# Work related well-being is associated with individual subjective well-being

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Abstract: This study utilizes Gallup-ShareCare Well-being Index data to investigate the association between work-related well-being, i.e., job satisfaction, and overall subjective well-being among US workers. Subjective well-being is measured by i) daily positive and negative emotional experiences happiness, smiles, enjoyment, sadness, anger, worry, and stress (hedonic well-being); and ii) current and future life evaluation (evaluative well-being). The study finds significant positive relationships between job satisfaction and subjective well-being both in terms of higher odds of positive hedonic experiences and increased life evaluation scores after controlling for covariates and other nonworkrelated contributors to well-being. Job satisfaction accounted for a 14% increase in current and an 8% increase in future life evaluation scores. The results emphasize that not only the income generated by work but the quality of work is also important for worker well-being. In fact, those without a job had higher well-being than those workers who are dissatisfied at work. This is probably the first study that relates work-related well-being to overall well-being, using a nationally representative sample of US workers. Further, this is one of the few instances where the subjective measure of well-being is used in the occupational safety and health literature.

Key words: Well-being, Job satisfaction, Gallup, Work, Unemployment, Hedonic, Evaluative

## Introduction

Ancient civilizations often regarded work as a curse<sup>1</sup>). Tilgher (1977) mentioned that the Greek word for work is 'ponos', which means hard labor, toil, or sorrow<sup>2</sup>). Yet, work is necessary for the fulfillment of material needs, and the income it generates is the major constituent of and contributor to material well-being<sup>3, 4</sup>). However, rather than in-

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come, it is the inherent quality of work that contributes to one's quality of life and correspondingly to one's well-being; that is the focus of this study. Thus, work-related well-being or well-being attained through work, apart from pecuniary benefits, is an essential contributor to overall well-being.

Eastern and Western philosophers have long discussed the intrinsic value of work toward the attainment of well-being. Bertrand Russel, for instance, argued that an individual's work experience is an intermediary toward a bigger goal, that of maximizing individual and collective well-being or utility<sup>5</sup>). Well-being that is attributed to work and the

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work environment, defined as work-related well-being, is an important component of individual well-being; this relationship has been examined by researchers from various fields of interest<sup>6, 7)</sup>. However, a problem in examining this relationship is that the term 'well-being' has diverse connotations and has often been used indiscriminately. In addition, few studies have specifically attempted to quantify the contributions of an individual's work toward that of individual's overall well-being<sup>8–11)</sup>. This is partly due to the absence of a standard definition of well-being<sup>7)</sup>, partly due to the lack of statistical data for measuring well-being comprehensively.

Well-being undoubtedly is a universal and spacious concept. Albeit conceptually simple, it is intricate in terms of quantification. Economists and policymakers alike, especially those working in public health, are preoccupied with statistical indicators that can assess human progress in terms of individual and collective health and well-being<sup>12</sup>). In the recent economics literature, well-being, often termed as subjective well-being, has been represented by two distinct concepts: i) hedonic well-being, or how people feel emotionally from moment to moment in their everyday life, and ii) evaluative well-being, or how people evaluate their overall current and future life<sup>13-15</sup>. Hedonic well-being and evaluative well-being have different causes and correlates<sup>16)</sup>. Hedonic well-being, also called experienced well-being, conceptually tries to capture a person's series of momentary emotions that fluctuate in response to various event experiences over a defined period. If we try to map this concept to one's work-related well-being, then a worker's hedonic well-being over a given time-say, yesterday-might reflect upon her at-work experiences, such as the current task at hand or supervisory and coworker support. On the other hand, evaluative well-being reflects upon the individual's long-term life evaluation or life satisfaction<sup>17)</sup>. Evaluative work-related well-being, then, can be gauged by looking at one's overall job satisfaction.

Although public health researchers have only recently shown surging interest in individual well-being<sup>12)</sup>, work-related well-being in various forms has long been a subject of study. The National Institute for Occupational Safety and Health (NIOSH) has been measuring work-related well-being through its Quality of Worklife Survey since 2002. There has been growing consensus among researchers in the work organization field that better working conditions—lower job demands, higher job control, enhanced job security, and increased supervisory support—lead to higher levels of work-related well-being, mostly measured in terms of lower job stress and higher job satisfaction<sup>18, 19</sup>.

In recent times, few studies have tried to relate work-related well-being to overall subjective well-being<sup>19)</sup>. Some studies showed positive associations exist between job satisfaction and job security at one end and subjective quality of life and well-being at the other end<sup>20–22)</sup>. Also, there is ample evidence of the effect of work organization on workers' mental and physical health. Further, health, happiness, and well-being are closely related<sup>23)</sup>. Although relating job satisfaction to subjective well-being is a recent phenomenon, substantial research has been undertaken in understanding the relationship between job satisfaction and life satisfaction<sup>24)</sup>. The majority of the empirical evidence suggests a positive relationship between job satisfaction and overall life satisfaction<sup>25)</sup>. This is obvious since work is one facet of life along with other non-work facets. Although in most cases, the degree of this association is found to be relatively small. The underlying theory supported is mainly of spillover hypothesis coined by Wilensky (1960)<sup>26</sup> where work experiences spill over to non-work facets of life. This indicates that emotions or attitudes spill over from one domain to another such that workers satisfied with their work will also be satisfied with their life and vice versa. This implies a positive relationship between the two and is different from the compensatory model and the segmentation model. The compensatory model assumes a negative relationship between job and life satisfaction, while the segmentation model proposes that they are not correlated. Using a nationally representative sample of workers, Judge and Watanabe (1993) found a strong correlation and reciprocity exists between job satisfaction and life satisfaction<sup>27)</sup>. However, apart from a very few, these studies are based on small samples mostly of specific workers and fail to control for other facets of well-being. This has been a severe shortcoming of the existing studies. As overall well-being is an umbrella term and consists of different facets of life, work being only one, it is rather important to control other facets of well-being to understand work's influence on individual well-being. Further, at the US population level, there is an absolute dearth of studies, in recent times, that show the importance of work on overall subjective well-being.

To address this gap, in the current study, we examined how work-related well-being, measured as job satisfaction, contributes to individual subjective well-being in both hedonic and evaluative terms. The study not only revisits the relationship between job and life satisfaction in a contemporary context and with nationally representative data but enriches the literature by looking at the conception of subjective (evaluative and hedonic) well-being after controlling for other non-work facets of well-being. Thus the current study is essential for the following reasons: 1) utilizes nationally represented study population to analyze the association between work-related and overall well-being, 2) controls for other non-work contributors to well-being, and 3) implements the concept of evaluative and hedonic well-being in understanding the value of job satisfaction. We measured hedonic well-being in terms of an individual's emotional experiences in terms of happiness, smiles, enjoyment, sadness, anger, worry, and stress; we measured evaluative well-being in terms of an individual's current and future life evaluation. We used the U.S. Gallup Share-Care Well-being Index data for the year 2013<sup>28</sup>.

## **Subjects and Methods**

#### Data and measurement of variables

The Gallup Corporation collects daily tracking data through live phone interviews conducted 350 days a year with 1,000 U.S.-based randomly chosen respondents, 18 years and older. The interviews feature questions on various political, economic, health, and well-being topics<sup>29</sup>). Half of the respondents are asked questions from the Gallup Well-being track, hereafter Gallup survey. Based on the works of Kahneman and Krueger (2006), the Gallup survey assesses well-being through a host of questions related to individual emotional, physical, community/social, behavioral, financial, and work experiences<sup>17</sup>). We analyzed responses from 177,395 US respondents to the Gallup survey for the year 2013.

Following Kahneman and Deaton (2010)<sup>30</sup> and Deaton and Stone (2014)<sup>31</sup>, we measured daily positive and negative emotional experiences (hedonic well-being) in terms of happiness, smiles, and enjoyment, as well as sadness, anger, worry, and stress, and subjective well-being in terms of current and future life evaluation (evaluative well-being).

We measured hedonic well-being using bivariate responses to the following Gallup survey questions: (i) Did you smile or laugh a lot yesterday? And did you experience the following feelings during MUCH OF THE DAY yesterday? - (ii) enjoyment; (iii) happiness; (iv) worry; (v) sadness; (vi) stress; and (vii) anger. Affirmative responses to these questions assess the prevalence of these feelings.

We measured evaluative well-being with Cantril's self-anchoring scale<sup>32)</sup>, asking respondents to imagine a ladder with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for the respondent, and the bottom of the ladder rep-

resents the worst possible life. The Gallup survey interviewer then asks two questions. (i) Current life evaluation: On which step of the ladder would you say you stand at this time? (ii) Future life evaluation: On which step of the ladder would you say you will stand about five years from now?

We assessed work-related well-being using the bivariate response to the Gallup survey question: Are you satisfied or dissatisfied with your job or the work you do? The use of job satisfaction to understand work-related well-being is limited in scope. However, job satisfaction has been used as an outcome variable in the literature to understand work-related well-being<sup>33, 34</sup>.

Apart from frequently used covariates such as age, gender, marital status, race, education, and income, for our regression analyses, we controlled for other variables that are often touted in the literature as contributors to well-being. Based on relevant literature on well-being, we assessed well-being as a combination of well-being from different facets of life, work being one. This is similar to the segmentation hypothesis in job satisfaction/life satisfaction literature where work and non-work domains are separated<sup>26</sup>). However, unlike the segmentation hypothesis, we assume that these different domains collectively contribute to overall well-being, which we call life satisfaction. The other contributors to well-being that are mentioned in the literature and that we control for in our analysis are physical health, access to basic needs, and health behaviors<sup>3, 17, 29)</sup>. We assessed these contributors by using Gallup-provided indexes. Gallup combines specific items or domains related to a particular topic area and forms indexes that make it easier to track related population experiences over time. We used three such indexes to control for factors that directly or indirectly contribute to well-being: physical health, accessibility to basic needs, and individual health behaviors<sup>29)</sup>. The Physical Health Index is a computed mean of nine survey items related to questions regarding overall health, presence of chronic health conditions, activity limitations due to health, overweight based on body mass index (BMI), feeling rested, feeling energetic, and presence of flu symptoms, headache, and pain. Gallup uses a simple scoring methodology that results in scores ranging from 0 to 100, where higher scores reflect better health conditions. The Basic Access Index is a computed mean of eight survey items that assess accessibility to health insurance and medicines, safe walking, a safe place to exercise, a better place to live, clean and safe water, availability of fruits and vegetables, money to buy food, shelter, and healthcare and to visit doctors and dentists, and overall satisfaction with the city/town of the respondent. The Health Behavior Index is a computed mean of four survey items related to behavioral health such as smoking, eating, exercising, and intake of fruits and vegetables. We did not control for other workplace variables in the Well-being track because we assumed that job satisfaction encompasses the positive and negative elements of the work environment.

To understand differences in work-related well-being among individuals by employment status, we used the categories provided by Gallup: i) employed full-time for an employer, ii) full-time for self, iii) part-time and wants fulltime; iv) part-time and does not want full-time;v) unemployed, and vi) out of the workforce.

#### Descriptive and regression analyses

Our aim was to examine the prevalence of positive and negative emotions and potential differences among individuals with positive and negative work experiences, as indicated by perceived job satisfaction. Therefore, we first estimated the unadjusted hedonic well-being scores for the employed, the unemployed, those not in the workforce, and the differences in well-being scores among the employed who were satisfied at work and those who were not. We utilized a two-sided mean comparison test (t-test) to see if the differences in proportions are statistically significant. Second, we calculated the mean life-evaluation scores across individuals classified by employment status and the differences among employed individuals with and without job satisfaction. We applied t-tests to evaluate the statistical significance of those differences, if any. Next, we examined the sociodemographic characteristics of our study population, along with other contributors to subjective well-being, and adjusted for these factors while analyzing the effect of job satisfaction on employed individuals' subjective well-being.

To understand the association of job satisfaction with hedonic well-being, we fitted individual logistic regressions to each hedonic well-being element. The independent variables included job satisfaction and other major contributors to well-being, as discussed above. We used ordinary least squares estimates to measure the association of job satisfaction with current and future life evaluation scores (evaluative well-being).

We used Gallup-provided weights to compensate for disproportionalities in selection probabilities and non-response of individuals of certain features. Hence, the results and conclusions drawn from this analysis apply to the US population in 2013.

## Results

Table 1 depicts the proportion of individuals who responded affirmatively to hedonic well-being questions. The columns display categories of individuals by employment status - employed, unemployed, and those not in the workforce. Within the employed category, we categorized workers according to their job satisfaction. We present absolute score differences in the prevalence of experiencing positive and negative emotions by reported job satisfaction. Individuals reporting job satisfaction had a higher prevalence of positive emotions expressed as happiness, smiles, and enjoyment. For sadness, anger, worry, and stress, negative differences signify a lower prevalence of negative emotions for those reporting job satisfaction. All the differences in the prevalence of positive and negative emotions were statistically significant. Interestingly, the unemployed experienced more positive emotions than those with a job with which they were not satisfied. Similarly, those who were not in the workforce were better off in terms of experiencing a higher prevalence of positive emotions and lower prevalence of experiencing negative emotions than the unemployed and those reporting no job satisfaction.

We observed similar trends for evaluative well-being. Table 2 depicts evaluative well-being scores for the employed (with and without job satisfaction), the unemployed, and those not in the workforce. As previously mentioned, life evaluation scores range from 0 to 10, with ten being best. Current life evaluation and future life evaluation scores were higher for those reporting job satisfaction (difference of 1.24 and 0.67, respectively). Like hedonic well-being scores, evaluative well-being scores were higher for unemployed workers than workers with no job satisfaction.

An obvious challenge in interpreting the results in Tables 1 and 2 is that individuals satisfied with their job might share certain characteristics such as higher education, which by themselves can lead to more increased well-being. Therefore, we show in Table 3 how the study population varied in terms of demographic characteristics, physical health, access to basic needs, health behaviors, and their reported job satisfaction. Job satisfaction was highest among those working part-time and not looking for fulltime employment, followed by the self-employed. These two groups evidently seemed to work in the jobs they prefer. Also, these groups were relatively older in age within the workforce. Relative to other employment categories, the unemployed and those employed part-time and looking for full-time employment were predominantly non-white.

Table 1. Prevalence of hedonic well-being by employment status

Hedonic Well-being Element		Employed N=109,370	)	Unemployed	Not in Work Force	
(proportion responding 'yes')	Satisfied with job	Not satisfied with job	Δ	N=9,547	N=58,478	
Happiness	0.92	0.76	0.16** (0.15, 0.17)	0.84	0.86	
Smiles	0.87	0.71	0.16** (0.15, 0.17)	0.79	0.79	
Enjoyment	0.89	0.68	0.21** (0.20, 0.22)	0.8	0.83	
Sadness	0.12	0.3	-0.18** (-0.19, -0.17)	0.28	0.21	
Anger	0.12	0.29	$-0.17^{**}$ (-0.18, -0.16)	0.19	0.11	
Worry	0.26	0.51	$-0.25^{**}$ (-0.26, -0.24)	0.44	0.27	
Stress	0.39	0.64	-0.25** (-0.26, -0.24)	0.51	0.29	

Note. The table shows the proportion of respondents agreeing to the hedonic well-being outcomes. The fourth column depicts the differences in proportions by job satisfaction status within those employed at the time of the survey. The numbers in parentheses are the 95% confidence intervals.

\*\*significant at 0.05.

#### Table 2. Mean life evaluation scores by employment status

Evaluative Well-being Element		Employed N=109,370	Unemployed	Not in Work Force	
Drataan to then being Element	Satisfied with job	Not satisfied with job	Δ	N=9,547	N=58,478
Current life evaluation	7.27	5.97	1.24** (1.19, 1.38)	6.10	7.04
Future life evaluation	7.95	7.28	0.67** (0.40, 0.90)	7.71	6.85

Note. The table shows the mean life evaluation scores. The fourth column depicts the differences in mean scores by job satisfaction status within those employed at the time of the survey. The numbers in parentheses are the 95% confidence intervals.

\*\*significant at 0.05.

Over 50% percent of workers had some college education. Relative to other workers, self-employed and full-time workers had higher household income, better physical health and health behaviors, and more access to the basic necessities of life.

Table 4 reports the results of separate logistic regressions for each hedonic well-being element on job satisfaction. As might be surmised intuitively, for workers satisfied with their jobs, the odds of having positive emotions were significantly higher and the odds of having negative emotions were significantly lower. For example, the third column of the table shows that workers who reported job satisfaction were twice as likely to smile after controlling for covariates. Among the demographic and socio-economic covariates, age, education, gender, income, physical health, access to basic needs, and health behaviors were statistically significant contributors to most elements of hedonic well-being. In addition, marital status was a statistically significant contributor to feelings of happiness, enjoyment, and sadness.

Table 5 depicts the results from two ordinary least square models fitted to estimate the effect of job satisfaction on life evaluation scores. Both current and future life evaluation scores increased by approximately 1 point (for the former) and a half point (for the latter). This accounted for 14% and 8% increases in the respective evaluative well-be-

			Emj				
	Study Population N=177,395	Full-Time (N=76,570)	Full-Time Self- Employed (N=8,921)	Part-Time (not looking for full-time) (N=11,984)	Part-Time (looking for full-time) (N=11,895)	Unemployed N=9,547	Not in Work Force N=58,478
Job satisfaction (%)	88	88	92	95	78	-	-
Age (mean years)	47	42	48	49	37	37	57
Male (%)	49	58	67	36	46	46	38
Married/living with partner (%)	64	65	71	67	41	42	70
Race and Ethnicity (%)							
White	71	71	78	78	59	54	73
Black	12	12	9	9	16	20	12
Asian	2	2	1	2	2	2	2
Hispanic	14	14	11	10	21	23	12
Other	1	1	1	1	2	2	1
Education (%)							
Below high school	12	7	8	8	15	17	17
High school	29	24	28	25	32	34	36
Technical degree	6	7	7	5	5	6	5
Some college	23	23	23	28	27	26	21
Graduate	17	23	18	18	14	11	11
Post-graduate	13	18	15	17	7	6	9
Monthly household income	e (%)						
Less than \$60	2	0	1	1	2	9	3
\$60-\$499	2	1	1	2	4	5	2
\$500-\$999	6	1	2	5	13	12	12
\$1,000-\$1,999	14	8	8	11	20	22	20
\$2,000-\$2,999	13	11	10	13	16	16	16
\$3,000-\$3,999	12	12	11	13	11	11	12
\$4,000-\$4,999	11	12	11	12	9	7	10
\$5,000-\$7,499	18	23	20	18	11	9	13
\$7,500-\$9,999	8	11	10	8	5	3	4
\$10,000 or more	15	21	25	18	9	6	8
Physical Health Index (1– 100)	76	81	81	80	75	76	69
Basic Access Index (1– 100)	80	85	82	58	74	72	81
Health Behavior Index (1–100)	63	62	67	68	60	59	66

## Table 3. Characteristics of respondents by employment status and perceived job satisfaction

Note. This table depicts the demographic makeup of the study sample. Also, their average scores on physical health index, access to basic needs index, and health behavior index. The numbers in this table are rounded to whole numbers.

Subjective Well- being	Happiness	Smiles	Enjoyment	Sadness	Anger	Worry	Stress
Job satisfaction	2.58***	2.07***	2.84***	0.49***	0.45***	0.50***	0.49***
	(2.38–2.78)	(1.94–2.22)	(2.65–3.04)	(0.46–0.53)	(0.42–0.48)	(0.47–0.53)	(0.46–0.52)
Age	0.98***	0.99***	0.99***	1.00***	0.99***	0.99***	0.98***
	(0.98–0.99)	(0.98–0.99)	(0.99–0.99)	(1.00–1.01)	(0.99–0.99)	(0.99–0.99)	(0.97–0.98)
Gender	1.29***	1.35***	1.02	1.30***	0.83***	1.10***	1.15***
	(1.21–1.37)	(1.28–1.42)	(0.96–1.08)	(1.23–1.38)	(0.78–0.87)	1.05–1.14)	(1.1–1.2)
Marital status	1.24***	1.06	1.10**	0.80***	1.00	1.01	1.04
	(1.16–1.33)	(0.99–1.11)	(1.04–1.18)	(0.76–0.85)	(0.94–1.06)	(0.97–1.06)	(0.99–1.08)
Black	1.04	1.14	1.28	1.01	1.20	0.81	0.73***
	(0.79–1.37)	(0.91–1.42)	(0.98–1.66)	(0.79–1.28)	(0.98–1.48)	(0.66–0.98)	(0.62–0.87)
Asian	0.83***	1.15**	0.99	0.89**	0.98	0.61***	0.52***
	(0.75–0.92)	(1.05–1.25)	(0.90–1.08)	(0.81–0.97)	(0.89–1.07)	(0.61–0.02)	(0.48–0.55)
Hispanic	0.64***	0.95	0.73**	1.17	0.96	1.14*	0.94
	(0.52–0.78)	(0.81–1.11)	(0.61–0.87)	(0.97–1.41)	(0.80–1.14)	(1.00–1.30)	(0.83–1.05)
Other	0.86**	1.44***	0.96	1.19***	0.98	0.95	0.66***
	(0.77–0.95)	(1.31–1.58)	(0.87–1.05)	(1.09–1.31)	(0.89–1.07)	(0.88–1.01)	(0.62–0.71)
Education	0.97*	0.94***	0.98*	1.03**	0.98	1.11***	1.15***
	(0.95–0.99)	(0.92–0.96)	(0.96–0.99)	(1.01–1.06)	(0.96–1.00)	(1.08–1.12)	(1.12–1.16)
Monthly income	0.99	0.97***	0.98**	0.98**	1.03***	0.99	1.03***
	(0.98–1.01)	(0.96–0.98)	(0.96–0.99)	(0.96–0.99)	(1.02–1.05)	(0.99–1.01)	(1.02–1.04)
Physical health	1.02***	1.02***	1.03***	0.97***	0.98***	0.97***	0.97***
Index	(1.02–1.02)	(1.02–1.02)	(1.02–1.03)	(0.97–0.98)	(0.98–0.98)	(0.97–0.98)	(0.96–0.97)
Basic access Index	1.02***	1.01***	1.01***	0.98***	0.99***	0.98***	0.98***
	(1.02–1.02)	(1.01–1.01)	(1.01–1.02)	(0.97–0.98)	(0.98–0.99)	(0.98–0.98)	(0.98–0.98)
Health behavior	1.01***	1.01***	1.01***	0.99***	0.99***	0.99***	0.99***
Index	(1.01–1.01)	(1.01–1.01)	(1.01–1.01)	(0.99–0.99)	(0.99–1.00)	(0.99–0.99)	(0.99–0.99)
Constant	0.16***	0.17***	0.11***	8.57***	12.59***	33.044***	81.6***
	(0.13–0.20)	(0.14–0.20)	(0.09–0.13)	(7.07–10.37)	(10.35–15.31)	(28.05–38.91)	(69.4–95.9)
Ν	83,128	82,965	83,118	83,171	83,189	83,158	83,154
Model Fit	F(13,83114)=	F(13,82951)=	F(13,83104)=	F(13,83157)=	F(13,83175)=	F(13,83145)=	F(13,83140)=
	287.21***	345.6***	298.00***	361.75***	433.76***	266.52***	502.76***

Table 4. Odds ratios from logistic regressions: Hedonic well-being and job satisfaction

Note. Table 4 depicts the results from seven individually fitted logistic regression models (columns 2–8). The dependent variables are the hedonic well-being variables, and the explanatory variables are the various rows under the first column. Job satisfaction is found to be a significant factor for all these well-being measures. The numbers in parenthesis under the odds ratios are the 95% confidence intervals, respectively. \*\*\*significant at 0.01; \*\*significant at 0.05; \*significant at 0.1.

ing scores that could be attributed to job satisfaction.

# Discussion

Our analyses established that perceived job quality and the work-related well-being associated with it, expressed in terms of perceived job satisfaction, were significant predictors of one's overall well-being. The effect of work on life's quality is not farfetched; not only does work provide financial sustenance, but it is at the center of individual well-being. This is quite intuitive. On average, one-third of a working individual's day is consumed at work, and it is natural

Evaluative Well-Being	Current life evaluation	Future life evaluation
Job Satisfaction	0.81*** (0.76–0.86)	0.40*** (0.35–0.46)
Age	(0.002)** (-0.003-0.000)	$(0.03)^{***}$ (-0.04-0.03)
Gender	0.30*** (0.27–0.33)	0.38*** (0.35–0.41)
Marital Status	0.23*** (0.19–0.27)	0.03 (-0.00-0.07)
Black	0.17* (0.01–0.33)	0.40*** (0.24–0.56)
Asian	0.93** (0.04–0.15)	0.87*** (0.81–0.94)
Hispanic	(0.12)** (-0.22-0.04)	(0.24)*** (-0.330.15)
Other	0.44*** (0.38–0.50)	0.40*** (0.34–0.46)
Education	0.03*** (0.14–0.04)	0.03*** (0.02–0.04)
Monthly income	0.09*** (0.08–0.10)	0.05*** (0.04–0.06)
Physical Health Index	0.14*** (0.14-0.15)	0.01*** (0.01–0.01)
Basic Access Index	0.03*** (0.02–0.03)	0.01*** (0.01–0.01)
Health Behavior Index	$0.01^{***}$ (0.01–0.01)	0.004*** (0.003–0.004)
Constant	6.42*** (6.23–6.62)	5.29*** (5.14–5.45)
Ν	83,103	82,211
Model Fit	F(13, 83089) = 720.32*** R-squared = 0.29	F(13, 82197) = 614.64*** R-squared = 0.16

Table 5. Ordinary least squares estimates: Evaluative well-being and job satisfaction

Note. The table depicts the results from two linear regressions (columns 2–3). The dependent variables are the current life evaluation scores and future life evaluation scores. The explanatory variables are the various rows under the first column. Again, job satisfaction is found to be a significant contributor to life evaluation scores. The numbers in parenthesis under the coefficients are the 95% confidence intervals, respectively.

\*\*\*significant at 0.01; \*\*significant at 0.05; \*significant at 0.1.

that positive and negative experiences are carried over from work to an individual's daily life away from work and vice versa. This has been studied before<sup>35, 36)</sup>. For example, hours of work are associated with health, sleep, and well-being<sup>37)</sup>. Similarly, there is ample evidence that work and family life are interrelated, and together they affect health and well-being<sup>38)</sup>. Our findings not only corroborate this but add to the work organization literature, first, by using definitions of subjective well-being from the field of

economics, and second, by quantifying the relationship of subjective well-being with job satisfaction after controlling for other non-work facets of well-being.

The results signal how vital job satisfaction is for attaining well-being. If the job is not a good fit for the worker and the worker ends up detesting the job, then their well-being is hampered significantly. This underscores that not only work but also the quality of work is important. We found that negative daily emotions were more common among workers not satisfied at work. The importance of job satisfaction was underlined to such an extent that we found those who were not participating in the workforce and those who were unemployed and looking for work experienced higher well-being than those working with no job satisfaction.

It was also interesting that our unconditional analysis showed that future life evaluation scores were consistently higher than current life evaluation scores for both employed and unemployed workers but not for those who were not in the workforce. This signals that in 2013, both the employed and the unemployed were hopeful about their future.

Our findings are important for the following reasons. First, previous studies found that unemployed individuals had lower well-being than the employed due to financial constraints, adverse health effects, and social isolation<sup>39</sup>. This study highlighted that understanding the role of job satisfaction is equally important. People dissatisfied with their jobs had lower well-being than those unemployed. Second, research has shown that workers with higher overall well-being were more engaged and productive at work<sup>40</sup>. The current study established the positive association between work-related well-being and overall well-being. This might fuel interests among employers to intervene in the betterment of working conditions so as to enhance worker well-being and, consequently, worker productivity. Third, this study found that job satisfaction significantly accounted for a 14% increase in current life evaluation scores and an 8% increase in future life evaluation scores. Policymakers and governments<sup>4</sup>, especially those that emphasize human well-being as an economic performance evaluation measure should consider the important contribution of the work environment toward job satisfaction. Public policies geared towards the betterment of the work environment would help in boosting overall well-being. Such real-life examples include but are not limited to harassment-free work environments<sup>41</sup>, stressor-free work<sup>42</sup>, and limiting long hours of work<sup>37)</sup>.

## **Limitations and Contributions**

We used job satisfaction as the sole indicator of work-related well-being, and we acknowledge this is a limitation of the current study. Also, while it is rather intuitive that satisfaction with one's job leads to higher general happiness, the cross-sectional nature of the survey data restricts us from affirming the positive effects of work-related well-being on overall well-being. In fact, previous research on the similar subject showed that the relationship between life satisfaction and job satisfaction is bidirectional. In our analysis, however, the resulting relationship between work and overall well-being are obtained after controlling for other nonwork facets like that of health and social accessibility to needs. Still, at best, we can conclude that higher job satisfaction is associated with higher subjective well-being. Another limitation we have is the self-reported nature of the data. The measures are generally collected at one point in time which is expected to yield a certain degree of covariation between responses based on method similarity alone.

Even if job satisfaction is at best a partial measure of work-related well-being, we believe our findings underline the importance of studying work-related well-being, especially in the context of it being a significant contributor toward the overall subjective well-being. We were able to show that work-related well-being was a key element of individual well-being, pointing to opportunities for interventions at work. Work is one of the facets of life and alienating work as a single factor and measuring its contribution towards overall well-being is rather important. Tracking changes in citizen's well-being underlines the importance of changes in features of work that contribute towards job satisfaction. Finally, to our knowledge, this is one of the very few studies that related work-related well-being to overall hedonic and evaluative well-being, using a nationally representative sample of US workers. This study establishes the sole positive contributions of a job that fits the worker towards his or her achievement of subjective well-being, after controlling for other facets of non-work well-being.

### **US Government Disclaimer**

The findings and conclusions in this article are those of the author(s) and do not necessarily represent the official position of US Department of Health and Human Services, the Public Health Service, or the Centers for Disease Control and Prevention.

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