker types that does not rely on using median splits was developed. Finally, the factors associated with worker types were examined.

Dichotomizing continuous variables by median splits is now known to be a very poor practice (Irwin & McClelland, 2003; MacCallum, Zhang, Preacher, & Rucker, 2002). Our composites are a new way to capture the essence of Spence and Robbins' (1992) worker types in variables that can be analyzed more powerfully (i.e., without performing the median splits). The results are essentially the same with the two approaches; however, with the new approach, a significant relationship was found between workaholism and work stress. Also, we were able to use information from all of our participants with the composites approach. Finally, compared to the median-splits approach, presentation of the results and data analysis was much simpler using the composites approach (e.g., Table 3 was fairly difficult to interpret, whereas Table 4 was more straightforward).

The inability to separate work life from personal life is a major component of workaholism. As expected by Hypothesis 1, workaholics demonstrated significantly higher levels of work-life imbalance than work enthusiasts; however, positively engaged workers showed lower levels than workaholics. Perhaps positively engaged workers derive emotional satisfaction from their work and can maintain work-life balance by staying involved in personal activities. Also contrary to expectation, disenchanted workers had higher levels of work-life imbalance than most other worker types, except for workaholics. Perhaps this is because workaholics and disenchanted workers share such features as high drive to work and low work enjoyment and thus have similar levels of work-life imbalance. Also, disenchanted workers are likely to be people who are generally unhappy with their situation, so the relationship with work-life imbalance seems consistent. In fact, Bonebright et al. (2000) also found that disenchanted workers experienced work-life conflict.

As expected in Hypothesis 2, OCB was associated with positive engagement and workaholism. We tend to consider OCB as a negative trait; however, findings from Decoster-Martin, Weiss, Davis, and Rostow (2004) showed that police officers ( $N = 800$ ) who scored high on OCB characteristics were significantly less likely to have been involved in an at-fault motor vehicle accident or have received citizen complaints regarding unprofessional conduct. Therefore, moderate OCB might actually enhance performance. In many ways, the positively engaged worker seems like a model employee; in our study we have provided more support that OCB can be associated with some positive traits.

It has been theorized that the workaholic's internal drive and need for recognition create interpersonal problems with coworkers and unrealistic work expectations, thereby leading to higher levels of work stress. Contrary to Hypothesis 3, there were no significant differences in work stress among the various worker types. The more powerful correlation analysis, however, revealed that the workaholism composite was significantly correlated with work stress. Essentially, work stress and the workaholism composite were correlated, yet stress did not have a significant unique effect in the multiple regression analysis predicting workaholism. Similarly, there was a significant correlation between hours worked and the workaholism composite, but the unique contribution of hours worked fell short of significance in the multiple regression analysis. It is possible that this may be an issue of multicollinearity (i.e., the stress and/or hours worked predictors might have been redundant with one of the other predictors). Although not a significant

difference, it is of note that workaholics reported higher levels of work stress than all other worker types, except for disenchanting workers. Interestingly, disenchanting workers reported work stress levels close to those of workaholics and greater than those of positively engaged workers.

The study is not without its limitations. The generalizability between cultures was limited given that study participants were mostly Caucasian Americans. Furthermore, over two thirds of the sample consisted of women. Therefore, future studies should sample from a more even distribution of men and women, as well as from different cultures, in order to explore whether relations between worker types and correlates of workaholism prevail across cultures and gender. Additionally, researchers should investigate the meanings of different worker types as they are conceptualized by working people. Qualitative work should be done with extensive open-ended interviews to more deeply probe workers' views on such types.

By integrating the findings of previous studies and including understudied variables, we have presented a more complete picture of worker types. By incorporating the knowledge we have gained in the area of worker types into intervention programs, counselors can help employees (especially workaholics) positively adapt to their different working styles. Such programs would be efficacious in that individuals could be categorized into a certain worker type and, accordingly, counselors could focus on the aspect of the worker type (i.e., work involvement, work drive, work enjoyment) that might be leading to such negative outcomes as work-life imbalance. For example, if an individual is categorized as a workaholic (i.e., high on work involvement, high on work drive, and low on work enjoyment), counselors could devote their attention to enhancing such a person's work enjoyment so that he or she might develop a healthier approach to work (i.e., become a positively engaged worker).

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