

# Work Motivations, Satisfactions, and Health Among Managers

## Passion Versus Addiction

Ronald J. Burke

Lisa Fiksenbaum

*York University, Toronto, ON, Canada*

Individuals in managerial and professional jobs are now working longer hours for a variety of reasons. Building on previous research on workaholism and on types of passion, the results of an exploratory study of correlates of work-based passion and addiction are presented. Data were collected from 530 Canadian managers and professionals, MBA graduates of a single university, using anonymously completed questionnaires. The following results were noted. First, scores on passion and addiction were significantly and positively correlated. Second, managers scoring higher on passion and on addiction were both more heavily invested in their work. Third, managers scoring higher on passion also indicated less obsessive job behaviors, greater work and extrawork satisfactions, and higher levels of psychological well-being. Fourth, managers scoring higher on addiction indicated more obsessive job behaviors, lower work and extrawork satisfactions, and lower levels of psychological well-being. Fifth, managers scoring higher on addiction saw their world in dog-eat-dog terms and their organizational cultures as less supportive of work–personal life balance; this pattern was in the opposite direction among managers scoring higher on passion.

**Keywords:** *passion; addiction; work motivation; satisfaction; health*

Over the past decade, work hours have increased among managers and professionals in several countries (e.g., the United States, the United Kingdom) and across the board in these and other countries, while decreasing among blue-collar workers in these same countries (Golden, 2007).

**Authors' Note:** Preparation of this manuscript was supported by York University. Graeme MacDermind assisted with the collection of the data.

Working long hours and working long hours of overtime have been found to be generally associated with lower levels of job and family satisfaction, psychological well-being, and physical health (Burke, 2007; Dembe, Erickson, Delbos, & Banks, 2005; De Raeye, Jansen, & Kant, 2007; Sparks, Cooper, Fried, & Shirom, 1997; van der Hulst, 2003). The Japanese have even coined a word *Karoshi* to refer to death from overwork (Kawahito, 1991; Uehata, 1990).

Why do people work hard, and does their motivation for working long hours matter in terms of their satisfaction and well-being? Several streams of research bear on these questions. First, a growing body of research on workaholism has shown that different types of workaholics exist (Scott, Moore, & Miceli, 1997; Spence & Robbins, 1992) and that some types seem to be work satisfied and psychologically healthy, whereas other types are dissatisfied with their jobs and careers, with their family relationships, and in psychological distress (Buelens & Poelmans, 2004; Burke, 2007; Kanai, Wakabayashi, & Fling, 1996; Machlowitz, 1980; Robinson, 1998; Spence & Robbins, 1992).

Second, extensive research on sources of motivation (e.g., the effects of intrinsic vs. extrinsic goals) and different processes or motivations for realizing these goals (e.g., internal vs. external motivations)—the “what” and “why” of goal pursuits—has shown that individuals motivated by extrinsic goals and external sources of motivation report lower levels of satisfaction and psychological health (Deci, Koestner, & Ryan, 1999; Deci & Ryan, 1985, 2000; Ryan & Deci, 2000; Srivastava, Locke, & Bartol, 2001). Burke (2007) has shown that different types of workaholics are motivated by different beliefs and fears about people and their larger social and work environment.

Third, although working long hours has generally been associated with more negative work and health outcomes, dramatic exceptions to this trend have also been observed. Hewlett and Luce (2006) reported some work and family experiences of men and women working in “extreme jobs”, jobs in which they worked 70 or more hours per week and under high work intensity (e.g., an unpredictable flow of work, responsibility for clients 24/7, and a fast paced flow of work). Respondents were senior-level managers and executives in large United States- and international-based corporations earning huge salaries and working in prestigious jobs having lots of perks. Their respondents indicated great work satisfaction resulting in part from the challenge, meaning, and rewards from their jobs. They were passionate about their work and their jobs. Respondents did indicate, however, that they hoped to work a few hours less in future and some were concerned about potential negative effects of their work hours on personal and family

lives. Brett and Stroh (2003), in a sample of alumni of a prestigious U.S. business school, also reported positive reasons among both men and women for working over 61 hr per week.

Fourth, it is only recently that passion in the workplace has begun to be explored. Vallerand et al. (2003, 2007) have proposed a dualistic approach to passion. Passion is defined as a strong inclination toward an activity (e.g., work in our case) that is important, liked, and involves investing considerable time in its pursuit. They distinguish between a harmonious passion (HP) that is well integrated into one's identity and undertaken freely and willingly and an obsessive passion or addiction (OP) that is not well integrated into one's identity and is the result of internal pressure (e.g., to increase one's self-esteem in the eyes of others). The activity controls the person under OP; the person controls the activity under HP. They hypothesized and found that HP leads to more positive affect, less negative affect, and higher levels of flow, whereas OP produced the opposite effects. Because the activity is freely chosen under HP, the individual is engaged in the activity more fully and flexibly leading to greater concentration, absorption, flow, and positive affect. They developed measures of both types of passion and found they were significantly and positively correlated with each other, and similarly and positively correlated with evaluations and liking for a self-chosen activity. They also found that levels of HP were higher than levels of OP for the chosen activity. They further suggested that HP would likely be correlated with psychological health and OP with psychological distress. Thus passion can create motivation, increase well-being, and provide meaning in one's life, but it can also lead to negative emotions, rigid persistence, and unbalanced life.

Fifth, two of the three workaholism components in the most widely used measure of workaholism developed by Spence and Robbins (1992)—feeling driven to work because of inner pressure (D) and work enjoyment (WE) have been found to relate in different directions and to different outcome (see Burke, 2007, for a review). WE, not surprisingly, has been shown to be positively related to various work outcomes whereas D was shown to be negatively related to many of these work outcomes. On the other hand, D was found to be negatively related to measures of psychological health, whereas WE was unrelated to these health indicators. In addition, WE and D related differently to potential antecedents of workaholism, such as perceptions of organizational climate supporting work–personal life balance and perceptions of people and their motives and how to succeed in the world. Other researchers have also reported different relations between WE and D and a number of different work and well-being outcomes (e.g.,

Graves, Ruderman, & Ohlott, 2006; Johnstone & Johnston, 2005; Virick & Baruch, 2007). For the purposes of the present exploratory study, WE is considered to be similar to passion, whereas D is considered to be similar to addiction.

Graves et al. (2006), using both WE and D, examined their relationship to job performance ratings based on 360-degree feedback perceptions. Self-reports of WE were positively related to performance ratings. Self-reports of D moderated the effects of WE on performance ratings; when D was low, WE was positively related to performance ratings, and when D was high, WE was not related to performance ratings. They concluded that high levels of D seemed to interfere with the performance-enhancing aspects of WE.

Virick and Baruch (2007), in a sample of 575 employees of a high tech firm, found that organizational identification, self-reliance, and outcome orientation were positively related to both D and WE. Work–family culture had a significant negative relationship with D but not WE. D lowered work–life balance and life satisfaction but enhanced employee performance. WE was positively associated with work–life balance and both job and life satisfaction.

Johnstone and Johnston (2005), in a study of two occupational groups (business Services, Social Services), found that only work pressure was significantly related to D. Work pressure, involvement, coworker cohesion, and supervisor support were all related to WE. In addition, employees in business services reported higher levels of D and lower levels of WE than did employees working in social services suggesting effects of occupational type as well as organizational climate on WE and D.

Schaufeli, Taris, and Bakker (2007) made a distinction between good and bad workaholics, reporting that the former score higher on measures of work engagement whereas the latter score higher on measures of burnout. They suggest that some people work because they are engaged, satisfied, and challenged, whereas other people work hard because they are addicted to work, seeing job contribution as a way of finding identity and value.

These studies indicate different patterns of correlations, both antecedents and consequences, of WE and D. WE and D represent different underlying motivations or orientations to work and therefore have different effects of both work and well-being outcomes. D is likely to hamper performance. WE is likely to facilitate performance (Vallerand et al., 2003, 2007). D is likely to be associated with persistence, rigidity, perfectionism, and heightened levels of job stress. D is likely associated with working harder not smarter. D may also be associated with the setting of unrealistic performance expectations and deadlines. The positive emotions of WE are likely to spur

higher levels of performance through increasing social resources and creativity, building trust with colleagues, and reducing levels of debilitating stress.

Vallerand and his colleagues (2003, 2007) suggested four hypotheses relating to their two types of motivation, passion and addiction. First, passion and addiction are likely to be positively correlated. Second, respondents will generally score higher on passion than on addiction. Third, passion is likely to be related to positive work outcomes and psychological health. And fourth, addiction is likely to be associated with negative work outcomes and psychological distress.

Burke and Fiksenbaum (2007a, 2007b) examined these four hypotheses in studies of Australian psychologists and Norwegian journalists and found considerable support for them. Psychologists and journalists scoring higher on passion and addiction were more heavily invested in their work, psychologists and journalists scoring higher on passion indicated greater work satisfaction and higher levels of psychological well-being, and psychologists and journalists scoring higher on addiction indicated lower work satisfaction and lower levels of psychological well-being. The present study attempts to replicate these findings in a large sample of Canadian MBA graduates holding managerial and professional jobs.

## Method

### Procedure

Mail questionnaires were sent to about 1,000 male and 1,000 female MBA graduates of a single university in Canada. Responses were received from 591 individuals, a response rate of about 35%, with elimination of questionnaires returned because the person had moved. The sample decreased to 530 when individuals who indicated they were no longer working full-time were excluded.

### Respondents

Table 1 presents personal demographic characteristics of the sample ( $N = 530$ ). A fairly wide range of response was present on most items. Ages ranged from under 35 to over 50, with about half falling between 36 and 45. Almost 80% were married and 70% had children. MBA degrees were obtained over a range of years, most (almost 60%) before 1985. Almost 40% had also achieved one or more professional designations (CA, CFA,

**Table 1**  
**Demographic Characteristics of Sample**

	<i>N</i>	%		<i>N</i>	%
Age			Professional designation		
35 and under	91	17.2	Yes	206	39.0
36-40	139	26.2	No	322	61.0
41-45	138	26.2	Level of management		
46-50	102	19.3	Nonmanagement	62	11.9
Over 50	58	11.1	Lower management	37	7.1
Children			Middle management	197	37.9
Yes	370	70.3	Senior management	234	43.1
No	156	29.7	Hours worked		
Number of children			35 or less	18	3.4
1	81	21.8	36-40	58	11.3
2	184	49.6	41-45	85	16.2
3	80	21.6	46-50	159	30.1
4	18	4.9	51-55	76	14.4
5	7	1.9	56-60	90	17.4
6	1	.3	61 or more	38	7.2
Marital status			Sex		
Single	71	13.4	Males	251	52.5
Divorced/widowed	44	8.3	Females	227	47.5
Married	415	78.3	Year of MBA		
Length of marriage			1980 or before	142	27.2
1-5 years	47	11.3	1981-1985	158	30.0
6-10 years	103	24.7	1986-1990	188	35.8
11-15 years	84	20.4	1991 and later	36	7.0
16-20 years	92	22.0	Years present employer		
21 years or more	89	21.6	5 years or less	179	36.4
Years present position			6-10 years	158	31.9
5 years or less	350	76.3	11-15 years	62	12.5
6-10 years	79	17.2	16 years or more	95	19.2
11 years or more	30	6.5	1996 Income		
Organizational size			US\$50,000 or less	50	10.3
100 or less	152	30.0	US\$50,001-US\$100,000	263	53.6
101-1,000	138	27.4	US\$100,001-US\$150,000	104	21.1
1001-10,000	126	25.0	US\$150,001-US\$200,000	29	5.9
Over 10,000	89	17.6	Over US\$200,000	45	8.1

etc.). Almost one third worked 46 to 50 hr per week. About half had incomes between US\$50,000 and US\$100,000. Almost three quarters had been with their present employers 10 years or less and in their present jobs 5 years or less. Employing organizations ranged in size from under 10 to over 85,000 with about one third less than 100 employees.

## Measures

*Personal characteristics.* Individual demographic characteristics were measures by single items, for example, age, sex, marital status, and parental status.

*Work situation characteristics.* These were also measures by single items, for example, organizational level, job and organizational tenure, and organizational size.

*Passion and addiction.* Passion was measured by the 10-item scale ( $\alpha = .88$ ) developed by Spence and Robbins (1992). One item was "My job is more life fun than work." Addiction was measured by the 7-item scale ( $\alpha = .80$ ) developed by Spence and Robbins. An item was "I often feel that there's something inside me that drives me to work hard." Respondents indicated their agreement with each item on a 5-point scale (1 = *strongly agree*; 5 = *strongly disagree*).

*Antecedents of passion and addiction.* Two antecedents were included, one individual and one organizational:

*Beliefs and fears:* Three measures of beliefs and fears developed by Lee, Jamieson, and Earley (1996) were used. One, "striving against others" ( $\alpha = .77$ ), had six items (e.g., "There can only be one winner in any situation"). A second, "no moral principles" ( $\alpha = .79$ ), had six items (e.g., "I think that nice guys finish last"). The third, "need to prove yourself" ( $\alpha = .87$ ), had nine items (e.g., "I worry a great deal about what others think of me"). Responses were made on a 5-point Likert-type scale (1 = *strongly disagree*; 5 = *strongly agree*). As these three scales were strongly and positively inter-correlated, a total score was obtained by combining them.

*Organizational culture values:* Organizational values encouraging work–personal life balance and imbalance were measured by scales created by Kofodimos (1993). Organizational values encouraging balance ( $\alpha = .86$ ) was measured by nine items (e.g., "Setting limits on hours spent at work"). Organizational values supporting imbalance ( $\alpha = .83$ ) was measure by eight items (e.g., "Traveling to and from work destinations on weekends"). Responses were made on a 5-point Likert-type scale (1 = *very negatively valued*, 5 = *very positively valued*). A total balance score was obtained by combining both scales, reversing the imbalance scores.

*Work investment.* Four indicators of work investment were included:

Hours worked was measured by a single item; respondents indicated how many hours they worked in a typical week.

Extra hours worked was measured by six items ( $\alpha = .68$ ). Respondents indicated how frequently they did each item (e.g., "Go to work early").

Job involvement was measured by an eight-item scale ( $\alpha = .81$ ) developed by Spence and Robbins (1992). One item was "I am deeply committed to my job."

Time to job, a measure of the psychological conception of time invested, was measured by seven items ( $\alpha = .82$ ) developed by Spence and Robbins (1992).

An item was "I devote more time to my work than most people."

*Job behaviors.* Two job behaviors were considered:

Perfectionism was measured by eight items ( $\alpha = .90$ ) developed by Spence and Robbins (1992). One item was "I can't let go of projects until I'm sure they are exactly right."

Nondelegation was assessed by seven items ( $\alpha = .87$ ), also developed by Spence and Robbins (1992). An item was "I feel that if you want something done correctly you should do it yourself."

*Work outcomes.* Four work outcomes were considered:

Job satisfaction was measured by a seven-item scale ( $\alpha = .79$ ) developed by Kofodimos (1993). One item was "I feel challenged by my work."

Career satisfaction was assessed by a five-item scale ( $\alpha = .91$ ) developed by Greenhaus, Parasuraman, and Wormley (1990). One item was "I am satisfied with the success I have achieved in my career."

Career prospects was measured by a three-item scale ( $\alpha = .66$ ) also developed by Greenhaus et al. (1990). An item was "I expect to advance in my career to senior levels of management."

Job stress was measured by nine items ( $\alpha = .89$ ) developed by Spence and Robbins (1992). One item was "Sometimes I feel like my work is going to overwhelm me."

*Extrawork satisfactions.* Three extrawork satisfactions were included:

Family satisfaction was measured by a seven-item scale ( $\alpha = .89$ ) developed by Kofodimos (1993). One item was "I have a good relationship with my family members."

Friends satisfaction was measured by three items ( $\alpha = .85$ ) also developed by Kofodimos (1993). An item was "My friends and I do enjoyable things together."

Community satisfaction was measured by four items ( $\alpha = .80$ ) developed by Kofodimos (1993). One item was "I contribute and give back to my community."



*Psychological well-being.* Three indicators of psychological well-being were included:

Psychosomatic symptoms was measured by 19 items ( $\alpha = .84$ ) developed by Quinn and Shepard (1974). Respondents indicated how often they experienced each physical condition (e.g., headaches) in the past year.

Emotional health was measured by six items ( $\alpha = .77$ ) developed by Kofodimos (1993). An item was "I actively seek to understand and improve my emotional well-being."

Physical health was assessed by five items ( $\alpha = .72$ ) also developed by Kofodimos (1993). One item was "I participate in a regular exercise program."

## Results

### Correlation of Passion and Addiction

Passion and addiction were significantly and positively correlated ( $r = .25$ ,  $p < .001$ ,  $N = 524$ ).

### Levels of Passion and Addiction

Respondents indicated similar levels of passion and addiction, the mean scale values being 2.5 and 2.7, respectively, contrary to predictions.

### Descriptive Statistics

Table 2 presents the means, standard deviations, and sample sizes of all correlates of passion and addiction.

### Work Investments

The correlations between the measures of both passion and addiction with four indicators of work investment are shown in the top fifth of Table 3. All were positive and significantly different from zero ( $p < .001$ ). As hypothesized, managers and professionals scoring higher on passion, and on addiction, were more involved with their jobs and work (e.g., worked more hours, more extra hours, more job involved).

**Table 2**  
**Descriptive Statistics**

Measures	<i>X</i>	<i>SD</i>	<i>N</i>
Hours worked	51.0	8.52	517
Extra hours	14.0	3.32	514
Job involvement	18.8	5.44	516
Time to job	22.6	6.06	512
Beliefs and fears	56.3	14.53	525
Organizational values	45.1	9.18	492
Perfectionism	21.3	6.79	520
Nondelegation	26.9	5.33	529
Job satisfaction	28.9	4.33	527
Career satisfaction	12.0	4.95	527
Career prospects	7.3	2.78	515
Job stress	24.3	7.59	523
Family satisfaction	29.2	5.24	490
Friends satisfaction	18.6	4.18	524
Community satisfaction	14.0	3.41	525
Psychosomatic symptoms	36.3	7.98	522
Emotional health	20.7	4.54	521
Physical health	18.3	3.96	524

### Antecedents of Passion and Addiction

The next fifth of Table 3 shows the correlations of passion, and of addiction, with two potential antecedents. All correlations here were significantly different from zero ( $p < .001$ ). Managers scoring higher on passion scored lower on the measure of beliefs and fears and higher on the measure of organizational support for work–personal life balance; managers scoring higher on addiction scored higher on the measure of beliefs and fears and lower on the measure of organizational support for work–personal life balance. As hypothesized, the pattern of correlations was the direct opposite.

### Job Behaviors

The next fifth of Table 3 presents the correlations of passion and addiction with two job behaviors: perfectionism and nondelegation. All correlations were significantly different from zero ( $p < .001$ ). Managers scoring higher on passion, and managers scoring higher on addiction, also scored higher on perfectionism; however, managers scoring higher on passion scored

**Table 3**  
**Correlates of Passion and Addiction**

Work Investment	Passion	Addiction
Hours worked	.18***	.26***
Extra hours	.17***	.33***
Job involvement	.51***	.31***
Time to job	.21***	.46***
Antecedents		
Beliefs and fears	-.25***	.39***
Organizational culture	.28***	-.29***
Job behaviors		
Perfectionism	.13***	.40***
Nondelegation	-.18***	.19***
Work outcomes		
Job satisfaction	.53***	-.19***
Career satisfaction	.30***	.10*
Career prospects	.33***	.02
Job stress	-.27***	.54***
Extra-work satisfactions		
Family	.18***	-.11*
Friends	.10*	-.14**
Community	.11*	-.24***
Psychological well-being		
Psychosomatic symptoms	-.27***	.31***
Emotional health	.24***	-.28***
Physical health	.16***	-.22***

Note: *Ns* range from 486 to 511.

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

lower on nondelegation, whereas managers scoring higher on addiction scored higher on nondelegation.

These findings provide partial support for our hypotheses.

## Work Outcomes

The middle fifth of Table 3 shows the correlations of both passion and addiction with four work outcomes. Most correlations were significantly different from zero. Managers scoring higher on passion also indicated more favorable work outcomes across the board (more satisfaction, lower levels of stress). Managers scoring higher on addiction also indicated less job and career satisfaction and higher levels of stress. Scores on addiction were not correlated with perceptions of future career prospects. Once again, as hypothesized, the pattern of correlations was in the opposite direction.

## Extrawork Satisfactions

The next fifth of Table 3 shows the correlations of scores on passion, and of addiction, with three indicators of extrawork satisfaction. All correlations were significantly different from zero ( $p < .05$ ). Managers scoring higher on passion were also more satisfied in all three extrawork areas; managers scoring higher on addiction were less satisfied in all three areas of extrawork satisfaction. As hypothesized, the pattern of correlations was in opposite directions, but weak.

## Psychological Well-Being

The bottom fifth of Table 3 presents the correlations between passion and addiction and three indicators of psychological health. All correlations were significantly different from zero ( $p < .001$ ). Managers scoring higher on passion reported higher levels of psychological well-being, whereas managers scoring higher on addiction reported lower levels of psychological well-being.

In summary, the pattern of findings shown in Table 3 provides strong support for the hypotheses proposed in the introduction. In almost all instances, passion and addiction showed opposite relationships with the antecedent and outcome variables under investigation.

## Discussion

Consistent with our hypotheses, our findings indicated marked differences in the correlates of two sources of work motivation, passion and addiction; potential antecedents; and both work and psychological well-being outcomes. Before examining these differences, it should be noted that, as predicted, both passion and addiction were significantly correlated with job and work investment (e.g., hours worked, job involvement) consistent with earlier reported results (Vallerand et al., 2003, 2007). In addition, again consistent with the conclusions of Vallerand and his colleagues (2003, 2007), scores on passion and addiction were moderately and positively correlated. There was one other noteworthy area of similarity: scores on both passion and addiction were significantly and positively correlated with a general measures of perfectionism (see Table 3) suggesting that perfectionism as operationally defined here may have some desirable features in the workplace. Future research might employ more differentiated measures of perfectionism.

There were also widespread differences in the direction of correlation of passion and addiction with antecedents, job behaviors, work and extrawork satisfactions, and indicators of psychological well-being. Passion was always correlated with favorable work, extrawork and psychological well-being outcomes, and less obsessive job behaviors. Addiction was almost always correlated with less favorable work, extrawork and psychological well-being indicators, and less constructive job behaviors (e.g., more difficulty delegating). In summary, our results suggest significant differences in the effects of a healthy commitment to one's work versus a harmful, psychologically and physically damaging compulsion to work.

Burke and Fiksenbaum (2007a, 2007b), as indicated earlier, undertook an examination of correlates of passion and addiction in two previous studies—one used the same measures in a sample of Australian male and female psychologists, and the other used different outcome variables in a study of male and female Norwegian journalists. They reported very similar findings. There is thus a suggestion that these sources of work motivations may have similar effects in different occupations in various countries.

Why should passion and addiction, as sources of work motivation, produce such different patterns of findings? These findings, along with previous conceptualization and empirical work (Burke, 2007; Srivastava et al., 2001; Vallerand et al., 2003), suggest interesting potential explanations. First, managers scoring higher on addiction also scored higher on the beliefs and fears measure, seeing their world as more dog-eat-dog and have a greater need to prove themselves (lower self-esteem). The workaholism literature, particularly Killinger (1991) and Robinson (1998), see low self-esteem coupled with strong needs to prove oneself associated with extrinsic goals and psychological distress. In addition, managers scoring higher on addiction are also more perfectionistic and have greater difficulty in delegating to others likely leading to heavier workloads (see Burke, 2007, for supporting evidence). Both perfectionism and the inability to delegate because of a lack of trust in subordinates are likely to influence both the nature of one's work experience and workload, resulting in greater work stress. Managers scoring higher on addiction indicated less satisfying work and extrawork outcomes associated with higher levels of job stress, more work–personal life conflict, and less satisfying relationships outside of work likely reflecting less social support as well. It was not surprising then that addiction as a source of work motivation was associated with diminished psychological functioning.

## **Workaholism Across Countries and Cultures**

Unfortunately, relatively few workaholism studies have been conducted in more than one country. Snir and Harpaz (2006) in fact may be the only

researchers to do so. They defined workaholism as time (hours) invested in work-related activities and thoughts, controlling for financial needs. This definition and its operationalization can apply to all countries and cultures, though the antecedents and consequences might vary across nations.

They report research findings using this measure in five countries: Belgium, Israel, Japan, the Netherlands, and the United States. Respondents were compared on hours worked per week, financial needs, work centrality, and workaholism. Significant country differences were found on these measures. Future research needs to consider potential antecedents and consequences of these investments; despite country differences in levels of workaholism, workaholism measures might have the same relationships with antecedents and consequences.

It is still possible to draw some conclusions about work hours and workaholism across countries and cultures. First, there are significant country differences in average number of hours worked per year (Burke, 2007). Employees work more hours per year in the United States, United Kingdom, and Japan than in France and Germany, for example. There are also country differences in the percentage of employees working long hours (e.g., more than 60 hr a week). But it is also likely that some individuals in all countries work long hours. Working long hours is one aspect of workaholism, so workaholism as a concept is likely to be relevant in almost all countries.

Second, studies of workaholism using the same measures, typically those of Spence and Robbins (1992) and Robinson (1998), have been carried out in several countries. The Spence and Robbins measures have been used in the United States, Canada, Norway, Turkey, Japan, New Zealand, and Australia. The Robinson measure has been used in the United States and the Netherlands. These measures have generally been found to have the same properties in most countries studied. The Spence and Robbins Work Involvement scale, however, has been shown to have lower reliability in some countries (New Zealand, Turkey) than in North American, Norwegian, and Australian samples. The Spence and Robbins measures have also shown similar relationships with a range of work and well-being outcomes across almost all the studies in which they have been used.

Third, as indicated above, we have undertaken studies of passion and addiction in both Australia and Norway—in samples of psychologists and journalists, respectively—using the same measures and similar results.

Not surprisingly, almost all of the studies of workaholism have been undertaken in Western countries having capitalist ideologies. It is not clear that research findings from these studies would generalize to non-Western countries or cultures. In addition, national culture dimensions such as masculinity–femininity that vary across cultures might relate differently to levels of workaholism and their effects across nations.

## Limitations of the Research

Some limitations of this study should be noted to put the results in a broader context. First, all data were collected using self-reports, raising the possibility of common method variance and response set tendencies. Second, the study was exploratory in examining passion and addiction using established and validated measures that were however created for other purposes and reframed here. Third, many of the outcome measures were themselves moderately correlated perhaps inflating the number of significant relationships between both passion and addiction and the various outcomes considered. We believe, however, that it was important to show the differences between the two sources of work motivation across a full range of outcomes. Fourth, the data were collected at only one point in time making an examination of causality impossible. Finally, although relatively consistent findings have now been reported in three different occupations involving three different countries, it is not clear the extent to which these findings would generalize to other occupations in other countries.

## Future Research Directions

The most important future research need is to strengthen the measures of both passion and addiction. As noted above, the two measures used here were initially developed to address related—but different—concepts. The work of Vallerand and his colleagues (2003, 2007) provided a useful starting point. Some of their items could be reworded and added to those contained in the Spence and Robbins (1992) measures. It is important to get at deeper levels of both passion and addiction (e.g., “I cannot live without my work,” “My work is in harmony with other activities in my life”). It is also vital to better understand the drivers of both passion and addiction. Where do passion and addiction come from? It is also critical to better understand how both passion and addiction get translated into different job behaviors and work and extrawork experiences and health outcomes. Is the process one involving attitudes and/or behaviors on and off the job? Work investments are likely to be the same so is it a matter of expectations and appraisal? Is the cup half full or is it half empty? In addition, it would be important to identify potential boundary conditions for the observed findings. These might involve number of work hours and national values. It is possible that these findings would be mitigated among employees working in occupations that limit the hours employees work because of contractual relationships (thus working fewer hours) or in countries that place a higher value on family and leisure.

## References

- Brett, J. M., & Stroh, L. K. (2003). Working 61 plus hours a week: Why do managers do it? *Journal of Applied Psychology*, 88, 67-78.
- Buelens, M., & Poelmans, S. A. Y. (2004). Enriching the Spence and Robbins typology of workaholism: Demographic, motivational and organizational correlates. *Journal of Organizational Change Management*, 17, 446-458.
- Burke, R. J. (2007). *Research companion to working time and work addiction*. Cheltenham, UK: Edward Elgar.
- Burke, R. J., & Fiksenbaum, L. (2007a). *Work motivations, work experiences and well-being among Norwegian journalists: Passion versus addiction*. Unpublished manuscript, Schulich School of Business, York University, Toronto.
- Burke, R. J., & Fiksenbaum, L. (2007b). *Work orientations, work outcomes and health among Australian psychologists: Passion versus addiction*. Unpublished manuscript, Schulich School of Business, York University, Toronto.
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analysis review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125, 627-668.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227-268.
- Dembe, A. E., Erickson, J. B., Delbos, R. G., & Banks, S. M. (2005). The impact of overtime and long work hours on occupational injuries and illnesses: New evidence from the United States. *Occupational and Environmental Medicine*, 62, 588-597.
- De Raeve, L., Jansen, N. W. H., & Kant, I. J. (2007). Health effects of transitions in work schedule, work hours and overtime in a prospective cohort study. *Scandinavian Journal of Work, Environment & Health*, 33, 105-113.
- Golden, L. (2007). How long? The historical, economic and cultural factors behind working hours and overwork. In R. J. Burke (Ed.), *Research companion to working time and work addiction* (pp. 36-60). Cheltenham, UK: Edward Elgar.
- Graves, L. M., Ruderman, M., & Ohlott, P. J. (2006, August). *Effect of workaholism on managerial performance: Help or hindrance*. Paper presented at the Academy of Management, Atlanta, GA.
- Greenhaus, J. H., Parasuraman, S., & Wormley, W. (1990). Organizational experiences and career success of black and white managers. *Academy of Management Journal*, 33, 64-86.
- Hewlett, S. A., & Luce, C. B. (2006). Extreme jobs: The dangerous allure of the 70-hour work week. *Harvard Business Review*, 84(12), 49-59.
- Johnstone, A., & Johnston, L. (2005). The relationship between organizational climate, occupational type and workaholism. *New Zealand Journal of Psychology*, 34, 181-188.
- Kanai, A., Wakabayashi, M., & Fling, S. (1996). Workaholism among employees in Japanese corporations: An examination based on the Japanese version of the workaholism scales. *Japanese Psychological Research*, 38, 192-203.
- Kawahito, H. (1991). Death and the corporate warrior. *Japan Quarterly*, April-June, 149-158.
- Killinger, B. (1991). *Workaholics: The respectable addicts*. New York: Simon & Schuster.
- Kofodimos, J. (1993). *Balancing act*. San Francisco: Jossey-Bass.



- Lee, C., Jamieson, L. F., & Earley, P. C. (1996). Beliefs and fears and type A behavior: Implications for academic performance and psychiatric health disorder symptoms. *Journal of Organizational Behavior*, 17, 151-178.
- Machlowitz, M. (1980). *Workaholics: Living with them, working with them*. Reading, MA: Addison-Wesley.
- Quinn, R. P., & Shepard, L. J. (1974). *The 1972-73 quality of employment survey*. Ann Arbor: Institute for Social Research, University of Michigan.
- Robinson, B. E. (1998). *Chained to the desk: A guidebook for workaholics, their partners and children and the clinicians who treat them*. New York: New York University Press.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.
- Schaufeli, W. B., Taris, T. W., & Bakker, A. B. (2007). Dr. Jekyll or Mr. Hyde: On the difference between work engagement and workaholism. In R. J. Burke (Ed.), *Research companion to working time and work addiction* (pp. 193-220). Cheltenham, UK: Edward Elgar.
- Scott, K. S., Moore, K. S., & Miceli, M. P. (1997). An exploration of the meaning and consequences of workaholism. *Human Relations*, 50, 287-314.
- Snir, R., & Harpaz, I. (2006). The workaholism phenomenon: A cross-national perspective. *Career Development International*, 11, 374-393.
- Sparks, K., Cooper, C. L., Fried, Y., & Shirom, A. (1997). The effects of hours of work on health: A meta-analytic review. *Journal of Occupational and Organizational Psychology*, 70, 391-408.
- Spence, J. T., & Robbins, A. S. (1992). Workaholism: Definition, measurement, and preliminary results. *Journal of Personality Assessment*, 58, 160-178.
- Srivastava, A., Locke, E. A., & Bartol, K. M. (2001). Money and subjective well-being: It's not the money, it's the motives. *Journal of Personality and Social Psychology*, 80, 959-971.
- Uehata, T. (1990). *Karoshi: When the corporate warrior dies*. Tokyo, Japan: Mado-sha.
- Vallerand, R. J., Blanchard, C. M., Mageau, G. A., Koestner, R., Ratelle, C., Leonard, M., et al. (2003). Les passions de l'âme: On obsessive and harmonious passion. *Journal of Personality and Social Psychology*, 85, 756-767.
- Vallerand, R. J., Salvy, S. J., Mageau, G. A., Elliot, A. J., Denis, P. L., Grouzet, F. M. E., et al. (2007). On the role of passion in performance. *Journal of Personality*, 75, 505-533.
- van der Hulst, M. (2003). Long work hours and health. *Scandinavian Journal of Work, Environment & Health*, 29, 171-188.
- Virick, M., & Baruch, Y. (2007, August). *Factors determining workaholism, its positive and negative consequences*. Paper presented at the Academy of Management, Philadelphia.

**Ronald J. Burke** (PhD, University of Michigan) is professor of organizational behavior at the Schulich School of Business, York University, Toronto. His research interests include work and health, gender issues in organizations, and using human resource management research findings to improve organizational performance.

**Lisa Fiksenbaum** is currently a PhD student in psychology at York University, Toronto. Her research interests include work and family, statistical methods in psychology, and work and health.