



Dimensions of Job Quality, Mechanisms, and Subjective Well-Being in the United States¹

Jonathan Horowitz²

How does job quality predict subjective well-being in the United States? Prior research suggests that various job quality dimensions such as job security and individual task discretion affect subjective well-being, but the theoretical mechanisms are implied rather than tested and aspects of job quality are rarely tested together. I use structural equation modeling and General Social Survey data to assess the impact of five job quality dimensions—individual task discretion, monetary compensation, job security, low work intensity, and safe work conditions—on subjective well-being. Then, I show that job quality influences subjective well-being by improving social life, altering class identification, affecting physical health, and increasing amounts of leisure time. Finally, while I find that job quality dimensions do have statistically significant effects on subjective well-being, the way in which job quality affects subjective well-being differs by job dimension. In other words, job quality has a statistically significant impact on subjective well-being, but different job quality domains are connected to subjective well-being in different ways.

KEY WORDS: General Social Survey; happiness; health; job quality; subjective well-being; work.

INTRODUCTION

How does job quality predict subjective well-being in the United States? American adults spend more time at work than in any other activity (Hermanowicz 2010), and the effects of work often spill over into other life domains (Settersten 2003). Thus, scholars have long suggested the importance of job quality to happiness (Green 2006; Jencks, Perman, and Rainwater 1988; Kalleberg 2011). However, the theoretical mechanisms connecting job quality to subjective well-being are implied rather than tested, and there are very few studies showing how a single job quality dimension matters in the presence of other job quality characteristics. While there is a general assumption that job quality leads to greater subjective well-being, we have surprisingly little evidence to prove it.

The purpose of this study is to demonstrate how different job quality dimensions predict subjective well-being via multiple potential mechanisms. I first estimate the effect of individual task discretion, monetary compensation, job security, low work intensity, and safe work conditions on subjective well-being. Then, I show that social life, higher class identification, better physical health, and greater leisure time mediate the relationship between various job quality dimensions and subjective

¹ I am indebted to Arne Kalleberg, Jessica Pearlman, Ken Bollen, David Braudt, Kristen Schorpp, C. Shane Elliott, J. Adam Lind, Ken Hudson, and the UNC Inequality workshop for comments on an earlier version of this manuscript. I would also like to thank two anonymous reviewers and the editor of *Sociological Forum* for their insightful comments.

² Department of Sociology, CB #3210, University of North Carolina, Chapel Hill, North Carolina 27599; e-mail: jonathanhorowitzresearch@unc.edu.

well-being. As a result, the present analysis provides stronger evidence for the importance of “good job” characteristics, as each job quality dimension has a statistically significant effect on subjective well-being but is mediated by a different set of mechanisms.

THE MULTIDIMENSIONAL NATURE OF JOB QUALITY

What makes for a “good job”? Scholars note that experiences at work vary along a number of separate dimensions (Daw and Hardie 2012; de Bustillo et al. 2011; Jencks et al. 1988). However, analytically distinguishing between these dimensions can be very difficult because jobs with one good job quality (e.g., monetary compensation) are also likely to have many other good job qualities (e.g., individual task discretion). In other words, there is tendency for good and bad job qualities to “cluster” within jobs, and each good or bad job characteristic rarely appears by itself (Holman 2013; Hudson 2007; Kalleberg 2011; Vidal 2013). Scholars do not always use the same dimensions of job quality in their analyses (Vidal 2013), but most job quality scholars include some combination of the following job quality characteristics: monetary compensation, job security, individual task discretion, work intensity, and safe working conditions. These five dimensions of job quality form the basis of the present analysis.

The first major type of job quality is monetary compensation, most frequently measured by income or wages (Daw and Hardie 2012; Fernandez-Macias 2012; Green 2006; Handel 2005; Holman 2013; Hudson 2007; Kalleberg 2011; Kalleberg, Reskin, and Hudson 2000; Sengupta, Edwards, and Tsai 2009; Vidal 2013). Monetary compensation is often used as a measure of job quality for two reasons. First, there is substantial evidence that income leads to greater happiness and excitement for life (Acock and Kiecolt 1989; Lee and Ono 2012; Louis and Zhao 2002; Schnitter 2008). Second, because people often choose to work because they want to earn money, the monetary compensation awarded to individuals is a measure of job quality with high face validity. In fact, some scholars actually use wages as a proxy for overall job quality (Fernandez-Macias 2012). However, this exclusive focus on income is generally rejected by most scholars of work and occupations (e.g., Green 2006; Handel 2005; Vidal 2013), as the relationship between wages and other job quality dimensions is heterogeneous (Sengupta et al. 2009). In fact, Holman (2013) suggests that using wages or income may not necessarily capture all monetary rewards; another facet of monetary compensation is whether or not a worker receives a fixed salary (rather than one that varies with hours worked or performance). Thus, not only are wages an incomplete way to measure overall job quality, they may not even capture all aspects of monetary compensation.

The second job quality dimension is job security, defined as the likelihood of losing one’s job and the accompanying subjective feelings of perceived job insecurity that accompany it (Daw and Hardie 2012; Green 2006; Holman 2013; Hudson 2007; Kalleberg et al. 2000; Vidal 2013). Monetary compensation and job security are the two primary dimensions favored by dual-labor market theorists, who argue that jobs exist in either a well-paid and secure primary labor market or a poorly

paid and contingent secondary labor market (e.g., Daw and Hardie 2012; Hudson 2007). Job security consists of both objective characteristics such as the likelihood that you lost or will lose your job (e.g., Kalleberg 2011; Vidal 2013) and subjective characteristics that represent the feeling that you might lose your job (e.g., Fullerton and Wallace 2007; Handel 2005). However, job-related perceived insecurity is distinct from overall labor market insecurity (Kalleberg and Marsden 2012). Overall, researchers have already found a negative relationship between insecurity and subjective well-being, although the mechanisms remain unclear (Clark, Knabe, and Rätzel 2010; Lucas et al. 2004).

The third job quality dimension in this study is individual task discretion, and is defined as the control that a worker has over how job tasks are completed (Barnett and Brennan 1995; de Bustillo et al. 2011; Glavin 2013; Green 2006; Handel 2005; Kalleberg 2011; Sengupta et al. 2009). Researchers see task discretion as a highly desirable job quality because of its relationship with intrinsic rewards (Kalleberg 2011), but also because Kohn and Schooler (1983) find that occupational self-direction—a construct similar to individual task discretion—plays an important role in psychological functioning. However, while individual task discretion is an important part of job quality, it may not have a direct effect on quality of life; Vidal (2013) suggests that task discretion is part of the labor process that generates monetary compensation, work intensity, job security, and opportunities for training and promotion. Thus, Vidal (2013) implies that the effects of individual task discretion may affect quality of life indirectly via other job quality dimensions. Furthermore, there is some evidence that task discretion may not have a direct effect after considering work intensity (Rafferty, Friend, and Landsbergis 2001).

The fourth aspect of job quality is work intensity, defined as having too much work to do (Anderson-Connolly et al. 2002; Barnett and Brennan 1995; Grunberg, Anderson-Connolly, and Greenberg 2000), or being forced to work harder or at greater speed (Kalleberg 2011; Vidal 2013). Although not all typologies of job quality include work intensity, work intensity has been a theoretically important construct for over a century (Fairris 2004). Furthermore, work intensity is a major contemporary issue; scholars suggest that technological changes, layoffs, and changes in management style have increased work intensity in recent eras (Green 2006; Grunberg et al. 2000; Kalleberg 2011; Vidal 2013).

Finally, scholars have noted the importance of safe working conditions (de Bustillo et al. 2011), which is sometimes called “safety climate” (Hadjimanolis and Boustras 2013:51; Smith and DeJoy 2012:69; Zohar 1980). While not all jobs are equally safe, workplaces can create a context where safety procedures are followed and emphasized (Smith and DeJoy 2012; Zohar 1980). However, unlike many other types of job quality, safe working conditions are emphasized more by public health researchers than by sociologists.

CONNECTING JOB QUALITY TO SUBJECTIVE WELL-BEING

What are the mechanisms connecting job quality to subjective well-being? Generally speaking, the effect of job quality dimensions on subjective well-being is taken

for granted. However, current research provides some clues that may connect each job quality dimension to well-being outcomes. While a very large number of factors likely influence job quality, not all of these factors are likely influenced by job quality. Indeed, most of the factors listed by Yang (2008) are not necessarily related to job quality in an obvious way. There are also two factors—marital quality and stress—that could mediate the effect of job quality on subjective well-being, but are not testable in the current analysis.³ As a result, this study focuses on four factors that are likely influenced by job quality dimensions and that impact on subjective well-being. These are leisure time, social life, subjective perceptions of social status, and health.

The most obvious way that job quality affects subjective well-being is that if a person spends more time at work, then they have less time to do other things that they enjoy (Newman, Tay, and Diener 2014). Employees with a greater work intensity need to work more hours in order to finish their work for the day (Burke, Singh, and Fiksenbaum 2010), and thus have less time to “detach” from work and recover (Fritz, Yankelevich, et al. 2010). In addition, more free time allows participants to engage in “serious leisure,” which leads to greater growth and happiness (Kim et al. 2015). Further evidence for the importance of leisure time is that the weekend plays a key restorative effect on subjective well-being (Fritz, Sonnentag, et al. 2010). Therefore, we should expect that low levels of work intensity will lead to more leisure hours, which then will increase subjective well-being.

However, poor job quality could also affect subjective well-being by making workers less likely to socialize with friends. While reductions in social life could be due to a loss of leisure time, work intensity may also lead workers to prioritize nonsocial leisure time activities. For example, many workers respond to job-related stress by exercising, watching television, or performing other solitary activities (Sonnentag 2001; Wu and Porell 2000). Individuals who make less money may be less able to engage in more costly social activities with friends, such as going to movies or going out to dinner. On the other hand, it is possible that individuals who engage in a great deal of self-directed activity at work may make and deepen friendships with their coworkers, clients, and business partners (Fine 1986; Price and Arnould 1999). Thus, we would expect high levels of individual task discretion, high amounts of monetary compensation, and low levels of work intensity to provide greater chances for socializing.

While there is substantial evidence that income leads to greater levels of subjective well-being, the exact theoretical mechanism linking money and happiness is difficult to determine. Clark, Frijters, and Shields (2008) argue that is not the total amount of money that generates happiness, but rather whether you have more money than others around you. Chang (2013) develops this model further by noting that changes in income change an individual’s “positional identity.” Individuals who make more money often subjectively view themselves as being part of a

³ I am unable to include marital quality because doing so would limit the analysis to married individuals only. This is a serious problem not only because it would remove a large portion of the analytic sample, but also because divorce would cause survivorship bias. Furthermore, I am unable to include stress in this study because all of the stress measures in the analytic sample overlap with either subjective well-being or job quality.

“higher” social class, which has been associated with greater degree of happiness (Gruen and Sørensen 2012; Haring, Stock, and Okun 1984). Other types of humiliations, such as a lack of workplace autonomy and high levels of work intensity could also affect an individual’s subjective social class identification. As a result, certain types of workplace conditions could make individuals feel like they are “higher” or “lower” in the American class structure, leading to different levels of subjective well-being.

Finally, previous scholarship has documented the impact of job quality on health, and physical health has an effect on overall happiness (Yang 2008). In particular, scholars have noted that job insecurity and income impact health (Burgard, Brand, and House 2007, 2009; Coverdill, López, and Petrie 2011; Cummings and Braboy Jackson 2008; Fullerton and Anderson 2013). Furthermore, high work intensity often leads to suboptimal health (Anderson-Connolly et al. 2002; Fujishiro, Xu, and Gong 2010), although this is sometimes mitigated by high levels of individual task discretion. Furthermore, poor safety climate can lead to both injury and illness (Smith and DeJoy 2012). Thus, it seems likely physical health mediates the impact of job insecurity, work intensity, and safe working conditions on subjective well-being.

In summary, previous scholarship has documented that monetary compensation, job security, and individual task discretion impact subjective well-being; however, empirical mechanisms are rarely proposed and tested, and very few studies account for the presence of multiple job quality dimensions. Thus, the present study (1) tests for the relationship between multiple job quality dimensions and subjective well-being, and then (2) investigates whether leisure time, the frequency of social activities, subjective class identification, and physical health mediate these relationships.

DATA AND METHODS

In this study, I use data from the General Social Survey (GSS) and structural equation modeling to test relationships between job quality and subjective well-being. The GSS is a nationally representative sample of adults in the United States that asks a large number of questions about experiences at work (Smith et al. 2010). In particular, the GSS introduced a new battery of questions titled “Quality of Working Life” in 2002 (and repeated in 2006 and 2010) which includes multiple questions about several job quality dimensions. The job quality dimensions that I use, observed indicators from the GSS, and information about whether I reversed and/or transformed the variable are all listed in Table I.⁴ Overall, I use 14 different job quality indicators that measure 5 separate job quality dimensions, from 2002, 2006, and 2010.

To test whether each job quality indicator actually represents a job quality characteristic, I estimate a structural equation model (SEM) which represents each job quality dimension as a latent variable (Bollen 1989). This helps to remove

⁴ I reverse the coding of most of the ordinal indicators for ease of interpretation; in this study, better outcomes are assigned to higher values.

Table I. Description of Job Quality Indicator Variables

Latent Variable	Indicator	Variable Text/Description	Variable Notes
Individual Task Discretion Monetary Compensation Job Security	Work Freedom	"... I am given a lot of freedom to decide how to do my own work."	Reversed
	Lot of Say at Work	"... I have a lot of say about what happens on my job."	Reversed
	Logged Income Paid by Salary	Log-value of Inflation-Adjusted Personal Income Constructed variable: "1" means that a person is paid a salary rather than hourly or based upon performance	Log of conrine From waypaid
	Job Security Okay	"Now I'm going to read you another list of statements about your main job you do: The Job Security Is Good"	Reversed
Not Intense	Lose Job in Next 12 Months	"Thinking about the next 12 months, how likely do you think it is that you will lose your job or be laid off—very likely, fairly likely, not too likely, or not at all likely?"	
	Lost Job in Last 12 Months	"Were you laid off your main job at any time in the last year?" "1" means a person was not laid off within the past year; "0" means a person was laid off within the past year.	Reversed
	Work Time Overwork	"I have enough time to get the job done."	Reversed
	Too Few Workers	"I have too much work to do everything well." "How often are there not enough people or staff to get all the work done?"	Reversed
Safe Working Conditions	Safety Priority	"The safety of workers is a high priority with management where I work."	Reversed
	Safety Shortcuts	"There are no significant compromises or shortcuts taken when worker safety is at stake."	Reversed
	Safety Teamwork	"Where I work, employees and management work together to ensure the safest possible working conditions."	Reversed
	Safe Conditions	"The safety and health conditions where I work are good."	Reversed

measurement error associated with survey items, which is a major benefit given that job quality characteristics tend to cluster together and items could therefore potentially represent more than one job quality dimension. The full list of indicators and latent variables may be found in Table I; for example, the latent variable “Not Intense” is represented by the indicators “Work Time,” “Overwork,” and “Too Few Workers.” This type of SEM—sometimes called a “measurement model”—is equivalent to confirmatory factor analysis, and represents each job quality dimension as a latent variable. The coefficient between the latent variable and the observed indicators show how each observed indicator measures the latent variable.

I use several overall fit statistics to assess the plausibility the first measurement model. When the Tucker-Lewis Index (TLI) and Confirmatory Fit Index (CFI) are closer to 1, the model provides evidence in favor of the hypothesized model structure. In general, the TLI and CFI are considered “adequate” when they are above 0.90, and “good” when they are above 0.95 (Bentler 1990; Tucker and Lewis 1973). In contrast, the Root-Mean Square Error of Approximation (RMSEA) provides evidence for the hypothesized model when it is close to zero; an RMSEA below 0.1 is considered “adequate,” and an RMSEA below 0.05 is considered “good” (Browne and Cudeck 1992).

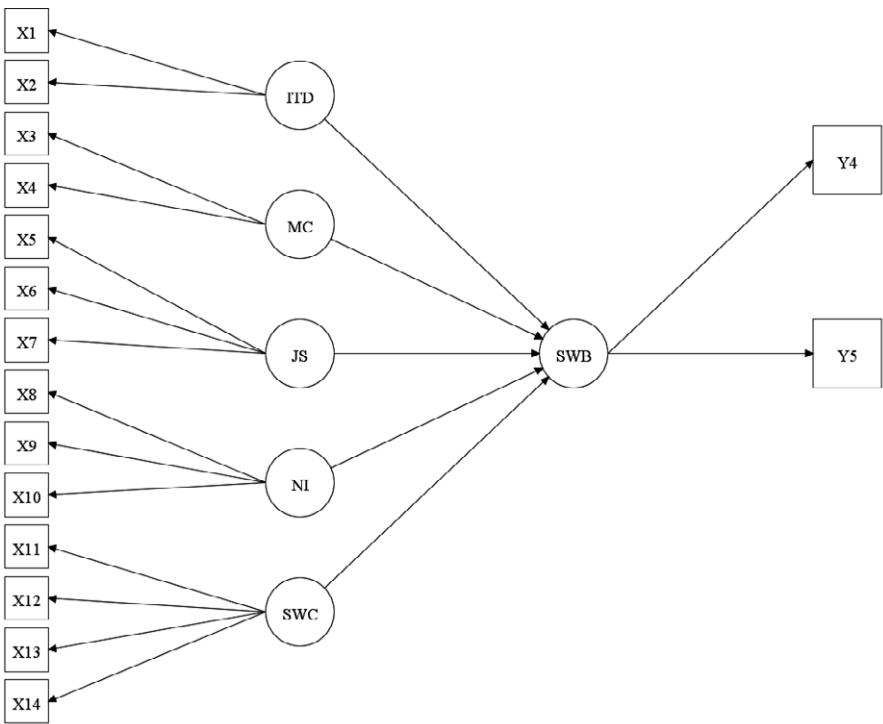
There are two likely scenarios where a measurement model would fit poorly. First, a model will have poor fit if any set of grouped indicators (e.g., “Work Freedom” and “Lot of Say at Work”) are not caused by the same latent factor. Second, the model will fit badly if a single indicator (e.g., “Work Freedom”) is actually the result of two separate latent variables (e.g., “Individual Task Discretion” and “Monetary Compensation”). Models with good overall fit suggest that the indicators are visible manifestations of the proposed underlying latent variable. In this case, the model fit statistics are extremely good; the TLI is 0.989, the CFI is 0.992, and the RMSEA is 0.036. Thus, the five-factor model of job quality is consistent with the data, and it is likely that the proposed indicators represent the corresponding latent variables.

In addition, the GSS includes several indicators that represent subjective well-being, as well as data on social activities, subjective class identification, hours available for leisure activities, and physical health. The variables for subjective well-being and the mediators, along with the recoded responses, are listed in Table II. The two indicators for subjective well-being are happiness and excitement for life, which are frequently used both separately and combined as a measure of general well-being (Acock and Kiecolt 1989; Coverdill et al. 2011; Hughes and Thomas 1998; Louis and Zhao 2002; Thomas and Hughes 1986). I then estimate a measurement model that includes all five job quality dimensions, social life, and subjective well-being in the same model. The fit statistics for this model are also extremely good (TLI = 0.990; CFI = 0.993; RMSEA = 0.023).

I then estimate two structural equation models to test the impact of each job quality dimension on subjective well-being. The first model (Model 1, shown in Fig. 1) looks at the effect of job quality on subjective well-being, but does not include any control or mediating variables. The interpretation of the coefficients is similar to standard regression approaches. For example, the coefficient representing the impact of job security on subjective well-being (the arrow pointing from JS to SWB) represents the one-unit change of job security on subjective well-being, net of

Table II. Description of Subjective Well-Being Variables and Mediators

Variable		Variable Text	Recorded Responses
Subjective Well-Being	Happiness	“Taken all together, how would you say things are these days—would you say that you are very happy, pretty happy, or not too happy?”	1 = not too happy; 2 = pretty happy; 3 = very happy
	Life Is Exciting	“In general, do you find life exciting, pretty routine, or dull?”	1 = dull; 2 = routine; 3 = exciting
	Socialize With Neighbor	[How often do you] Spend a social evening with someone who lives in your neighborhood?	1 = never; 2 = once a year; 3 = several times a year; 4 = once a month; 5 = several times a month; 6 = several times a week; 7 = almost daily
Social Life	Socialize With Friend	[How often do you] Spend a social evening with friends who live outside the neighborhood?	
	Socialize With Relatives	[How often do you] Spend a social evening with relatives?	
	Poor Physical Health	... for how many days during the past 30 days was your physical health not good?	Number of poor physical health days between 0 and 30
Free Time	Hours to Relax	After an average workday, about how many hours do you have to relax or pursue activities that you enjoy?	Number of hours to relax between 0 and 24
Subjective Class Identification	Subjective Class Identification	If you were asked to use one of four names for your social class, which would you say you belong in: the lower class, the working class, the middle class, or the upper class?	1 = lower class; 2 = working class; 3 = middle class; 4 = upper class



Factor Structure:

- X1: Work Freedom
- X2: Lot of Say
- X3: Logged Income
- X4: Paid by Salary
- X5: Job Security Okay
- X6: Lose Job in Next 12 Months
- X7: Lost Job in Last 12 Months
- X8: Work Time
- X9: Overwork
- X10: Too Few Workers
- X11: Safety Priority
- X12: Safety Shortcuts
- X13: Safety Teamwork
- X14: Safe Conditions

- Y4: Happiness
- Y5: Excitement for Life

Latent Variables:

- ITD: Individual Task Discretion
- MC: Monetary Compensation
- JS: Job Security
- NI: Not Intense
- SWC: Safe Working Conditions
- SOC: Social Life
- SWB: Subjective Well-Being

Fig. 1. The Impact of Job Quality on Subjective Well-Being, No Control Variables (Model 1).

the other domains of job quality. Statistically significant relationships provide evidence for a relationship between the predictor and outcome variable in the population, while nonsignificant relationships suggest that effect sizes may be due to sampling error instead of a true, population-level relationship.

The second model (Model 2, shown in Fig. 2) examines whether the impact of job quality on subjective well-being holds after accounting for potential confounding relationships. Based on previous studies investigating subjective well-being,

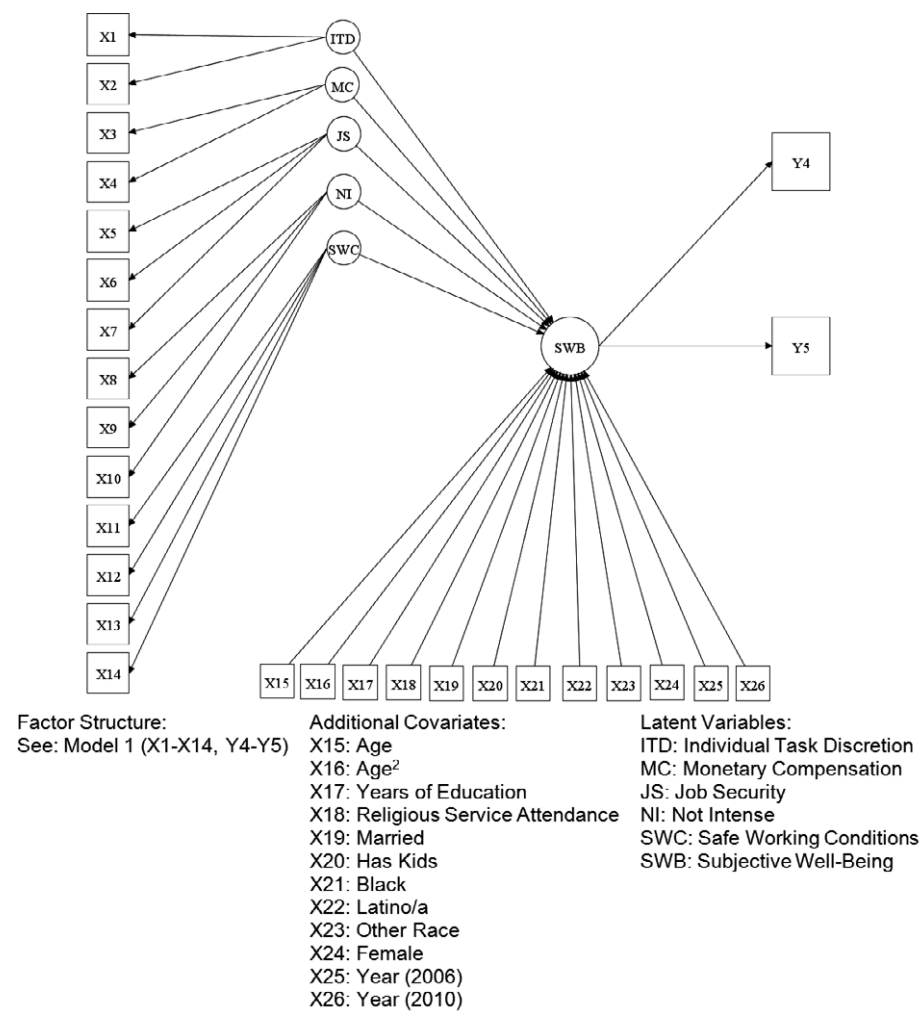


Fig. 2. The Impact of Job Quality on Subjective Well-Being, With Additional Covariates (Model 2).

personal characteristics such as racial/ethnic background, sex, age, educational attainment, marital status, having children, and religious service attendance have far-reaching impacts on individual outcomes (Acock and Kiecolt 1989; Coverdill et al. 2011; Hughes and Thomas 1998; Louis and Zhao 2002; Thomas and Hughes 1986). In addition, I include survey year to account for potential period effects that could impact both job quality and subjective well-being (Yang 2008).

Finally, Model 3 (in Fig. 3) examines the mechanisms for job quality’s effects on subjective well-being. Prior scholarship suggests that individual task discretion, monetary compensation, and work intensity could impact a worker’s social life; that monetary compensation, job security, work intensity, and safe work conditions affect physical health; that individual task discretion, monetary compensation, and

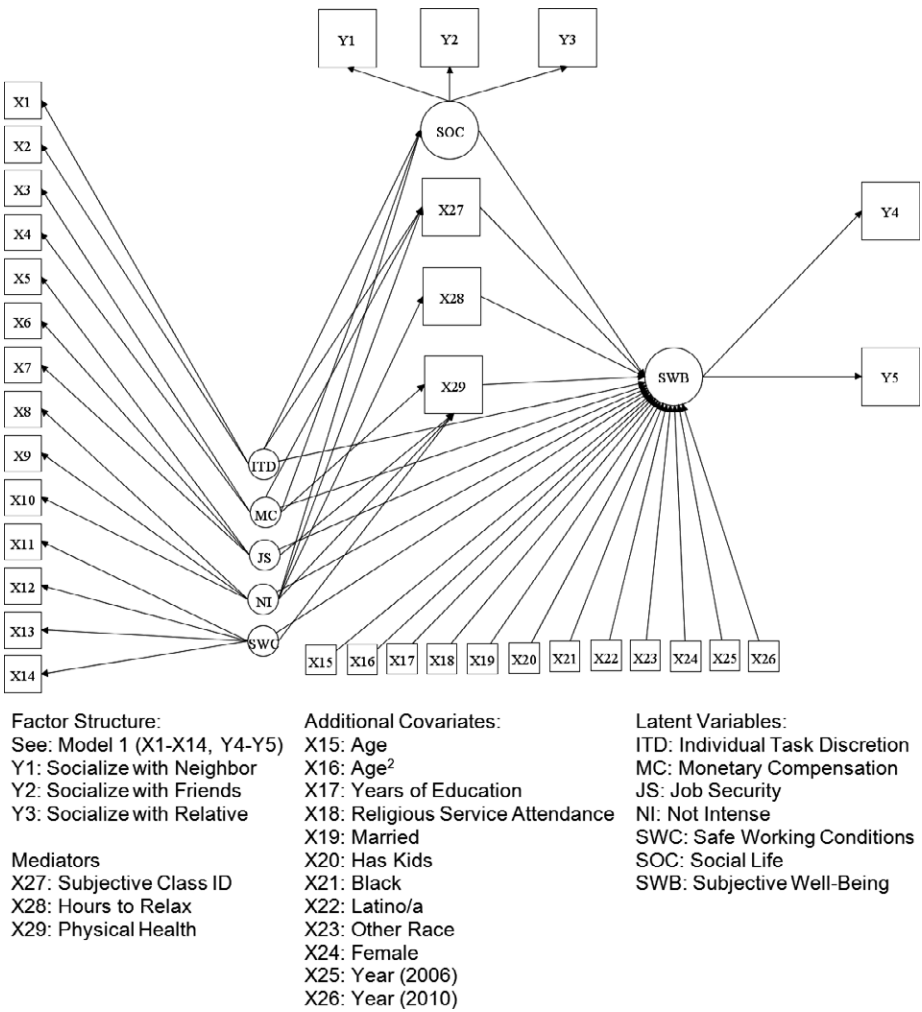


Fig. 3. The Impact of Job Quality on Subjective Well-Being, With Mediators and Additional Covariates (Model 3).

work intensity could alter subjective class identification; and that work intensity affects an individual’s amount of leisure time. I also estimate the direct effect of job quality on subjective well-being to determine whether the present mediators account for the entire effect of job quality on subjective well-being, or whether there are other unaccounted mediators.

Ultimately, the present research shows the effect of individual job quality characteristics on subjective well-being after taking into account other aspects of job quality, other factors, and mechanisms of action. Furthermore, this study addresses measurement error in observed variables by estimating latent variables. One of the limitations of this study is that it is difficult to prove causal relationships with cross-

sectional data; however, addressing explanations due to omitted variable bias, identifying the mechanisms linking job quality to subjective well-being, and removing measurement error provides a stronger test of job quality’s impact on subjective well-being than demonstrated in previous research.

In this study, I model the impact of five different dimensions of job quality on subjective well-being, and test for whether this effect is mediated by social life, class identification, physical health, and hours available for leisure activities; the level of measurement and descriptive statistics for each indicator are listed in Table III. Because observed indicator variables are categorical, I estimate all models using Weighted Least Squares-Mean/Variance (WLS-MV) in MPlus, which is the most effective way to handle missing data for ordinal and dichotomous indicators (Asparouhov and Muthén 2010). I declare all ordinal and dichotomous indicators of latent variables as categorical; the remaining variables are treated as a continuous.

FINDINGS

In this section, I present the effects of job quality on subjective well-being, with the effects of job quality, the mediators, and the additional covariates on subjective well-being in Table IV. I organize the findings by dependent variable, so that all of coefficients predicting subjective well-being come first, followed by the predictors of each mediator.

In the first model, I estimate the effect of job quality on subjective well-being without any additional covariates or mediators. Each coefficient has an interpretation that is comparable to standard regression equations—the impact of each job

Table III. Descriptive Statistics for Job Quality, Subjective Well-Being, and Mediators

Indicator	Level of Measurement	\bar{x}	sd
Work Freedom	Ordinal	3.39	0.82
Lot of Say at Work	Ordinal	2.95	0.88
Logged Income	Continuous	9.98	1.14
Paid by Salary	Dichotomous	0.35	0.48
Job Security Okay	Ordinal	3.31	0.88
Lose Job in Next 12 Months	Ordinal	3.41	0.85
Lost Job in Last 12 Months	Dichotomous	0.92	0.27
Work Time	Ordinal	3.2	0.85
Overwork	Ordinal	2.76	0.73
Too Few Workers	Ordinal	2.26	0.98
Safety Priority	Ordinal	3.32	0.69
Safety Shortcuts	Ordinal	3.29	0.71
Safety Teamwork	Ordinal	3.25	0.68
Safe Conditions	Ordinal	3.29	0.63
Happiness	Ordinal	2.16	0.64
Life Is Exciting	Ordinal	2.46	0.59
Physical Health	Continuous	2.62	6.17
Socialize With Relative	Ordinal	4.64	1.63
Socialize With Neighbor	Ordinal	3.42	2.04
Socialize With Friend	Ordinal	4.12	1.61
Subjective Class ID	Ordinal	2.44	0.67
Hours to Relax	Continuous	3.73	2.75

Table IV. Impact of Job Quality on Subjective Well-Being

Dependent Variable	Independent Variable	Model 1	Model 2	Model 3
Subjective Well-Being	Individual Task Discretion	.125** (.047)	.135** (.047)	.079 (.049)
	Monetary Compensation	.198*** (.041)	.168** (.057)	.126* (.061)
	Job Security	.153*** (.032)	.125*** (.031)	.122*** (.032)
	Low Intensity	.117** (.035)	.119** (.035)	.084* (.037)
	Safe Working Conditions	.098*** (.027)	.096** (.029)	.091** (.028)
	Social Life			.395*** (.075)
	Subjective Class ID			.129*** (.026)
	Poor Physical Health			-.01*** (.003)
	Hours to Relax			.022** (.007)
	Black		-.065 (.04)	-.064 (.04)
	Latino		-.087* (.044)	-.084 (.044)
	Other Race		-.128 (.073)	-.126 (.072)
	Female		-.036 (.027)	-.036 (.027)
	Age		-.174*** (.044)	-.171*** (.044)
	Age Sq.		.002*** (0)	.002*** (0)
	Education		.049*** (.004)	.049*** (.004)
	Married		.459*** (.029)	.429*** (.028)
	Has Kids		-.119*** (.032)	-.116*** (.03)
	Attended Relig. Services		.044*** (.005)	.043*** (.005)
	Year: 2006		.02 (.032)	.025 (.031)
	Year: 2010		-.086* (.035)	-.079* (.033)
Social Life	Individual Task Discretion			.118*** (.032)
	Monetary Compensation			-.018 (.033)
	Low Intensity			.038 (.024)
Physical Health	Monetary Compensation			-1.52*** (.278)
	Job Security			.053 (.149)
	Low Intensity			-.92*** (.16)
	Safe Working Conditions			-.244 (.124)

Table IV. (Continued)

Dependent Variable	Independent Variable	Model 1	Model 2	Model 3
Subjective Class ID	Individual Task Discretion			.104*** (.023)
	Monetary Compensation			.301*** (.032)
	Low Intensity			.044* (.018)
Hours to Relax	Low Intensity			.528*** (.054)

Standard errors in parentheses.
***p < .001, **p < .01, *p < .05

Table V. Effect of Job Quality on Subjective Well-Being (Standardized Coefficients)

Independent Variable	Model 1	Model 2	Model 3
Individual Task Discretion	.139**	.129**	.076
Monetary Compensation	.235***	.127**	.097*
Job Security	.201***	.149***	.145***
Low Intensity	.150**	.134**	.095*
Safe Working Conditions	.131***	.110**	.106**

***p < .001, **p < .01, *p < .05

quality dimension on subjective well-being, net of the other job quality domains. For example, monetary compensation ($p < .001$) has a statistically significant impact on subjective well-being, after accounting for variation associated with the other four job dimension categories. Job security ($p < .001$), low work intensity ($p < .001$), safe working conditions ($p < .001$), and individual task discretion ($p < .01$) also have a statistically significant impact on subjective well-being. The findings that monetary compensation and job security have an effect on subjective well-being are consistent with prior research (Acock and Kiecolt 1989; Lee and Ono 2012; Louis and Zhao 2002; Schnittker 2008). However, Model 1 also finds effects for low-intensity work environments, individual task discretion, and safe working conditions.

In Table V, I present standardized coefficients in order to assess which job quality characteristic has the greatest effect on subjective well-being. Without any additional covariates in in the model, the largest effect sizes are monetary compensation ($\beta = .235$) and job security ($\beta = .201$). However, individual task discretion ($\beta = .139$), low work intensity ($\beta = .150$), and safe work conditions ($\beta = .131$) each have a substantial effect on subjective well-being, although each effect size is roughly two-thirds that of monetary compensation and job security.

Model 2 tests the impact of job quality on subjective well-being, after accounting for other potentially confounding relationships. Most of the relationships are unaffected by the introduction of the additional covariates; individual task discretion ($p < .05$), low-intensity work environments ($p < .001$), job security ($p < .001$), and safe work conditions ($p < .001$) have approximately the same effect sizes on

subjective well-being as in Model 1. For example, in Model 1, having a low-intensity work environment has an effect of $\beta = .117$ on subjective well-being, and with the additional covariates added the effect barely changes ($\beta = .119$). However, the effect of monetary compensation ($p < .01$) declines from 0.234 to 0.178, suggesting that some of the effect of monetary compensation on subjective well-being is spurious. The decline of substantive significance of monetary compensation in Model 2 is also visible when comparing the standardized coefficients to each other. In Model 1, monetary compensation and job security had much stronger effects on subjective well-being than the other job quality characteristics. After introducing additional covariates, all five job quality characteristics have similar effect sizes to each other; individual task discretion ($\beta = .129$), monetary compensation ($\beta = .127$), job security ($\beta = .149$), low-intensity work environments ($\beta = .134$), and safe working conditions ($\beta = .110$).

Finally, Model 3 tests how different mechanisms account for the relationship between job quality and subjective well-being. First, social life ($p < .001$), class identification ($p < .001$), physical health ($p < .001$), and hours available for relaxation ($p < .01$) all have a statistically significant effect on subjective well-being. The effect of individual task discretion on subjective well-being is completely mediated by social life ($p < .001$) and by class identification ($p < .001$). Furthermore, the effect of monetary compensation on subjective well-being drops from $\beta = .168$ to $\beta = .126$; this is because it is mediated by class identification ($p < .001$) and physical health ($p < .001$), but not by an individual's social life. Meanwhile, low work intensity has a direct effect on subjective well-being ($p < .001$) and also has an indirect effect via increased leisure time ($p < .001$), but no direct effects via social life.

Two job quality characteristics have strong direct effects on subjective well-being, but no indirect effects. Safe working conditions ($p < .01$) and job security ($p < .001$) have strong direct effects on subjective well-being but no indirect effects via physical health.⁵ For both safe working conditions and job security, the unstandardized coefficients barely change between Models 2 and 3, further demonstrating that physical health does not mediate either characteristic. Overall, the standardized coefficients show that the job security has the strongest unmediated effect on subjective well-being of all job quality characteristics ($\beta = .145$); meanwhile, monetary compensation ($\beta = .097$), low-intensity work environments ($\beta = .095$), and safe working conditions ($\beta = .106$) have approximately the same direct effect on subjective well-being.

Table VI lists a summary of the results, showing how job quality affects subjective well-being. In summary, job quality does affect subjective well-being, but different types of job quality affect subjective well-being in different ways. After accounting for potentially confounding relationships, individual task discretion and monetary compensation have no direct effects on subjective well-being, but they do have indirect effects via class identification, physical health, and social life. Meanwhile low-intensity work conditions affect subjective well-being directly, but also via physical health and class identification. Finally, job security and safe working

⁵ This is likely because the items tapping safe work conditions have a relationship with physical safety in some occupations rather than others. Future research should investigate whether this relationship differs by subgroup.

Table VI. How Job Quality Affects Subjective Well-Being

Job Quality Dimension	Direct Effect	Via Social Life	Via Physical Health	Via Class ID	Via Hours to Relax
Individual Task Discretion	n.s.	p < .001		p < .001	
Monetary Compensation	p < .05	n.s.	p < .001	p < .001	
Job Security	p < .001		n.s.		
Low Intensity	p < .05	n.s.	p < .001	p < .05	p < .001
Safe Working Conditions	p < .01		n.s.		

conditions have only direct effects on subjective well-being, with none of the effect mediated by physical health.

I also estimate the indirect effects (with standardized coefficients) for each pathway in Table VII, which helps to demonstrate that some indirect effects are stronger than others. For example, individual task discretion operates primarily by increasing social life ($\beta = .046$) rather than subjective class identification ($\beta = .013$). Meanwhile, monetary compensation increases subjective well-being more via subjective class identification ($\beta = .030$) instead of physical health ($\beta = .011$). Finally, having low work intensity has some effects via both physical health ($\beta = .011$) and having hours to relax ($\beta = .013$), both of which are much larger effects than via subjective class identification ($\beta = .006$). This further demonstrates that although job quality characteristics are highly intercorrelated and all lead to greater subjective well-being, the actual effects of job quality characteristics are unique.

DISCUSSION

Prior to this study, scholars have generally assumed that job quality increases subjective well-being, but the evidence for some dimensions (e.g., job security) has

Table VII. Effect Sizes of Indirect Effects of Job Quality on Subjective Well-Being (Standardized Coefficients)

Job Quality Dimension	Mediator	Indirect Effect
Individual Task Discretion	Social Life	0.046** (0.014)
Individual Task Discretion	Subjective Class ID	0.013*** (0.004)
Monetary Compensation	Physical Health	0.012** (0.004)
Monetary Compensation	Subjective Class ID	0.030*** (0.006)
Low Work Intensity	Physical Health	0.011** (0.003)
Low Work Intensity	Subjective Class ID	0.006* (0.003)
Low Work Intensity	Hours to Relax	0.013** (0.004)

***p < .001, **p < .01, *p < .05

been much greater than for others (e.g., low work intensity). Furthermore, previous research tended to examine only one job quality characteristic at a time, and thus a statistically significant relationship could be due to omitted variable bias. I demonstrate the effect of several dimensions of job quality in two different ways: first, I show that different job quality dimensions have statistically significant effects in the presence of other job quality characteristics. This study confirms the effects of job security (Acock and Kiecolt 1989; Lee and Ono 2012; Louis and Zhao 2002; Schnitker 2008), monetary compensation (Clark et al. 2010; Lucas et al. 2004), and task discretion (Kohn and Schooler 1983) on subjective well-being. Furthermore, the present study also shows that low intensity and safe work conditions can also increase subjective well-being. As a result, the study shows that each of these has a statistically significant effect on subjective well-being, even in the presence of the others.

Second, I show that each job quality dimension affects subjective well-being through different mechanisms. These establish that different dimensions of job quality have their own, unique effects on subjective well-being. Some job quality dimensions are completely mediated by social life, physical health, class identification, and time to relax, while two job quality domains (job security and safe work conditions) are not mediated at all. Furthermore, job quality domains rarely have the same pattern as another, suggesting that while job quality characteristics may cluster together (Green 2006; Kalleberg 2011), job quality characteristics have a unique effect on a worker's happiness. By testing several theoretical mechanisms, this study strengthens the case that job quality has an impact on a worker's subjective well-being.

Theoretically, the fact that all five job quality characteristics matter—but don't necessarily matter in the same way—has two additional implications for future research. First, some scholars have proposed using a single job quality dimension as a stand-in for job quality (e.g., Fernandez-Macias 2012); because all job quality dimensions are intercorrelated with each other, this appears to be an appropriate analysis technique. However, each of the job quality characteristics are related to subjective well-being in a different way, suggesting that job quality characteristics do not have uniform effects on distal outcomes. For example, monetary compensation affects physical health and subjective class status, but not social life; if the theoretical model assumes that job quality increases the quality of a participants' social life, then it is inappropriate to use monetary compensation as a stand-in for job quality. As a result, scholars should, whenever possible, use multiple job quality characteristics to account for different explanatory mechanisms.

Second, scholars using regression methods often introduce additional covariates to "control" for potentially spurious factors. These additional covariates are usually demographic variables (e.g., sex, race) that are causally prior to both occupational standing and more distal outcomes. However, sometimes scholars introduce variables such as social relationships, leisure time, or physical health to help account for other potentially spurious relationships. That said, the present analysis suggests that several of these covariates mediate the relationship between job quality and subjective well-being, and are *not* spurious effects. Therefore, including these

types of covariates in the model will understate total effect of job quality on outcomes by eliminating indirect effects.

There are three major ways in which future studies could build upon these results. First, this study looks at the impact of job quality in a cross-sectional manner. At a practical level, inferring causal relationships via cross-sectional surveys is more difficult than using panel data. The present study uses cross-sectional data because the GSS includes a large battery of questions about job quality, subjective well-being, and potential mediators, and there is some evidence that cross-sectional studies of job quality return similar findings as longitudinal designs (Nixon et al. 2011). Furthermore, this study does include several methodological tools to address measurement error, omitted variable bias, and to identify potential mechanisms; these provide a stronger test of the relationship between job quality and subjective well-being than prior research has demonstrated. However, future studies should replicate these findings with panel data to confirm the present analyses.

There is also a good theoretical reason to look at job quality over time: There is substantial evidence that job experiences early in life can affect individuals many years later (e.g., Elder 1999; Finch et al. 1991). This study investigated the effects of job quality on present well-being, but in what ways does job quality affect *future* well-being? Furthermore, there is the question of how workers respond to good and bad job qualities: Are there particular job qualities that influence workers to leave jobs, return to school, or even to switch occupations? The present cross-sectional data limits the ability to measure how job quality matters over the life course, but this should be an area for future research.

Additionally, future scholarship should investigate how combinations of job qualities affect subjective well-being. There is already some research in this area; for example, scholars have investigated the combination of high work intensity with low individual task discretion (e.g., Fujishiro et al. 2010). Some scholars have also looked at the demands-resources model of job quality, which often looks at the importance of task discretion in the context of work intensity and some other, less commonly studied job quality characteristics (Glavin and Schieman 2012; Schieman 2013). It is possible that some bad job qualities are only problematic in the presence of other job qualities; for example, high work intensity may not have deleterious effects in the presence of high job security. However, analyzing combinations of job qualities may be a technically challenging task. As Cummings and Braboy Jackson (2008) note, interaction terms can substantially increase multicollinearity, and job quality characteristics already tend to “cluster” together. Additionally, including other measures of job quality—including indicators like fringe benefits, and domains such as schedule control—would be ideal, although difficult due to high levels of multicollinearity.

Finally, this study showed how individual task discretion and monetary compensation affect subjective well-being by affecting social life, physical health, and class identification. However, there are still substantial direct effects of job security, work intensity, and safe working conditions on subjective well-being. Furthermore, there is not substantial evidence that either job security or safe working conditions increase subjective well-being via physical health; this runs counter to existing predictions (Burgard et al. 2007, 2009; Coverdill et al. 2011; Cummings and Braboy

Jackson 2008; Fullerton and Anderson 2013). In the case of safe working conditions, it is likely that a safe working environment directly leads to poor physical health in some occupations but not others; an unsafe office environment may be less likely to cause physical injury than an unsafe construction site.

Meanwhile, the remaining direct effects for job security, work intensity, and safe working conditions suggest that we do not yet fully understand why they affect subjective well-being. However, these three job quality dimensions have one major characteristic in common: They all directly increase stress (Barnett and Brennan 1995; Perrewe and Ganster 1989), which in turn has a negative effect on subjective well-being (Suh, Diener, and Fujita 1996). Unfortunately, the GSS does not have adequate measures of stress for this purpose, as many of them are confounded either with job quality dimensions or with subjective well-being. Future studies should test to see whether stress mediates the effects of job security, work intensity, and safety climate on subjective well-being.

In summary, Americans spend more of their adult lives at work than any other nonsleep activity (Hermanowicz 2010), and thus participation in work often has dramatic effects on other life domains (Settersten 2003). The study of job quality is not new, and has intensified in recent years (Green 2006; Jencks et al. 1988; Kalleberg 2011). However, prior studies have only assessed the impact of one or two job quality dimensions on subjective well-being. The present multidimensional approach looks at the effects of job quality on subjective well-being while accounting for other job quality dimensions and testing for mediating effects. The results suggest that job quality has a statistically significant impact on subjective well-being, but that different job quality domains make workers happy in different ways.

REFERENCES

- Acock, Alan C., and K. Jill Kiecolt. 1989. "Is It Family Structure or Socioeconomic Status? Family Structure during Adolescence and Adult Adjustment." *Social Forces* 68: 2: 553–571.
- Anderson-Connolly, Richard, Leon Grunberg, Edward S. Greenberg, and Sarah Moore. 2002. "Is Lean Mean? Workplace Transformation and Employee Well-Being." *Work Employment and Society* 16: 3: 389–413.
- Asparouhov, Timor, and Bengt Muthén. 2010. "Weighted Least Squares Estimation With Missing Data." Los Angeles: Muthén & Muthén.
- Barnett, Rosalind C., and Robert T. Brennan. 1995. "The Relationship Between Job Experiences and Psychological Distress: A Structural Equation Approach." *Journal of Organizational Behavior* 16: 3: 259–276.
- Bentler, P. M.. 1990. "Comparative Fit Indexes in Structural Models." *Psychological Bulletin* 107: 2: 238–246.
- Bollen, Kenneth A. 1989. *Structural Equation Models*. New York: Wiley.
- Browne, Michael W., and Robert Cudeck. 1992. "Alternative Ways of Assessing Model Fit." *Sociological Methods & Research* 21: 2: 230–258.
- Burgard, Sarah A., Jennie E. Brand, and James S. House. 2007. "Toward a Better Estimation of the Effect of Job Loss on Health." *Journal of Health and Social Behavior* 48: 4: 369–384.
- Burgard, Sarah A., Jennie E. Brand, and James S. House. 2009. "Perceived Job Insecurity and Worker Health in the United States." *Social Science & Medicine* 69: 5: 777–785.
- Burke, Ronald J., Parbudyal Singh, and Lisa Fiksenbaum. 2010. "Work Intensity: Potential Antecedents and Consequences." *Personnel Review* 39: 3: 347–360.

- Chang, Wen-Chun. 2013. "Climbing Up the Social Ladders: Identity, Relative Income, and Subjective Well-Being." *Social Indicators Research* 113: 1: 513–535.
- Clark, Andrew E., Paul Frijters, and Michael A. Shields. 2008. "Relative Income, Happiness, and Utility: An Explanation for the Easterlin Paradox and Other Puzzles." *Journal of Economic Literature* 46: 1: 95–144.
- Clark, Andrew, Andreas Knabe, and Steffen Rätzl. 2010. "Boon or Bane? Others' Unemployment, Well-Being and Job Insecurity." *Labour Economics* 17: 1: 52–61.
- Coverdill, James E., Carlos A. López, and Michelle A. Petrie. 2011. "Race, Ethnicity and the Quality of Life in America, 1972–2008." *Social Forces* 89: 3: 783–805.
- Cummings, Jason L., and Pamela Braboy Jackson. 2008. "Race, Gender, and SES Disparities in Self-Assessed Health, 1974–2004." *Research on Aging* 30: 2: 137–167.
- Daw, Jonathan, and Jessica Halliday Hardie. 2012. "Compensating Differentials, Labor Market Segmentation, and Wage Inequality." *Social Science Research* 41: 5: 1179–1197.
- de Bustillo, Rafael Muñoz, Enrique Fernández-Macías, Fernando Esteve, and José-Ignacio Antón. 2011. "E Pluribus Unum? A Critical Survey of Job Quality Indicators." *Socio-Economic Review* 9: 3: 447–475.
- Elder, Glen H. 1999. *Children of the Great Depression: Social Change in Life Experience*. Boulder, CO: Westview.
- Fairris, David. 2004. "Towards a Theory of Workplace Intensity." *Eastern Economic Journal* 30: 4: 587.
- Fernandez-Macias, Enrique. 2012. "Job Polarization in Europe? Changes in the Employment Structure and Job Quality, 1995–2007." *Work and Occupations* 39: 2: 157–182.
- Finch, Michael D., Michael J. Shanahan, Jeylan T. Mortimer, and Seongryeol Ryu. 1991. "Work Experience and Control Orientation in Adolescence." *American Sociological Review* 56: 5: 597–611.
- Fine, Gary Alan. 1986. "Friendships in the Work Place." In Valerian J. Derlega and Barbara A. Winstead (eds.), *Friendship and Social Interaction*: pp. 185–206. New York: Springer.
- Fritz, Charlotte, Sabine Sonnentag, Paul E. Spector, and Jennifer A. McInroe. 2010a. "The Weekend Matters: Relationships Between Stress Recovery and Affective Experiences." *Journal of Organizational Behavior* 31: 8: 1137–1162.
- Fritz, Charlotte, Maya Yankelevich, Anna Zarubin, and Patricia Barger. 2010b. "Happy, Healthy, and Productive: The Role of Detachment From Work During Nonwork Time." *Journal of Applied Psychology* 95: 5: 977–983.
- Fujishiro, Kaori, Jun Xu, and Fang Gong. 2010. "What Does 'Occupation' Represent as an Indicator of Socioeconomic Status?: Exploring Occupational Prestige and Health." *Social Science & Medicine* 71: 12: 2100–2107.
- Fullerton, Andrew S., and Kathryn Freeman Anderson. 2013. "The Role of Job Insecurity in Explanations of Racial Health Inequalities." *Sociological Forum* 28: 2: 308–325.
- Fullerton, Andrew S., and Michael Wallace. 2007. "Traversing the Flexible Turn: US Workers' Perceptions of Job Security, 1977–2002." *Social Science Research* 36: 1: 201–221.
- Glavin, Paul. 2013. "The Impact of Job Insecurity and Job Degradation on the Sense of Personal Control." *Work and Occupations* 40: 2: 115–142.
- Glavin, Paul, and Scott Schieman. 2012. "Work–Family Role Blurring and Work–Family Conflict: The Moderating Influence of Job Resources and Job Demands." *Work and Occupations* 39: 1: 71–98. doi: 10.1177/0730888411406295333
- Green, Francis. 2006. *Demanding Work: The Paradox of Job Quality in the Affluent Economy*. Princeton, NJ: Princeton University Press.
- Grunberg, Leon, Richard Anderson-Connolly, and Edward S. Greenberg. 2000. "Surviving Layoffs: The Effects on Organizational Commitment and Job Performance." *Work and Occupations* 27: 1: 7–31.
- Guyen, Cahit, and Bent E. Sørensen. 2012. "Subjective Well-Being: Keeping Up With the Perception of the Joneses." *Social Indicators Research* 109: 3: 439–469.
- Hadjimanolis, Athanasios, and Georgios Boustras. 2013. "Health and Safety Policies and Work Attitudes in Cypriot Companies." *Safety Science* 52: 50–56.
- Handel, Michael J. 2005. "Trends in Perceived Job Quality, 1989 to 1998." *Work and Occupations* 32: 1: 66–94.
- Haring, Marilyn J., William A. Stock, and Morris A. Okun. 1984. "A Research Synthesis of Gender and Social Class as Correlates of Subjective Well-Being." *Human Relations* 37: 8: 645–657.
- Hermanowicz, Joseph C. 2010. *Lives in Science: How Institutions Affect Academic Careers*. Chicago: University of Chicago Press.
- Holman, David. 2013. "Job Types and Job Quality in Europe." *Human Relations* 66: 4: 475–502.
- Hudson, Kenneth. 2007. "The New Labor Market Segmentation: Labor Market Dualism in the New Economy." *Social Science Research* 36: 1: 286–312.

- Hughes, Michael, and Melvin E. Thomas. 1998. "The Continuing Significance of Race Revisited: A Study of Race, Class, and Quality of Life in America, 1972 to 1996." *American Sociological Review* 63: 6: 785–795.
- Jencks, Christopher, Lauri Perman, and Lee Rainwater. 1988. "What Is a Good Job? A New Measure of Labor-Market Success." *American Journal of Sociology* 93: 6: 1322–1357.
- Kalleberg, Arne L. 2011. *Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970s–2000s*. New York: Russell Sage Foundation.
- Kalleberg, Arne L., and Peter V. Marsden. 2012. "Labor Force Insecurity and US Work Attitudes, 1970s–2006." In Peter V. Marsden (ed.), *Social Trends in American Life: Findings From the General Social Survey Since 1972*: pp. 315–337. Princeton, NJ: Princeton University Press.
- Kalleberg, Arne L., Barbara F. Reskin, and Ken Hudson. 2000. "Bad Jobs in America: Standard and Nonstandard Employment Relations and Job Quality in the United States." *American Sociological Review* 65: 2: 256–278.
- Kim, Junhyoung, Jinmoo Heo, In Heok Lee, and Jun Kim. 2015. "Predicting Personal Growth and Happiness by Using Serious Leisure Model." *Social Indicators Research* 122: 1: 147–157.
- Kohn, Melvin L., and Carmi Schooler. 1983. *Work and Personality: An Inquiry Into the Impact of Social Stratification*. Norwood, NJ: Ablex.
- Lee, Kristen Schultz, and Hiroshi Ono. 2012. "Marriage, Cohabitation, and Happiness: A Cross-National Analysis of 27 Countries." *Journal of Marriage and Family* 74: 5: 953–972.
- Louis, Vincent V., and Shanyang Zhao. 2002. "Effects of Family Structure, Family SES, and Adulthood Experiences on Life Satisfaction." *Journal of Family Issues* 23: 8: 986–1005.
- Lucas, Richard E., Andrew E. Clark, Yannis Georgellis, and Ed Diener. 2004. "Unemployment Alters the Set Point for Life Satisfaction." *Psychological Science* 15: 1: 8–13.
- Newman, David B., Louis Tay, and Ed Diener. 2014. "Leisure and Subjective Well-Being: A Model of Psychological Mechanisms as Mediating Factors." *Journal of Happiness Studies* 15: 3: 555–578.
- Nixon, Ashley E., Joseph J. Mazzola, Jeremy Bauer, Jeremy R. Krueger, and Paul E. Spector. 2011. "Can Work Make You Sick? A Meta-Analysis of the Relationships Between Job Stressors and Physical Symptoms." *Work & Stress* 25: 1: 1–22.
- Perrewe, Pamela L., and Daniel C. Ganster. 1989. "The Impact of Job Demands and Behavioral Control on Experienced Job Stress." *Journal of Organizational Behavior* 10: 3: 213–229.
- Price, Linda L., and Eric J. Arnould. 1999. "Commercial Friendships: Service Provider-Client Relationships in Context." *Journal of Marketing* 63: 4: 38–56.
- Rafferty, Yvonne, Ronald Friend, and Paul A. Landsbergis. 2001. "The Association Between Job Skill Discretion, Decision Authority and Burnout." *Work & Stress* 15: 1: 73–85.
- Schieman, Scott. 2013. "Job-Related Resources and the Pressures of Working Life." *Social Science Research* 42: 2: 271–282. doi: <http://dx.doi.org/10.1016/j.ssresearch.2012.10.003>
- Schnittker, Jason. 2008. "Diagnosing Our National Disease: Trends in Income and Happiness, 1973 to 2004." *Social Psychology Quarterly* 71: 3: 257–280.
- Sengupta, Sukanya, Paul K. Edwards, and Chin-Ju Tsai. 2009. "The Good, the Bad, and the Ordinary Work Identities in 'Good' and 'Bad' Jobs in the United Kingdom." *Work and Occupations* 36: 1: 26–55.
- Settersten, Richard A. Jr. 2003. "Propositions and Controversies in Life-Course Scholarship." In R. A. Settersten Jr. (ed.), *Invitation to the Life Course: Toward New Understandings of Later Life*: pp. 15–45. Amityville, NY: Baywood.
- Smith, Todd D., and David M. DeJoy. 2012. "Occupational Injury in America: An Analysis of Risk Factors Using Data From the General Social Survey (GSS)." *Journal of Safety Research* 43: 1: 67–74.
- Smith, Tom W., Peter V. Marsden, Michael Hout, and Jibum Kim. 2010. *General Social Surveys, 1972–2010: Cumulative Codebook*. Chicago: National Opinion Research Center.
- Sonnentag, Sabine. 2001. "Work, Recovery Activities, and Individual Well-Being: A Diary Study." *Journal of Occupational Health Psychology* 6: 3: 196–210.
- Suh, Eunkook, Ed Diener, and Frank Fujita. 1996. "Events and Subjective Well-Being: Only Recent Events Matter." *Journal of Personality and Social Psychology* 70: 5: 1091.
- Thomas, Melvin E., and Michael Hughes. 1986. "The Continuing Significance of Race: A Study of Race, Class, and Quality of Life in America, 1972–1985." *American Sociological Review* 51: 6: 830–841.
- Tucker, Ledyard R., and Charles Lewis. 1973. "A Reliability Coefficient for Maximum Likelihood Factor Analysis." *Psychometrika* 38: 1: 1–10.
- Vidal, Matt. 2013. "Low-Autonomy Work and Bad Jobs in Postfordist Capitalism." *Human Relations* 66: 4: 587–612.
- Wu, Bei, and Frank Porell. 2000. "Job Characteristics and Leisure Physical Activity." *Journal of Aging and Health* 12: 4: 538–559.

- Yang, Yang. 2008. "Social Inequalities in Happiness in the United States, 1972 to 2004: An Age-Period-Cohort Analysis." *American Sociological Review* 73: 2: 204–226.
- Zohar, Dov. 1980. "Safety Climate in Industrial Organizations: Theoretical and Applied Implications." *Journal of Applied Psychology* 65: 1: 96–102.