



Journal of Managerial Psychology

Relationship of eudaimonia and hedonia with work outcomes

Daniel B Turban Wan Yan

Article information:

To cite this document:

Daniel B Turban Wan Yan , (2016), "Relationship of eudaimonia and hedonia with work outcomes", Journal of Managerial Psychology, Vol. 31 Iss 6 pp. 1006 - 1020

Permanent link to this document:

<http://dx.doi.org/10.1108/JMP-07-2015-0271>

Downloaded on: 26 August 2016, At: 07:39 (PT)

References: this document contains references to 58 other documents.

To copy this document: permissions@emeraldinsight.com

The fulltext of this document has been downloaded 64 times since 2016*

Users who downloaded this article also downloaded:

(2016), "Abusive supervision, knowledge sharing, and individual factors: A conservation-of-resources perspective", Journal of Managerial Psychology, Vol. 31 Iss 6 pp. 1106-1120 <http://dx.doi.org/10.1108/JMP-05-2015-0169>

(2016), "Heavy work investment, personality and organizational climate", Journal of Managerial Psychology, Vol. 31 Iss 6 pp. 1057-1073 <http://dx.doi.org/10.1108/JMP-07-2015-0259>

(2016), "Political skill dimensions and transformational leadership in China", Journal of Managerial Psychology, Vol. 31 Iss 6 pp. 1040-1056 <http://dx.doi.org/10.1108/JMP-05-2014-0166>

Access to this document was granted through an Emerald subscription provided by

Token: JournalAuthor:27DC2245-7CCC-403B-93F9-83984286B895:

For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

*Related content and download information correct at time of download.

Relationship of eudaimonia and hedonia with work outcomes

Daniel B. Turban

*Department of Management, University of Missouri, Columbia,
Missouri, USA, and*

Wan Yan

Santa Clara University, Santa Clara, California, USA

1006

Received 15 July 2015
Revised 12 April 2016
Accepted 7 June 2016

Abstract

Purpose – The purpose of this paper is to examine the effects of two perspectives of well-being, hedonism and eudaimonism, on job attitudes and extra-role behaviors. Theoretically, hedonism equates well-being with the experience of pleasure, whereas eudaimonism is the experience of personal growth, purpose and social significance.

Design/methodology/approach – Data were collected from 528 administrative support staff at two points in time. At time 1, hedonia and eudaimonia at work were measured. Job attitudes and extra-role behaviors were measured at time 2.

Findings – Results indicate that hedonia and eudaimonia, although strongly correlated, have unique effects on job attitudes and extra-role behaviors. Further, there is a synergistic effect between eudaimonia and hedonia such that experienced eudaimonia has a stronger effect on employee outcomes when hedonia is higher.

Practical implications – Popular books highlight the importance of creating happy workers. However, one's view of happiness/well-being at work influences the actions taken to improve such well-being. An important implication of this study is that firms should focus on creating an environment that fosters personal growth, a sense of purpose and a feeling of social significance in addition to hedonic happiness.

Originality/value – Both eudaimonic and hedonic measures of well-being were examined and results indicated that both were important predictors of extra-role behavior and job attitudes. Such results not only highlight the importance of explicit examination of additional conceptualizations of well-being at work, but also indicate the importance of eudaimonia at work.

Keywords Employee well-being, Happiness, Job attitudes, Eudaimonia, Hedonia, Work-related behaviours

Paper type Research paper

The “happy-productive worker thesis,” which proposes that happy workers are more productive, has resulted in companies providing perks, such as gourmet food and play rooms, to attract, retain and motivate employees (Hsieh, 2010). Underlying this trend is the belief that employees are more motivated and perform better when they are happy at work (Wright and Cropanzano, 2007). Although there is some support for the happy-productive worker thesis, most work-based studies measured only happiness, or the hedonic aspect of well-being[1] (Warr, 2007; Wright and Cropanzano, 2007). Because well-being is a broader concept than happiness, scholars have urged examination of alternative conceptualizations of well-being at work (Warr, 2007; Wright and Huang, 2012). This study extends the literature by incorporating both hedonic and eudaimonic perspectives of well-being at work to investigate their unique and synergistic relationship with job attitudes and extra-role behaviors, discretionary behaviors beyond job requirements that contribute to effective organizational functioning (Organ, 1988).



Employee well-being is a subjective global judgment of the quality of work experiences (Grant *et al.*, 2007; Wright and Huang, 2012). The two major perspectives of well-being are hedonia and eudaimonia (Ryff, 1989; Warr, 2007). The hedonic perspective equates well-being with pleasure attainment and pain avoidance, whereas the eudaimonic perspective focusses on personal growth and self-fulfillment (Fisher, 2010; Warr, 2007). Although scholars have speculated about differences between hedonia and eudaimonia (e.g. Barrick *et al.*, 2013; Rosso *et al.*, 2010), little research has simultaneously investigated hedonia and eudaimonia in work settings. Since the conceptualization of well-being influences the research questions examined and the implications that follow, it is important to examine both eudaimonic and hedonic well-being (McMahan and Estes, 2011b).

Hedonia and eudaimonia

Both hedonism and eudaimonism are based on ancient Greek conceptualizations of well-being, although they have different perspectives on human nature (Ryan and Deci, 2001; Ryan *et al.*, 2008; Ryff and Singer, 2008; Waterman, 1990). As noted above, hedonism focusses on attaining pleasure and avoiding pain, whereas eudaimonia focusses on actualizing one's potential while pursuing one's purpose in life in a virtuous manner (Deci and Ryan, 2008; Waterman, 1993, 2007). Thus, hedonia at work is the extent to which employees experience work as fun and pleasant. Hedonia is conceptually different from engagement, which is psychological presence in a role as indicated by high levels of attention and absorption (Kahn, 1990). Although engagement may be enjoyable, workers can be attentive and absorbed in a role without experiencing hedonia.

Eudaimonia is conceptualized as striving for personal growth in a virtuous manner that allows one to fulfill one's life purpose (Aristotle, 1925; Waterman, 1993). An underlying premise of the eudaimonic perspective is that individuals experience well-being when they are fulfilling their potential while contributing to the greater good (McMahan and Estes, 2011a, b; Ryan and Deci, 2001). Thus, eudaimonia at work is the subjective experience that work helps one grow, provides a sense of purpose and contributes to a larger community. As such, eudaimonia at work is a multi-dimensional construct that measures employees' experiences of personal growth, purpose and social significance (McMahan and Estes, 2011a, b; Ryan *et al.*, 2008; Ryff and Singer, 2008). Since eudaimonia is a more complex construct than hedonia and has not been examined as frequently in organizational settings, the following discussion elaborates its components.

The first component, personal growth, is an important aspect of eudaimonia (Ryff and Singer, 2008; Waterman, 1993). Eudaimonia occurs when people experience work as providing opportunities to learn, to develop their potential, and to use such learning and potential (Ryan *et al.*, 2008; Waterman, 2007). Experiencing work with a sense of purpose is the second component of eudaimonia (Waterman, 1993). Ryff and Singer (2008) emphasized that eudaimonia involves purposeful and goal-oriented activities. The importance of meaning and purpose in optimal functioning also has been emphasized in an array of research (Baumeister, 1991; Frankl, 1985; Ryff, 1989), and scholars have noted that work can provide purpose and meaning (Dik *et al.*, 2013). Third, a sense that one's activities are virtuous is a component of eudaimonia, and society influences what are considered virtuous activities (Aristotle, 1925). Eudaimonia occurs when individuals experience personal growth by engaging in activities that have personal meaning and contribute to a larger community. As such, social significance represents the third crucial component of eudaimonia.

Huta and Waterman (2014) noted that eudaimonia has been examined as: experiences (subjective experiences or appraisals); orientations (values, motives, goals, i.e. the “why” of behavior); behaviors (the actions, i.e. the “what”); and functioning (positive psychological health and flourishing). They urged researchers to explicitly state how eudaimonia (and hedonia) are conceptualized. This study conceptualizes eudaimonia at work as subjective experiences of personal growth, purpose and social significance. Our conceptualization of eudaimonia is consistent with McMahan and Estes (2011b, p. 269) who stated that “a eudaimonic conception of well-being includes the experience of meaning or purpose, the development of personal strengths, and contributions to society.” However, whereas McMahan and Estes (2011a, b) examined beliefs about well-being, finding that such beliefs influenced actions taken to increase well-being, this study examines the experience of well-being.

This conceptualization of eudaimonia is consistent with, yet differs from, self-determination theory (SDT), which is a macro-theory of motivation, comprising several mini-theories (Sheldon *et al.*, 2003). One of those mini-theories is the basic needs theory, which proposes that when three innate psychological needs – autonomy, competence and relatedness – are fulfilled, individuals experience well-being (Deci and Ryan, 2000). Another mini-theory, organismic integration theory, compares the effects of internally and externally generated goals (Sheldon *et al.*, 2003). Thus, SDT primarily focusses on orientations that relate to well-being (Huta and Waterman, 2014). Both eudaimonia and hedonia can be contrasted with job satisfaction, which is an attitude based on an appraisal of the work environment (Wright and Cropanzano, 2007). As noted by Wright and Cropanzano (2007), job satisfaction is not an appropriate indicator of hedonic or eudaimonic well-being.

To summarize, although eudaimonia and hedonia are both conceptualized as subjective experiences of well-being, they have different philosophical perspectives (Ryan and Deci, 2001). Hedonia is experiencing pleasure and avoiding pain, whereas eudaimonia is experiencing personal growth, purpose and social significance (McMahan and Estes, 2011b; Ryan *et al.*, 2008). The purposes of this study are to examine the unique and interactive relationships of hedonia and eudaimonia with the job attitudes of job satisfaction, affective commitment and turnover intentions, and with the self-reported extra-role behaviors of helping, boosterism and taking charge. If eudaimonia and hedonia are different conceptualizations of well-being then each would explain unique variance in the outcomes. Furthermore, based in part on conservation of resources theory (Hobfoll, 1989), eudaimonia and hedonia may have a synergistic relationship with the outcomes such that the effects of eudaimonia are stronger when hedonia is higher.

Hypotheses development

Both eudaimonia and hedonia are expected to have positive relationships with the outcomes[2]. Furthermore, although eudaimonia and hedonia are expected to be relatively strongly correlated, because they reflect different experiences, they are hypothesized to explain unique variance in the outcomes. Eudaimonia and hedonia are likely to be positively correlated because many eudaimonic activities (i.e. learning while engaging in purposeful and significant actions) elicit positive emotions (Waterman, 1993). Notably, however, some activities (challenging tasks) may elicit eudaimonia but not hedonia, while other activities (gourmet food) can lead to hedonia but not eudaimonia. Thus, although eudaimonia and hedonia are correlated, some evidence indicates they have a different pattern of relationships with the outcomes

(Fredrickson *et al.*, 2013; Ryan *et al.*, 2008; Waterman, 2007). We theorize that eudaimonia and hedonia provide different resources (Hobfoll, 1989) that positively influence job attitudes and extra-role behaviors.

Hedonia provides the resource of positive affect, which has a positive influence on employee attitudes and extra-role behaviors (Fredrickson, 2001; Lyubomirsky *et al.*, 2005). Happier employees have more positive work attitudes (Thoresen *et al.*, 2003) and engage in more extra-role behaviors (Carlson *et al.*, 1988; George, 1991). When individuals experience eudaimonia, they experience work activities as providing personal growth, having purpose and benefitting the community. People who believe their work benefits others exert extra effort and tend to engage in more extra-role behaviors (Grant, 2008). Thus, eudaimonia is hypothesized to be positively related to work outcomes because workers with greater eudaimonia experience work as meaningful and valuable and understand how to direct their effort toward impactful activities. Thus, hedonia and eudaimonia are hypothesized to have positive yet unique effects on the outcomes:

- H1.* Hedonia at work and eudaimonia at work are both positively related to (a) job attitudes and (b) extra-role behaviors and each adds unique variance to those outcomes.

A second goal of this study is to examine whether eudaimonia and hedonia have a synergistic effect on the outcomes. Individuals who experience greater eudaimonia see work as providing opportunities for growth and development, as having a purpose, and as impacting others' lives. Thus, workers with high eudaimonia experience work as valuable and understand how to direct their effort toward impactful activities. When individuals experience greater hedonia (i.e. more positive feelings), they have more energy and exert more effort, which helps them build psychological, physical and social resources (Fredrickson, 2001). Such resources are expected to amplify the resources provided by eudaimonia and lead to a synergistic effect on the outcomes. Conceptually, such theorizing is consistent with evidence that intrinsic motivation strengthens the relationship of prosocial motivation with persistence, performance and creativity (Grant, 2008; Grant and Berry, 2011). Thus, hedonia is hypothesized to strengthen the positive relationship of eudaimonia with the outcomes:

- H2.* Hedonia moderates the positive relationship of eudaimonia at work with job attitudes and extra-role behaviors such that the relationship is stronger when hedonia is higher.

The overriding goal of this study is to examine different conceptualizations of well-being at work. *H1* proposes unique positive main effects of eudaimonia and hedonia, and *H2* proposes an interactive effect. If hedonia and eudaimonia have unique as well as interactive effects on the outcomes, then such results would support the theorizing that hedonia and eudaimonia are both important conceptualizations of well-being at work.

Method

Procedure

The human resource department of a large university in the USA. Midwest provided a list of administrative support employees. This job family included office support staff, administrative assistants and associates, secretaries and clerks (i.e. secretarial/clerical job family). Using campus mail, surveys were mailed with \$1.00 to encourage

participation to 1,000 randomly selected participants. Survey 1 measured eudaimonia, hedonia, and the demographic variables, and was returned by respondents using the campus mail envelope provided. Approximately two weeks later, an e-mail with a link to an online survey, which included the outcomes of job satisfaction, affective commitment, turnover intentions, interpersonal helping, loyal boosterism and taking charge, was sent to the 608 individuals who completed the time 1 survey. The time 2 survey was completed by 528 people (overall response rate of 52.8 percent).

In an attempt to reduce potential common method bias, recommendations to use temporal and methodological separation of predictors and outcomes were followed (Podsakoff *et al.*, 2003). Specifically, the first survey measured the predictors with a paper-and-pencil survey and the second survey, which was completed approximately two weeks later and included the outcomes, was web based. A two-week interval was chosen in an attempt to reduce potential memory effects of survey 1 responses yet not allow too much time for subject attrition or for contaminating factors to intervene between the predictors and outcomes.

To examine possible subject attrition bias, respondents who completed only the first survey were compared to respondents who completed both surveys. Results indicated no significant differences for any of the time 1 variables (i.e. hedonia, eudaimonia, demographics).

Participants. The respondents were primarily female (95 percent) and Caucasian (90 percent) and had been working at the university for approximately 9.6 years with five years in their current position. The majority of respondents had a college degree (70 percent) and the average age of respondents was 43 years (SD = 11.7).

Measures

Unless otherwise indicated, all items used a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree).

Time 1: eudaimonia and hedonia at work. Eudaimonia. Eudaimonia at work is a higher-order construct comprised of personal growth, purpose and social significance. The personal growth items were adapted from the Ryff (1989) personal growth dimension: "I have opportunities to learn and grow at work," "In general, I feel that I continue to learn at work" and "I feel that I've learned a lot at work that has made me a more capable person." The purpose items were adapted from Ryff (1989): "I have a sense of direction and purpose with my work," "My work means more to me than providing a paycheck" and "My work helps me to achieve more goals in life than just financial goals." Social significance was measured with two items adapted from Cable and Edwards's (2004) Work Values Survey and one item from Hackman and Oldham's (1976) task significance scale. Items were "I feel that my work helps to make the world a better place," "I feel that my work contributes to society or the community" and "I feel that my job has a substantial impact on the lives or work of other people." Cronbach's α for growth, purpose and social significance were 0.90, 0.89 and 0.90, respectively.

Hedonia. Three items, adapted from Waterman (1993) and Huta and Ryan (2010), measured hedonia: "I think my work is pleasant," "I think my work is fun" and "I feel good when I am working."

Time 2: employee attitudes and extra-role behavior. Employee attitudes. Job satisfaction was measured with the three-item scale from Cammann *et al.* (1983). A representative item is "All in all, I am satisfied with my job." Affective commitment was measured with the Meyer and Allen (1987) eight-item scale. A representative item

is "I would be very happy to spend the rest of my career with this organization." Finally, turnover intentions was measured with the three-item scale from Hellgren *et al.* (1997). A representative item is "I am actively looking for other jobs."

Extra-role behaviors. We captured a wide range of extra-role behaviors by measuring interpersonal helping, loyal boosterism and taking charge. Interpersonal helping and loyal boosterism were each measured with five items adapted from Moorman and Blakely (1995). Interpersonal helping included, as a representative item, "I go out of my way to help co-workers with work-related problems." Loyal boosterism (five items) included "I defend the university when other employees criticize it." Taking charge was measured with the ten-item scale validated by Morrison and Phelps (1999). A representative item is "I often make constructive suggestions for improving how things operate within the organization."

Control variables. In the regression analyses, we controlled for gender (1 = male, 2 = female), organization tenure (in months) and education level (measured with 6 levels with 1 = some high school, 2 = high-school degree, 3 = some college, 4 = college degree, 5 = some graduate school and 6 = graduate degree), as these variables were expected to be related to the outcomes.

Analyses and results

Before testing the hypotheses, a confirmatory factor analysis investigated the measurement model. Hedonia was a first-order factor comprising three items. Eudaimonia was conceptualized as a higher-order construct comprised of the sub-dimensions of growth, purpose and social significance. Thus, the measurement model had the three scale items loading on the first-order dimensions of growth, purpose and social significance, which loaded on the second-order eudaimonia factor. The latent factors of hedonia and eudaimonia were allowed to correlate. Although the χ^2 was significant, which is not surprising given the large sample size, the model provided an adequate fit to the data (χ^2 (50, n = 528) = 185.11; GFI = 0.94; CFI = 0.98; NFI = 0.97; RMSEA = 0.072) as indicated by a RMSEA less than 0.08 and fit indices greater than 0.90 (Hu and Bentler, 1999). All first-order and second-order loadings in the model were statistically significant and were greater than 0.70. The theorized model was compared to an alternative model in which the nine eudaimonic items loaded directly on a eudaimonic construct without the first-order sub-dimension. The fit of the alternative model, however, was not acceptable (χ^2 (53, n = 528) = 1073.87; GFI = 0.74; CFI = 0.82; NFI = 0.81; RMSEA = 0.19). Additionally, when the correlation between the latent factors of eudaimonia and hedonia was fixed to 1.00, the model fit significantly worse (χ^2 change of 28.01 with 1 df, p < 0.01). Such results indicate that eudaimonia and hedonia are distinct constructs and support the conceptualization of eudaimonia as a higher-order construct.

As shown in Table I eudaimonia and hedonia are correlated (r = 0.72), indicating that people who experience more eudaimonia tend to experience more hedonia at work. More broadly, as expected, both eudaimonia and hedonia were correlated with the job attitudes and with the extra-role behaviors. A usefulness analysis tested whether eudaimonia and hedonia explain unique variance in the outcomes (*HI*) (Darlington, 1968; Erez and Judge, 2001). As shown in Table II, model one examines whether eudaimonia explained unique variance beyond hedonia, whereas model two examines whether hedonia explains unique variance beyond eudaimonia.

Eudaimonia and hedonia each explained unique variance in all three job attitudes (step 3 in models). For example, eudaimonia explained an additional 5 percent of the

Table I.
Means, standard deviations, correlations and reliability

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1 Eudaimonia	5.11	1.19	(0.93)										
2 Hedonia	5.18	1.37	0.72**	(0.92)									
<i>Job attitudes</i>													
3 Job satisfaction	4.41	0.52	0.68**	0.67**	(0.93)								
4 Affective commitment	4.30	1.13	0.54**	0.48**	0.57**	(0.87)							
5 Turnover intentions	3.63	1.69	-0.54**	-0.55**	-0.71**	-0.48**	(0.87)						
<i>Extra-role behaviors</i>													
6 Interpersonal helping	5.66	0.78	0.20**	0.13**	0.17**	0.22**	-0.11*	(0.79)					
7 Loyalty boosterism	4.64	1.15	0.44**	0.39**	0.41**	0.71**	-0.29**	0.27**	(0.91)				
8 Taking charge	5.17	0.97	0.26**	0.16**	0.20**	0.24**	-0.10*	0.35**	0.24**	(0.93)			
<i>Control variables</i>													
9 Organizational tenure (months)	114.69	102.92	0.10*	0.04	0.12**	0.17**	-0.11*	0.12**	0.05	-0.04	-		
10 Education	3.34	1.02	-0.07*	-0.05	-0.09*	-0.09**	0.11**	-0.10**	-0.10**	0.06	-0.25**	-	
11 Gender (1 = male; 2 = female)	1.95	0.21	0.02	0.01	0.00	-0.06	0.04	0.07	-0.03	0.00	-0.03	-0.11**	-

Notes: $n = 528$. Coefficient α is reported on the diagonal in parentheses. * $p < 0.05$; ** $p < 0.01$

Table II.

Usefulness analysis
of eudaimonia and
hedonia in predicting
work outcomes

	Job satisfaction	Affective commitment	Turnover intentions	Interpersonal helping	Loyal boosterism	Taking charge
<i>Model 1</i>						
Step 1	0.02*	0.04**	0.03**	0.03**	0.02	0.01
Control variables						
Step 2	0.51**	0.26**	0.29**	0.02**	0.14**	0.03**
R^2 change after entry of hedonia						
Step 3	0.05**	0.04**	0.04**	0.01**	0.06**	0.05**
R^2 change after entry of eudaimonia						
<i>Model 2</i>						
Step 1	0.02*	0.04**	0.03**	0.03**	0.02	0.01
Control variables						
Step 2	0.44**	0.28**	0.28**	0.03**	0.19**	0.08**
R^2 change after entry of eudaimonia						
Step 3	0.12**	0.02**	0.05**	0.00	0.01*	0.00
R^2 change after entry of hedonia						

Notes: Table entries are change in R^2 ; control variables are organizational tenure, education and gender (1 = male; 2 = female). * $p < 0.05$; ** $p < 0.01$

variance in job satisfaction beyond hedonia, whereas hedonia explained an additional 12 percent of the variance in job satisfaction beyond eudaimonia. Turning to the extra-role behaviors, eudaimonia appeared to have stronger effects than hedonia. Specifically, for taking charge, boosterism and helping, eudaimonia explained 5, 6 and 1 percent compared to hedonia which explained 0, 1 and 0 percent, respectively. Thus, although hedonia was related to all three extra-role behaviors beyond the control variables (see step 2 of model 1), it explained unique variance only in loyal boosterism. To summarize, eudaimonia added unique variance for all six outcomes, whereas hedonia added unique variance for the three job attitudes and for loyal boosterism. Such results suggest that hedonia and eudaimonia are distinct conceptualizations of employee well-being.

Moderated hierarchical regression analyses examined whether eudaimonia had a stronger relationship with the outcomes when hedonia was higher ($H2$). Consistent with recommendations, we mean-centered eudaimonia and hedonia before creating the interaction term (Cohen *et al.*, 2002). Results indicated (see Table III) that the interaction term was significant for affective commitment, turnover intentions, interpersonal helping and taking charge. To understand the pattern of the interactions, we calculated simple slopes of eudaimonia with the outcome for high (+1 SD) and low (-1 SD) levels of hedonia (see Table IV). All four significant interactions provide support for $H2$ as the relationship of eudaimonia with the outcome was stronger when hedonia was high.

Discussion

Although hedonism is the most common conceptualization of well-being, eudaimonism has been proposed as an additional conceptualization (Ryan *et al.*, 2008; Waterman, 1993). To date, however, little research has simultaneously examined both hedonia and

Table III.
Hierarchical
regression analyses
for time 2 self-report
outcomes

Variable	Job satisfaction			Affective commitment			Turnover intentions			Interpersonal helping			Loyal boosterism			Taking charge		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Tenure	0.10*	0.07*	0.07*	0.16**	0.12**	0.13**	-0.07	-0.04	-0.04	0.09*	0.08	0.08	0.02	-0.01	-0.01	-0.02	-0.04	-0.04
Education	-0.08	-0.03	-0.02	-0.06	-0.03	-0.03	0.12**	0.08*	0.09*	-0.10*	-0.09	-0.10*	-0.1*	-0.07	-0.07	0.08	0.08	0.12**
Gender	0.00	-0.03	-0.03	-0.09*	-0.11**	-0.11**	0.03	0.04	0.04	0.06	0.05	0.06	-0.07	-0.08*	-0.08	-0.02	-0.03	-0.02
Eudaimonia		0.32**	0.31**		0.39**	0.41**		-0.30**	-0.32**		0.20**	0.24**		0.34**	0.35**		0.31**	0.33**
Hedonia		0.49**	0.48**		0.20**	0.24**		-0.33**	-0.36**		-0.02	0.05		0.14*	0.15*		-0.05	-0.01
Eudaimonia × hedonia			-0.04			0.12**		-0.10*	-0.10*		0.03**	0.17**		0.04	0.04		0.07**	0.01*
ΔR^2	0.02*	0.55**	0.00	0.04**	0.30**	0.01*	0.03**	0.53**	0.01*	0.03**	0.03**	0.02**	0.02*	0.02*	0.00	0.01	0.07**	0.01*

Notes: Standardized coefficients for the OLS regressions are reported at each step. * $p < 0.05$, ** $p < 0.01$

eudaimonia in a work setting, although the conceptualization of well-being influences research questions and actions taken to improve such well-being (Huta and Ryan, 2010; Ryff, 1989; Wright and Cropanzano, 2007). Our results suggest that the eudaimonic perspective of well-being complements and extends the hedonic perspective.

Our study makes two major contributions. First, theoretical and empirical evidence suggest that although eudaimonia and hedonia at work are related, they are different constructs and have unique effects on the outcomes. Notably, eudaimonia had stronger effects on the extra-role behaviors than hedonia, whereas hedonia had a stronger relationship with job satisfaction. Such results are consistent with evidence that people higher in eudaimonia engage in more prosocial actions (Ryan *et al.*, 2008) and suggest that experiencing growth, purpose and social significance leads to more extra-role behaviors. Nonetheless, the evidence that the two conceptualizations of well-being have different relationships with extra-role behaviors, and by extension with performance, needs to be replicated and extended.

Second, eudaimonia and hedonia has a synergistic effect such that eudaimonia had stronger relationships with commitment, turnover intentions, interpersonal helping and taking charge when hedonia was higher. Such results extend evidence from other settings that eudaimonia and hedonia have both a main effect and a synergistic effect on outcomes (Huta and Ryan, 2010; Peterson *et al.*, 2005). More broadly, our results suggest the importance of both eudaimonic and hedonic well-being for scholars and practitioners.

By examining eudaimonia, the results provide insight into the happy-productive worker thesis, which proposes that happy workers are productive workers (Wright and Cropanzano, 2007). Some evidence indicates that a hedonic measure of well-being influences performance (Wright and Bonett, 2007; Wright and Cropanzano, 2007) and also moderates the relationship of job satisfaction with performance (Wright *et al.*, 2007). Our findings are consistent with and extend such results as eudaimonia and hedonia had direct and synergistic influences on work outcomes. As noted by Fisher (2010) in her review, "the 'happy-productive worker hypothesis' may be more true than we thought" (p. 404), although how happiness is defined is crucial in establishing the happy-productive worker relationship.

An important contribution of our study is the examination of eudaimonia as an additional conceptualization of well-being beyond hedonia. Nonetheless, our study has various limitations, which suggest areas for future research. First, although we used relevant theory to develop our measure of eudaimonia, there is not yet agreement on the meaning or measurement of eudaimonia (Huta and Waterman, 2014; Warr, 2007). Research is needed to compare our measure of eudaimonic well-being with other related constructs, such as psychological well-being (Ryff, 1989), which is a broader construct

Job satisfaction	Affective commitment	Turnover intentions	Interpersonal helping	Loyal boosterism	Taking charge
-1 <i>SD hedonia</i>					
-	0.32	-0.36	0.12	-	0.26
+1 <i>SD hedonia</i>					
-	0.47	-0.54	0.35	-	0.40

Note: Values in table are regression coefficients for significant interactions

Table IV.
Simple slope analyses of relationship of eudaimonia with outcome at low and high levels of hedonia

that includes self-acceptance, positive relations with others, autonomy and environmental mastery in addition to personal growth and purpose (social significance). Research might also compare eudaimonia with the self-determination needs of autonomy, competence and relatedness (Deci and Ryan, 2000; Ryan and Deci, 2001), which appear similar to Ryff's (1989) dimensions of, respectively, autonomy, environmental mastery and positive relations with others. More work is needed to refine our measure of eudaimonia and to further develop its nomological network by examining relationships with other concepts beyond hedonic well-being. As research continues, we expect to see more agreement on the conceptualization and operationalization of eudaimonia.

The sample of predominantly white, female administrative support staff that worked for a university raises questions about the generalizability of our findings. Future research might examine more demographically diverse samples that also have more variability in occupational rank and workload control. A limitation of our study is that all measures were based on self-reports, leading to concerns about possible same-source method variance. To minimize such concerns, we followed recommendations to measure the predictors and outcomes at different times using different data collection techniques (paper and web-based surveys) (Podsakoff *et al.*, 2003). Although it seems unlikely that method variance is an alternative explanation for the pattern of results found (e.g. the interaction effects or the unique R^2 effects), future research might measure peer or supervisor ratings of extra-role behaviors. Additionally, although we collected data at two points in time, we cannot rule out reverse causality. For example, crafting one's job (Wrzesniewski and Dutton, 2001), which may result in more extra-role behaviors, may influence eudaimonia and hedonia.

More broadly, research might utilize different methodologies to more fully examine eudaimonia and hedonia. For example, it seems likely that hedonia is more transient, and thus more variable, than eudaimonia (Fisher, 2010; Waterman, 1990). As such, eudaimonia may have longer-lasting effects than hedonia (Steger *et al.*, 2008). An experience sampling methodology, with data collection across time periods, could provide insight into the relative transience and effects of eudaimonia and hedonia.

Future research might examine antecedents of eudaimonia. Activities that lead to experiencing eudaimonia vs hedonia provided more growth potential, required more effort, provided a balance of challenge and skills (flow), and were seen as important (Waterman, 1990). Such evidence suggests that professional development opportunities can lead to experiencing eudaimonia at work. Additionally, employees are more likely to experience eudaimonia when managers highlight how employees contribute to the firm's mission, and/or allow employees to meet beneficiaries of their work (Grant, 2007). More broadly, perhaps transformational leadership, which provides growth opportunities and emphasizes the meaning of work (Bass and Riggio, 2006), influences eudaimonia.

Practical implications and conclusion

Given the popularity of books highlighting the importance of delivering happiness to employees (e.g. Hsieh, 2010), it is important to explicitly consider what is meant by happiness, since the conceptualization of happiness influences actions taken to enhance it (McMahan and Estes, 2011a). Our results indicate that practitioners and scholars should consider both eudaimonic and hedonic conceptualizations of well-being as both perspectives add to our understanding of employee attitudes and extra-role behaviors. For example, although perks such as gourmet food may influence hedonia, managers

also should ensure employees understand how their job contributes to the organization's mission and create work environments that help employees grow and develop. Although pleasure at work is important, we hope our study raises managers' awareness of the importance of creating eudaimonic well-being at work and encourages more research into eudaimonic well-being.

Notes

1. As noted by Wright and Huang (2012), well-being and happiness are sometimes used interchangeably, although they are not necessarily identical constructs. Consistent with many academics, we use the broader term well-being, and differentiate it from happiness, which is sometimes considered a lay term that lacks scientific precision, and tends to be associated with pleasure and joy (Zelenski *et al.*, 2008).
2. Note that for clarity of exposition, we describe positive relationships with the outcomes, although empirically we expect a negative relationship with turnover intentions, as a higher score reflects a less positive attitude.

References

- Aristotle (1925), *The Nicomachean Ethics* (Trans. by D. Ross), Oxford University Press, New York, NY.
- Barrick, M.R., Mount, M.K. and Li, N. (2013), "The theory of purposeful work behavior: the role of personality, higher-order goals, and job characteristics", *Academy of Management Review*, Vol. 38 No. 1, pp. 132-153.
- Bass, B.M. and Riggio, R.E. (2006), *Transformational Leadership*, 2nd ed., Erlbaum, Mahwah, NJ.
- Baumeister, R.F. (1991), *Meanings of Life*, Guilford Press, New York, NY.
- Cable, D.M. and Edwards, J.R. (2004), "Complementary and supplementary fit: a theoretical and empirical integration", *Journal of Applied Psychology*, Vol. 89 No. 5, pp. 822-834.
- Cammann, C., Fichman, M., Jenkins, D. and Klesh, J.R. (1983), "Assessing the attitudes and perceptions of organizational members", in Seashore, S., Edward, E.L., Mirvis, P.H. and Cammann, C. (Eds), *Assessing Organizational Change: A Guide to Methods, Measures, and Practices*, Wiley, New York, NY, pp. 71-138.
- Carlson, M., Charlin, V. and Miller, N. (1988), "Positive mood and helping behavior: a test of six hypotheses", *Journal of Personality and Social Psychology*, Vol. 55 No. 2, pp. 211-229.
- Cohen, J., Cohen, P., West, S.G. and Aiken, L.S. (2002), *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*, 3rd ed., Erlbaum, Mahwah, NJ.
- Darlington, R.B. (1968), "Multiple regression in psychological research and practice", *Psychological Bulletin*, Vol. 69 No. 3, pp. 161-182.
- Deci, E.L. and Ryan, R.M. (2000), "The 'what' and 'why' of goal pursuits: human needs and the self-determination of behavior", *Psychological Inquiry*, Vol. 11 No. 4, pp. 227-268.
- Deci, E.L. and Ryan, R.M. (2008), "Hedonia, eudaimonia, and well-being: an introduction", *Journal of Happiness Studies*, Vol. 9 No. 1, pp. 1-11.
- Dik, B.J., Byrne, Z.S. and Steger, M.F. (2013), *Purpose and Meaning in the Workplace*, American Psychological Association, Washington, DC.
- Erez, A. and Judge, T.A. (2001), "Relationship of core self-evaluations to goal setting, motivation, and performance", *Journal of Applied Psychology*, Vol. 86 No. 6, pp. 1270-1279.
- Fisher, C.D. (2010), "Happiness at work", *International Journal of Management Reviews*, Vol. 12 No. 4, pp. 384-412.

- Frankl, V.E. (1985), *Man's Search for Meaning*, Beacon Press, Boston, MA.
- Fredrickson, B.L. (2001), "The role of positive emotions in positive psychology: the broaden-and-build theory of positive emotions", *American Psychologist*, Vol. 56 No. 3, pp. 218-226.
- Fredrickson, B.L., Grewen, K.M., Coffey, K.A., Algoe, S.B., Firestone, A.M., Arevalo, J.M., Ma, J. and Cole, S.W. (2013), "A functional genomic perspective on human well-being", *Proceedings of the National Academy of Sciences*, Vol. 110, pp. 13684-13689.
- George, J.M. (1991), "State or trait: effects of positive mood on prosocial behaviors at work", *Journal of Applied Psychology*, Vol. 76 No. 2, pp. 299-307.
- Grant, A.M. (2007), "Relational job design and the motivation to make a prosocial difference", *Academy of Management Review*, Vol. 32 No. 2, pp. 393-417.
- Grant, A.M. (2008), "Does intrinsic motivation fuel the prosocial fire? Motivational synergy in predicting persistence, performance, and productivity", *Journal of Applied Psychology*, Vol. 93 No. 1, pp. 48-58.
- Grant, A.M. and Berry, J.W. (2011), "The necessity of others is the mother of invention: intrinsic and prosocial motivations, perspective taking, and creativity", *Academy of Management Journal*, Vol. 54 No. 1, pp. 73-96.
- Grant, A.M., Christianson, M.K. and Price, R.H. (2007), "Happiness, health, or relationships? Managerial practices and employee well-being tradeoffs", *The Academy of Management Perspectives*, Vol. 21 No. 3, pp. 51-63.
- Hackman, J.R. and Oldham, G.R. (1976), "Motivation through the design of work: test of a theory", *Organizational Behavior and Human Performance*, Vol. 16 No. 2, pp. 250-279.
- Hellgren, J., Sjöberg, A. and Sverke, M. (1997), "Intention to quit: effects of job satisfaction and job perceptions", in Avallone, F., Arnold, J. and de Witte, K. (Eds), *Feelings Work in Europe*, Guerini, Milano, pp. 415-423.
- Hobfoll, S.E. (1989), "Conservation of resources: a new attempt at conceptualizing stress", *American Psychologist*, Vol. 44 No. 3, pp. 513-524.
- Hsieh, T. (2010), *Delivering Happiness: A Path to Profits, Passion, and Purpose*, Business Plus, New York, NY.
- Hu, L.T. and Bentler, P.M. (1999), "Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives", *Structural Equation Modeling: A Multidisciplinary Journal*, Vol. 6 No. 1, pp. 1-55.
- Huta, V. and Ryan, R.M. (2010), "Pursuing pleasure or virtue: the differential and overlapping well-being benefits of hedonic and eudaimonic motives", *Journal of Happiness Studies*, Vol. 11 No. 6, pp. 735-762.
- Huta, V. and Waterman, A.S. (2014), "Eudaimonia and its distinction from hedonia: developing a classification and terminology for understanding conceptual and operational definitions", *Journal of Happiness Studies*, Vol. 15 No. 6, pp. 1425-1456.
- Kahn, W.A. (1990), "Psychological conditions of personal engagement and disengagement at work", *Academy of Management Journal*, Vol. 33 No. 4, pp. 692-724.
- Lyubomirsky, S., King, L. and Diener, E. (2005), "The benefits of frequent positive affect: does happiness lead to success?", *Psychological Bulletin*, Vol. 131 No. 6, pp. 803-855.
- McMahan, E.A. and Estes, D. (2011a), "Hedonic versus eudaimonic conceptions of well-being: evidence of differential associations with self-reported well-being", *Social Indicators Research*, Vol. 103 No. 1, pp. 93-108.
- McMahan, E.A. and Estes, D. (2011b), "Measuring lay conceptions of well-being: the beliefs about well-being scale", *Journal of Happiness Studies*, Vol. 12 No. 2, pp. 267-287.

- Meyer, J.P. and Allen, N.J. (1987), "A longitudinal analysis of the early development and consequences of organizational commitment", *Canadian Journal of Behavioural Science*, Vol. 19 No. 2, pp. 199-215.
- Moorman, R.H. and Blakely, G.L. (1995), "Individualism-collectivism as an individual difference predictor of organizational citizenship behavior", *Journal of Organizational Behavior*, Vol. 16 No. 2, pp. 127-142.
- Morrison, E.W. and Phelps, C.C. (1999), "Taking charge at work: extra role efforts to initiate workplace change", *Academy of Management Journal*, Vol. 42 No. 4, pp. 403-419.
- Organ, D.W. (1988), *Organizational Citizenship Behavior: The Good Soldier Syndrome*, Lexington Books/DC Heath and Company.
- Peterson, C., Park, N. and Seligman, M.E. (2005), "Orientations to happiness and life satisfaction: the full life versus the empty life", *Journal of Happiness Studies*, Vol. 6 No. 1, pp. 25-41.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903.
- Rosso, B.D., Dekas, K.H. and Wrzesniewski, A. (2010), "On the meaning of work: a theoretical integration and review", *Research in Organizational Behavior*, Vol. 30, pp. 91-127.
- Ryan, R.M. and Deci, E.L. (2001), "On happiness and human potentials: a review of research on hedonic and eudemonic wellbeing", *Annual Review of Psychology*, Vol. 52 No. 1, pp. 141-166.
- Ryan, R.M., Huta, V. and Deci, E.L. (2008), "Living well: a self-determination theory perspective on eudaimonia", *Journal of Happiness Studies*, Vol. 9 No. 1, pp. 139-170.
- Ryff, C.D. (1989), "Happiness is everything, or is it? Explorations on the meaning of psychological well-being", *Journal of Personality and Social Psychology*, Vol. 57 No. 6, pp. 1069-1081.
- Ryff, C.D. and Singer, B.H. (2008), "Know thyself and become what you are: a eudaimonic approach to psychological well-being", *Journal of Happiness Studies*, Vol. 9 No. 1, pp. 13-39.
- Sheldon, K.M., Turban, D.B., Brown, K.G., Barrick, M.R. and Judge, T.A. (2003), "Applying self-determination theory to organizational research", *Research in Personnel and Human Resources Management*, Vol. 22 No. 1, pp. 357-394.
- Steger, M.F., Kashdan, T.B. and Oishi, S. (2008), "Being good by doing good: daily eudaimonic activity and well-being", *Journal of Research in Personality*, Vol. 42 No. 1, pp. 22-42.
- Thoresen, C.J., Kaplan, S.A., Barsky, A.P., Warren, C.R. and de Chermont, K. (2003), "The affective underpinnings of job perceptions and attitudes: a meta-analytic review and integration", *Psychological Bulletin*, Vol. 129 No. 6, pp. 914-945.
- Warr, P. (2007), *Work, Happiness, and Unhappiness*, Erlbaum, Mahwah, NJ.
- Waterman, A.S. (1990), "The relevance of Aristotle's conception of eudaimonia for the psychological study of happiness", *Theoretical & Philosophical Psychology*, Vol. 10 No. 1, pp. 39-44.
- Waterman, A.S. (1993), "Two conceptions of happiness: contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment", *Journal of Personality and Social Psychology*, Vol. 64 No. 4, pp. 678-691.
- Waterman, A.S. (2007), "On the importance of distinguishing hedonia and eudaimonia when contemplating the hedonic treadmill", *American Psychologist*, Vol. 62, pp. 612-613.
- Wright, T.A. and Bonett, D.G. (2007), "Job satisfaction and psychological well-being as nonadditive predictors of workplace turnover", *Journal of Management*, Vol. 33 No. 2, pp. 141-160.
- Wright, T.A. and Cropanzano, R. (2007), "The happy/productive worker thesis revisited", *Research in Personnel and Human Resources Management*, Vol. 26 No. 1, pp. 269-307.

Wright, T.A., Cropanzano, R. and Bonett, D.G. (2007), "The moderating role of employee positive well being on the relation between job satisfaction and job performance", *Journal of Occupational Health Psychology*, Vol. 12 No. 2, pp. 93-104.

Wright, T.A. and Huang, C.C. (2012), "The many benefits of employee well-being in organizational research", *Journal of Organizational Behavior*, Vol. 33 No. 8, pp. 1188-1192.

Wrzesniewski, A. and Dutton, J.E. (2001), "Crafting a job: revisioning employees as active crafters of their work", *Academy of Management Review*, Vol. 26 No. 2, pp. 179-201.

Zelenski, J.M., Murphy, S.A. and Jenkins, D.A. (2008), "The happy-productive worker thesis revisited", *Journal of Happiness Studies*, Vol. 9 No. 4, pp. 521-537.

Further reading

Waterman, A.S. (2008), "Reconsidering happiness: a eudaimonist's perspective", *The Journal of Positive Psychology*, Vol. 3 No. 4, pp. 234-252.

Corresponding author

Daniel B. Turban can be contacted at: turban@missouri.edu