ECONOMICS & Sociology

Vörös, Zs. (2022). The role of work values in the subjective quality-of-life of employees and self-employed adults . *Economics and Sociology*, *15*(2), 138-152. doi:10.14254/2071-789X.2022/15-2/9

THE ROLE OF WORK VALUES IN THE SUBJECTIVE QUALITY-OF-LIFE OF EMPLOYEES AND SELF-EMPLOYED ADULTS

Zsófia Vörös
University of Pécs,
Pécs, Hungary
E-mail: voros.zsofia@ktk.pte.hu
ORCID 0000-0003-4756-8050

Received: May, 2021
1st Revision: April, 2022
Accepted: June, 2022

DOI: 10.14254/2071-789X.2020/15-2/9

JEL Classification: L26, I31, M50

ABSTRACT. As research has produced conflicting results on the relationship between the employment form and life outcomes, it is important to examine the moderators of this link. In this article, we analyze the data of more than 4,000 working individuals of an international OECD survey and use the person-environment fit theory to test whether intrinsic and extrinsic work values have a differential effect on the subjective and eudaimonic well-being, and job satisfaction of organizational employees and self-employed individuals. We found that employees experience lower job satisfaction and well-being than self-employed adults but work values may narrow the gap.

Keywords: work value orientation, eudaimonic well-being, subjective well-being, job satisfaction, person-environment fit theory, self-employment

Introduction

This study examines whether the form of employment moderates the effect of work values on working individuals' well-being. Self-employed individuals may often be considered entrepreneurs who recognize new business opportunities and undertake innovative business projects under uncertainty (Schumpeter, 1934). As theories do not assist the empirical distinction of routine self-employed people from self-employed entrepreneurs and empirical studies often conflate these categories (e.g., Henrekson and Sanandaji 2014; Van Praag and Versloot 2007), in this study, we rely on both literatures and use both terms to describe working adults who do not work for an organization as an employee.

Studies found that the subjective well-being of self-employed adults differs considerably from the well-being of employees. Self-employment is often considered the employment form that is capable of increasing well-being through the satisfaction of basic psychological needs (e.g., Shir et al., 2019; Wiklund, 2019). However, results on the relationship between entrepreneurship (or self-employment) and well-being are inconsistent. Some studies show that generally entrepreneurs are more satisfied with their job (e.g., Benz & Frey, 2008a, 2008b; Warr & Inceoglu, 2017) and life (Binder & Coad, 2013; Stephan 2018) than their employed peers. On the other hand, Bencsik and Chuluun (2019) found that self-employment has mostly negative well-being effects in the USA; self-employed working adults experience lower life-satisfaction and more negative effects, such as stress, than employees. Therefore, studying which individual differences moderate the life outcomes-employment form

relationship is important to know more about whom entrepreneurship or self-employment is for. In this paper, we propose to study the role of work values in the differences between the well-being of self-employed adults and employees.

Work value orientation refers to the type of work aspects that are considered desirable (e.g., Gallie et al., 2012; Ryan & Deci, 2000). Intrinsic work value orientation is linked to the motivation to do a job for its own sake, as it would be inherently substantial. Extrinsic work value orientation is connected to work outcomes, such as the external recognition of the job, high income, and social status (Demerouti et al., 2012; Gallie et al., 2012; Ryan & Deci, 2000). Intrinsic work value orientation was linked to higher job engagement and satisfaction, better health, and higher subjective well-being of employees, whereas extrinsic work value orientation was found to correlate with emotional exhaustion, poor health, more work and family conflicts, lesser job and life satisfaction, and happiness of employees (Deci & Ryan, 2000; Demerouti et al., 2012; Gallie, 2007; Kasser & Ryan, 1996; Van den Broeck et al., 2013; Vansteenkiste et al., 2007). There is little research on the link between the work values and the well-being of self-employed adults. Shevchuk et al. (2018) found that, similarly to employees, intrinsic work values are positively correlated, whereas extrinsic value orientation is negatively linked to the well-being of freelancers participating in online labour markets. Results also show that entrepreneurial autonomy contributes to an enhanced level of well-being directly and indirectly through the increase of feeling competent and related (Shir et al., 2019). However, despite the fundamental differences between the job of an entrepreneur and an employee, until now, studies did not examine directly if work value orientation affects employees' and self-employed adults' well-being differently.

To fill this research gap, we draw on the person-environment fit (PE) theory (Edwards et al., 1998; Kristof-Brown & Guay, 2011). The PE fit theory suggests that individuals are happy and content if there is a congruence between their needs and abilities and what their environment can provide and require. The person-job (PJ) fit refers to the compatibility between the characteristics of a specific job and a given individual. PJ fit was shown to positively influence job satisfaction and subjective well-being (Kristof-Brown et al., 2005; O'Reilly et al., 1991; Park et al., 2011; Saks & Ashforth, 1997). In this paper, we argue that work value orientation represents needs that working as an entrepreneur or an organizational employee may satisfy differently, as entrepreneurial firms differ largely from well-established organizations and the entrepreneurial job and employees' work are characterized by major dissimilarities. Therefore, we examine how entrepreneurship and employment may relate to the satisfaction of work values. Thus, the present study increases the understating of the causes behind the variations of entrepreneurs' and employees' well-being and the effects of the employment form on well-being.

In this study, we found that employees experience lower job satisfaction and well-being than self-employed adults but work values may narrow the gap. Intrinsic work value orientation was shown to benefit employees' life-outcomes to a greater extent than entrepreneurs' and extrinsic work value orientation was found to have the most severe negative impact on entrepreneurs with low income. Possible causes behind these findings and implications are discussed.

1. Literature review and hypotheses

Work values attach to diverse aspects of a job, such as a possibility of acquiring new skills, doing something meaningful, helping others, earning money, or achieving a high position in an organizational hierarchy. Although other classifications were proposed (c.f., Locke & Schattke, 2018), two main categories of work value orientations were confirmed by various research: intrinsic and extrinsic work values (e.g., Gallie et al., 2012; Gesthuizen & Verbakel,

2011). The two work value orientations usually coexist, correlate positively, and their combination may be seen as a general dedication to do a job (Gesthuizen & Verbakel, 2011; Vansteenkiste et al., 2007).

The importance of work value orientation stems from its dual effect on organizational success and working individuals' quality-of-life (e.g., Kasser & Ryan, 1996; Ryan & Deci, 2000; Van den Broeck et al., 2013; Vansteenkiste et al., 2007). The effect of work value orientation on subjective well-being is typically explained by the self-determination theory (SDT) (Deci & Ryan, 2000). SDT posits that people's subjective well-being increases if their basic psychological needs for autonomy, competence, and relatedness are satisfied. Researchers argue that intrinsic work values enable the satisfaction of basic psychological needs, while extrinsic values empower the impact of external feedbacks and hinder the satisfaction of basic needs (Deci & Ryan, 2000). Work value orientation was also incorporated into the job demand resource (JDR) model (Bakker & Demerouti, 2007) to explain working adults' well-being. Authors claimed that extrinsic value orientation represents a job demand leading to reduced satisfaction and psychological and physiological ill-being. On the other hand, intrinsic values are argued to embody job resources triggering higher well-being through the satisfaction of basic needs (Demerouti et al., 2012; Shevchuk et al., 2018; Van den Broeck et al., 2011).

However, the PE fit theory implies that any work values should be considered needs. The needs-supplies dimension of fit between individuals and their work environment concerns the degree to which the work environment satisfies the needs of individuals acting in the environment. The lack of the needs-supplies fit puts psychological, physical, and behavioral strains on individuals, such as dissatisfaction, stress, or anxiety (Edwards et al., 1998; Kristof-Brown & Guay, 2011). As working adults' life in entrepreneurship differs considerably from the life of organizational employees (e.g., Croson & Minniti, 2012; Nikolaev et al., 2019; Shir et al., 2019; Stephan, 2018), in the following sections, we examine how entrepreneurship and employment are able to satisfy the needs of working individuals deriving from intrinsic and extrinsic work value orientations.

As for autonomy, on the one hand, entrepreneurs are considered to be self-directed, enjoying higher work flexibility and autonomy in decision making than their employed peers. Therefore, entrepreneurs are better positioned than employees to find purpose and motivation in work (Croson & Minniti, 2012; Markman & Baron, 2003; Nikolaev et al., 2019; Rauch & Frese, 2007; Shir et al., 2019). Yet, entrepreneurship is also characterized by long working hours that may increase stress and restrict the autonomous and flexible organization of private time (Baines et al., 2003; Süß & Sayah, 2013). Moreover, intrinsically oriented employees are also likely to learn and develop, participate in decision making, and find autonomy (Vansteenkiste, 2007). As for relatedness, employees with intrinsic work value orientation are more likely to care for and feel connected to others than their peers (Kasser & Ryan, 2001; Richins & Dawson, 1992). For entrepreneurs, the potential tension between prosocial and for-profit motivations may cause stress and decrease well-being (Kibler et al., 2019; Ryff, 2019). Being the boss of others can also deprive entrepreneurs of collegial relatedness that is more easily achievable when working as an employee of a larger organization (Hannafey, 2003). As regards competence, entrepreneurship scholars claim that learning-by-doing is the primary way entrepreneurs learn (Frese & Gielnik, 2014; Minniti & Bygrave, 2001; Politis, 2005).

Therefore, on the one hand, entrepreneurs are considered better positioned than employees to satisfy their inner needs to use and develop their skills and fulfill their aspirations to develop and acquire new competencies (Nikolaev et al., 2019; Shir et al., 2019; Stephan, 2018). On the other hand, entrepreneurship is also seen as a process full of uncertainties, unexpected challenges, and frequent failures (e.g., European Commission, 2016; Frese & Gielnik, 2014; Schonfeld & Mazzola, 2015). Overconfidence in entrepreneurial skills with unrealistically optimist income and growth expectations are well documented (e.g., Hall &

Woodward, 2010; Szerb & Voros, 2020). About half of the ventures fail and half of the entrepreneurs continue working as an employee within three to five years worldwide (Quatraro & Vivarelli, 2014). Thus, feeling competent may be challenged during the entrepreneurial process. At the same time, it was argued that employees with intrinsic work motivation are more likely to develop their skills and take on new challenges than other employees. Thus, they are more likely to feel competent than their counterparts (Amabile et al., 1994).

All in all, entrepreneurship or self-employment may hamper feeling competent and related to others but support autonomy, self-development, and learning. Shir et al. (2019), for example, found that entrepreneurial engagement directly increases autonomy and, in turn, augmented autonomy drives the rise in feeling competent and related. On the other hand, employees seem to be better positioned than entrepreneurs to experience relatedness. Additionally, intrinsically oriented employees are also highly likely to learn and develop, feel competent, and autonomous (Slemp & Vella-Brodrick, 2014). Hence, as intrinsic work value orientation helps employees to find or create a work environment that satisfies their basic psychological needs, the positive effect of intrinsic work value orientation is supposed to be stronger in the case of employees. Thus, we formulate two competing hypotheses.

H1: The well-being of entrepreneurs is higher than that of employees but intrinsic work value orientation may compensate the latter.

SDT and JDR suggest and studies generally confirm that extrinsic work value orientation is detrimental to the well-being of working individuals (see Introduction). However, some studies show that the negative effect of extrinsic work value orientation disappears if individuals earn a high income (Malka & Chatman, 2003; Nickerson et al., 2003). Indeed, PE implies that if a work environment is able to satisfy the needs associated with extrinsic values, extrinsic value orientation may be positively linked to well-being. However, the income of entrepreneurs or self-employed adults is typically lower than employees' (e.g., Hamilton, 2000; Sorgner et al., 2017). Moreover, entrepreneurial income and success of the business ventures are typically overestimated (see under the argumentation under H1a and H1b). Also, entrepreneurs or self-employed adults are obviously accountable for the result of their business venture and their income, meanwhile employees' income is usually fixed and employees' performance is often not directly measurable and linked to their wages (e.g., Murphy 2008). Therefore, we posit that extrinsic work value orientation fits employment better as it impairs low-income entrepreneurs the most.

H2: Extrinsic work value orientation is the most harmful to low-income self-employed adults' well-being.

2. Methodological approach

For this study, we used the data of OECD's PIAAC non-cognitive skill international pilot study (OECD, 2018). OECD conducted the online study survey by using the Survey Monkey platform. The data of about 1,500 adults aged between 16 and 65 years were collected between 01.2017 – 03.2017 in Germany, Spain, France, Japan, and Poland. The sample was a non-representative convenience sample but age and gender quotas were used to randomly select participants. The survey contained several personality tests with questions on socio-demographic information and life-outcomes (see OECD, 2018). OECD (2018) contains the full questionnaire and the database.

For this study, responders with missing data, whose mother tongue differed from the language of the questionnaire, were aged below 18 years and did not work were not taken into account. The data of 4,374 participants was analyzed.

2.1. Data and analyses

The employment status was a binary code: employed (N=3,863) vs self-employed (N=511). Intrinsic and extrinsic work value orientations were assessed by eight statements under the question ”For you personally, how important do you think each of the following would be if you were choosing a job?”. Work value orientation statements were adapted from the European Social Survey 5th wave (European Social Survey, 2010) and the British Skills Survey 1992 and 2006 waves (see Gallie et al., 2012). Statements were evaluated on a five-point Likert-scale with “not at all” and “very important” endpoints. The sum of answers given to the statements of “A job that enables you to use your own initiative”, “A job that gives you the opportunity to use your abilities”, “A job that allows you to work independently”, and “A job you like doing” represented the strength of intrinsic work value orientation (Cronbach's Alpha=0.805, M=16.28, SD= 2.592). Extrinsic work value orientation was characterized by the statements; “A secure job”, “A job with high income”, “A job with good fringe benefits”, and “A job with good physical working conditions” (Cronbach's Alpha=.765, M=15.77, SD= 2.61). The unrestricted two-factor model of job value measures ($\chi2$=1,020.691 p=0.000 RMSEA=0.110 CFI=0.926 TLI=0.890 SRMR=0.041 CD=0.913) had a significantly better model fit than the single-factor model ($\chi2$=1,217.168 p=0.000 RMSEA=0.117 CFI=0.911 TLI=0.875 SRMR=0.047 CD=0.874).

Categories of well-being were assessed on a 10-point Likert scale. Subjective well-being or happiness consists of a context-free cognitive judgment of life contentment and levels of positive and negative effects (Diener, 1984; Kahneman, et al. 1999). The question “Overall, how satisfied are you with your life nowadays?” represented the global evaluation of life satisfaction (M=6.61, SD=1.962). Recent experience of happiness and worry was assessed by the questions “Overall, how happy did you feel yesterday?” (M=6.65, SD=2.165) and “Overall, how anxious did you feel yesterday?” (M=4.29, SD=2.508). Eudaimonic well-being refers to meaning, self-realization, and purposefulness (Ryan & Deci, 2001; Waterman et al., 2010). Eudaimonic happiness was assessed by “Overall, to what extent do you feel the things you do in your life are worthwhile?” (M=6.78, SD=1.994). Well-being questions were adapted from Dolan et al. (2011) the Annual Population Survey (UK's Office of National Statistics) (see also Dolan et al., 2011). The unrestricted four-factor model of the well-being measures ($\chi2$=0.047 p=0.000 RMSEA=0.000 CFI=1.000 TLI=1.000 SRMR=0.003 CD=0.999) had a significantly better model fit than the single-factor model ($\chi2$=135.214 p=0.000 RMSEA=0.123 CFI=0.983 TLI=0.950 SRMR=0.024 CD=0.894).

Table 1 contains the descriptive statistics of the above measures by employment group. Life satisfaction of employed adults was higher in our sample but the two employment status groups did not differ in their work value orientation or other well-being measures (Table 1.).

Well-being at work or subjective job satisfaction is an important domain-specific aspect of subjective well-being (Bowling et al., 2010). Job satisfaction is described as a positive emotional state rooted in the appreciation of one's job. Job satisfaction was assessed by the question “All things considered, how satisfied are you with your current job?”. Respondents chose one category from “extremely satisfied” (14.56%), “satisfied” (49.4%), “neither satisfied nor dissatisfied” (25.43%), “dissatisfied” (7.7%), and “extremely dissatisfied” (3%). According to our sample, self-employed adults enjoy higher job satisfaction (Mann-Whitney U=917,660, p<.01) than employees.

Table 1. Descriptive Statistics of the Well-being and Work Value Orientation Measures by Employment Status

Variable	Employment status	*M*	*SD*	*t*
In	Employed	16.098	2.604	-0.792
	Self-employed	16.196	2.662	
Ex	Employed	15.604	2.654	-0.866
	Self-employed	15.712	2.742	
LS	Employed	6.634	1.941	2.399*
	Self-employed	6.413	2.097	
EWB	Employed	6.770	1.987	-1.016
	Self-employed	6.865	2.048	
Hap	Employed	6.670	2.150	1.367
	Self-employed	6.530	2.285	
Anx	Employed	4.301	2.512	1.121
	Self-employed	4.168	2.468	

Note. M=mean. SD= standard deviation. In=intrinsic work value. Ex=extrinsic work value. LS=life satisfaction. EWB= eudaimonic well-being. Hap=happiness. Anx=anxiety.
*p< .05

The unrestricted seven-factor model of the above non-cognitive skills ($\chi2$=1,145.341 p=0.000 RMSEA=0.071 CFI=0.953 TLI=0.925 SRMR=0.032 CD=1.000) had a significantly better model fit than the single-factor model ($\chi2$=9,748.212 p=0.000 RMSEA=0.184 CFI=0.582 TLI=0.499 SRMR=0.136 CD=0.877). The Common Latent Factor technique suggests that there is no significant common bias in the data.

The country, age category, educational attainment, gender, health, marital status, income group were entered as covariates into all models on well-being (Diener et al., 2017; Dolan et al., 2011; Gallie, 2007; Gesthuizen & Verbakel, 2011) (see further information on the covariates in Annex A).

With our baseline models (M1), we tested if the employment status, extrinsic, and intrinsic work value orientations affect life outcomes when accounting for the other two parameters. Thus, these three variables and the covariates were entered into the same model. As a next step, M1 was extended with an intrinsic orientation * employment status interaction effect (models M2) to see if the form of employment moderates the effect of intrinsic work value orientation on life-outcomes. In the last step, M1 was extended to test if income moderates the effect of extrinsic values in employment and in the case of self-employed adults. Thus, the extrinsic value orientation * employment status* income interaction effect was entered into the models M1 (models M3). Generalized linear models (GLM) in SPSS 25 were used for all analyzes. A p-value of less than .05 was considered statistically significant.

3. Results

Our baseline GLM (M1) models show that employees are less satisfied with their job (B=-.3756, p<.01) and their eudaimonic well-being is lower (B=-.147, p<.01) than that of self-employed working adults. Intrinsic work value orientation decreases anxiety (B=-.117, p<.001) and affects all other measured life-outcomes positively (JS B=.0687, p<.001; EWB B=.147, p<.001; LS B=.088, p<.001; Hap B=.122 p<.001). Extrinsic work value orientation decreases job satisfaction (B=-.0498, p<.01) but does not influence hedonic and eudaimonic well-being. Table II summarizes the parameter estimates for employment status, work value orientations, and their interactions. See also Table III for the likelihood ratio chi-square statistics for the full models and the Wald chi-square statistics for the independent variables of the models on life-outcomes.

Models M2 indicates that when accounting for the potential differential effect of intrinsic values in the different forms of employment, employees experience lower job satisfaction (B=-1.46045, p<.05), happiness (B=-1.135, p<.05) and eudaimonic well-being (B=-1.212, p<.05) than entrepreneurs. However, intrinsic work value orientation counterbalances the drawbacks of being an employee in the case of all three life-outcomes (In*Es JS B=.0676, p<.1; EWB B=.061, p<.05; Hap B=.076, p<.05). In fact, intrinsic work values do not affect self-employed adults' happiness (B=.055, p>.1) and job satisfaction (B=.008, p>.1) but employees' (Hap B=.131, p<.001; JS B=.075, p<.001).

Also, according to models M2, the main effect of intrinsic work value orientation for eudaimonic well-being (B=.093, p<.01), anxiety (B=-.122, p<.01), and life satisfaction (B=.059, p<.05) remains significant (see Tables 2 and 3). Taken together, it seems that intrinsic work value orientation positively affects all examined life-outcomes. On average, entrepreneurs enjoy higher job satisfaction, eudaimonic and hedonic well-being. However, intrinsic work value orientation leads employees to experience life-outcomes comparable to those of entrepreneurs. This means that H1 is approved.

By completing the baseline model with the employment status * extrinsic work values * income interaction effect (M3), the models indicate that lower-income coupled with higher extrinsic work value orientation is more damaging for the life-outcomes of entrepreneurs than that of their employed peers. An employment status * extrinsic work values * income interaction effect was detected in the models M3 on job satisfaction, eudaimonic well-being, and anxiety (see Tables 2 and 3). Thus, a relatively low income coupled with higher extrinsic work values decreases several aspects of the life-outcomes of entrepreneurs but do not deteriorates the well-being of employees. Hence, H2 can be accepted.

Table 2. Parameter estimates for employment status, work value orientation and their interactions of the GLM models on life-outcomes

Model	Variable	JS		EWB		LS		Anx		Hap	
		B	*SE*	*B*	*SE*	*B*	*SE*	*B*	*SE*	*B*	*SE*
M1	ES1	-0.375***	0.091	-0.147+	0.082	0.093	0.08	0.081	0.116	0.023	0.091
	Ex	-0.049**	0.016	0.002	0.014	-0.011	0.014	0.02	0.02	-0.026	0.016
	In	0.068***	0.016	0.147***	0.014	0.088***	0.014	-0.117***	0.02	0.122***	0.016
M2[1]	Es1	-1.460**	0.560	-1.135*	0.501	-0.434	0.489	-0.005	0.706	-1.212*	0.555
	Ex	-0.049**	0.016	0.002	0.014	-0.011	0.014	0.02	0.02	-0.025	0.016
	In	0.008	0.035	0.093**	0.031	0.059*	0.03	-0.122**	0.043	0.055	0.034
	Es1 * In	0.067+	0.034	0.061*	0.031	0.033	0.03	0.005	0.043	0.076*	0.034
M3[2]	ES1	-0.937+	0.528	-0.940*	0.477	0.093	0.465	-0.008	0.671	-0.877+	0.528
	Ex	-0.007	0.044	0.007	0.04	0.052	0.039	-0.074	0.056	-0.042	0.044
	In	0.070***	0.016	0.149***	0.015	0.089***	0.014	-0.121***	0.02	0.125***	0.016
	Es1 * I1 * Ex	-0.103+	0.055	-0.037	0.05	-0.045	0.048	0.171*	0.07	0.023	0.055
	Es1 * I2 * Ex	-0.071	0.054	-0.033	0.048	-0.099*	0.047	0.162*	0.068	-0.009	0.054
	Es1 * I3 * Ex	-0.065	0.051	0.011	0.046	-0.073	0.045	0.115+	0.065	0.004	0.051
	Es1 * I4 * Ex	-0.032	0.05	-0.001	0.045	-0.071	0.044	0.082	0.064	0.014	0.05
	Es1 * I5 * Ex	0.010	0.052	0.01	0.048	-0.063	0.046	0.014	0.067	0.063	0.053
	Es1 * I6 * Ex	0.032	0.035	0.049	0.032	-0.013	0.031	0.036	0.045	0.054	0.036
	Es2 * I1 * Ex	-0.148***	0.044	-0.101*	0.04	-0.053	0.039	0.179**	0.056	-0.065	0.044
	Es2 * I2 * Ex	-0.120**	0.045	-0.093*	0.041	-0.094*	0.04	0.138*	0.057	-0.07	0.045
	Es2 * I3 * Ex	-0.079+	0.041	-0.026	0.037	-0.065+	0.036	0.127*	0.052	-0.035	0.041
	Es2 * I4 * Ex	-0.074+	0.04	-0.062+	0.036	-0.099**	0.035	0.093+	0.051	-0.051	0.04
	Es2 * I5 * Ex	-0.025	0.044	-0.022	0.039	-0.05	0.038	0.002	0.055	0.022	0.043

Note. In=intrinsic work value. Ex=extrinsic work value. LS=life satisfaction. EWB= eudaimonic well-being. Hap=happiness. Anx=anxiety. ES= employment status. ES1= employees. ES2= entrepreneurs. I=income.

[1]Interaction effect reference group is entrepreneurs*intrinsic work value orientation.

[2]Interaction effect reference group is entrepreneur* highest income category (I6)*extrinsic work value orientation.

+=p<.1, *=p<.05, **=p<.01, ***=p<.001

Table 3. Likelihood ratio chi-square statistics for the full models and Wald chi-square statistics for the independent variables of the models on life-outcomes

Model	Variable	JS	EWB	LS	Anx	Hap
M1	Full model	415.297***	1315.155***	1390.521***	323.227***	1144.085***
	Intercept		368.321***	564.142***	429.795***	406.573***
	Country	179.761***	122.758***	45.205***	55.406***	44.321***
	Gender	10.491**	24.179***	17.620***	0.706	4.781*
	Education	1.164	2.092	0.468	1.724	1.110
	Health		396.713***	638.768***	125.883***	533.794***
	Age	9.930*	38.559***	8.619+	31.472***	6.645
	Income	127.159***	27.428***	97.766***	3.101	32.992***
	MS		69.247***	114.167***	0.481	79.919***
	Es	17.047***	3.187+	1.338	0.486	0.063
	Ex	9.393**	0.018	0.665	0.988	2.588
	In	17.734***	103.202***	38.897***	32.987***	58.035***
M2	Full model	419.142***	1319.143***	1391.714***	323.242***	1149.163***
	Intercept		241.704***	335.139***	237.707***	270.297***
	Country	181.214***	123.964***	45.635***	55.416***	44.847***
	Gender	10.865***	24.644***	17.828***	0.710	5.014*
	Education	1.177	2.142	0.457	1.724	1.206
	Health		398.518***	639.832***	125.777***	536.359***
	Age	9.980*	38.785***	8.659+	31.469***	6.772
	Income	128.112***	27.752***	97.988***	3.107	33.319***
	MS		68.343***	113.469***	0.476	78.843***
	ES	6.800**	5.121**	0.788	0.000	4.763*
	Ex	9.216**	0.025	0.645	0.990	2.508
	In	3.886*	43.511***	17.081***	20.434***	19.963***
	ES*In	3.856+	3.989*	1.193	0.015	5.080*
M3	Full model	436.828***	1332.409***	1407.413***	346.867***	1160.679***
	Intercept		242.170***	314.771***	248.610***	260.967***
	Country	176.016***	120.344***	41.294***	53.955***	42.221***
	Gender	9.990**	23.563***	17.292***	1.008	4.789*
	Education	1.051	1.858	0.403	1.139	1.190
	Health		395.140***	632.821***	124.216***	529.255***
	Age	10.075*	39.016***	8.854+	31.312***	6.855
	Income	4.390	3.726	3.800	14.111*	2.268
	Ms		69.175***	116.328***	0.392	81.192***
	ES	3.146+	3.886*	0.040	0.000	2.761
	Ex	9.322**	1.029	0.210	0.563	5.072*
	In	18.607***	105.435***	39.224***	34.967***	60.204***
	ES * I * Ex	21.512**	17.288+	16.925	23.704*	16.625

Note. In=intrinsic work value. Ex=extrinsic work value. MS= marital status. I=income. LS=life satisfaction. EWB= eudaimonic well-being. Hap=happiness. Anx=anxiety. ES= employment status.
+=p<.1, *=p<.05, **=p<.01, ***=p<.001

Conclusion

Taken together, this study is an important step toward increasing our understanding of the role of work value orientation in the happiness and contentment of entrepreneurs or self-employed adults, and organizational employees. The results are in line with studies indicating that self-employed working adults are better positioned than employees to satisfy their basic needs as defined by the STD (e.g, Shir et al., 2019; Wiklund, 2019). However, our results also suggest that employees with intrinsic work value orientation may be able to find or create a work environment that is comparable to that of entrepreneurs in its ability to satisfy basic needs. The results of Slemp and Vella-Brodrick (2014), for example, indicate that job crafting increases employees' well-being via the satisfaction of intrinsic needs. Future research could study the exact processes through which employees with intrinsic work values achieve a work environment that is a better fit to satisfy their basic psychological needs as defined by the SDT.

Moreover, our results show that extrinsic work values harm low-income entrepreneurs' well-being more than employees' and high-income entrepreneurs' well-being.

This result underlies the idea that if an extrinsic need is satisfied, it may not be harmful. Thus, the definition of extrinsic work values as needs within the framework of PE fit theory opens to way to examine whether extrinsic values may be positively linked to life-outcomes. For example, our theorizing suggests that extrinsic values coupled with high entrepreneurial income may decrease anxiety, or when low intrinsic values are coupled with high extrinsic values and income, the job satisfaction of employees may increase. Future research could study the factors that moderate the effects of extrinsic work value orientation and the ways extrinsic values exercise their effects.

Our results also have practical implications for mangers, organizations, and policy makers. The result that intrinsic work value orientation positively correlates with employees' well-being suggests that by promoting intrinsic motivation and introducing intrinsic motivational techniques, larger organizations and managers can increase the well-being of their employees. Considering that extrinsic work values harm self-employed adults well-being the most, we think that individuals should know more about the complexity and setbacks of the entrepreneurial job and process before market entry. Entrepreneurial success and income are typically overestimated when starting a business solo or with others. The low return of entrepreneurship was showed by several studies (e.g., Hamilton, 2000). Exaggerated income and growth expectations may cause disappointment in the subsequent performance and failure of the ventures (e.g., Shepherd et al., 2016). Therefore, policymakers could found programs to reach out to the larger public to support new venture owners, individuals with entrepreneurial intention or self-employed in making more realistic business plans, to assess their skills and opportunities more reasonably. In all probability, more realistic expectations of entrepreneurship would diminish strains. Results also suggest that entrepreneurship should be promoted for individuals who would like to become entrepreneurs to fulfill their internal motivations and intrinsic motivation should be promoted among entrepreneurs.

Finally, we have to mention the limitations of our study. First, self-employment varies widely across countries. Our results are based on an international study but it would be interesting to see how work values function in other economies. Second, we worked with cross-sectional survey data. Thus, we could formulate our hypotheses solely on associations and not on causations. Third, it would be important to see how the distinction between opportunity or necessity entrepreneurship or self-employment would moderate the results.

Acknowledgement

Project no. TKP2021-NKTA-19 has been implemented with the support provided from the National Research, Development and Innovation Fund of Hungary, financed under the TKP2021-NKTA funding scheme.

References

Amabile, T.M., Hill, K.G., Hennessey, B.A., & Tighe, E.M. (1994). The Work Preference Inventory: Assessing intrinsic and extrinsic motivational orientations. *Journal of Personality and Social Psychology*, *66*, 950. doi.org/10.1037/0022-3514.66.5.950

Bakker, A., & Demerouti, E. (2007). The Job Demands–Resources Model: State of the art. Journal of Managerial Psychology, 22, 309–328. doi.org/10.1108/02683940710733115

Benz, M., & Frey, B.S. (2008a). Being independent is a great thing: Subjective evaluations of self-employment and hierarchy. *Economica, 75*, 362-383. https://doi.org/10.1111/j.1468-0335.2007.00594.x

Benz, M., & Frey, B.S. (2008b). The value of doing what you like: Evidence from the self-employed in 23 countries. *Journal of Economic Behavior & Organization, 68*, 445-455. https://doi.org/10.1016/j.jebo.2006.10.014

Bencsik, P., & Chuluun, T. (2021). Comparative well-being of the self-employed and paid employees in the USA. *Small Business Economics, 56*(1), 355-384. doi:10.1007/s11187-019-00221-1.

Binder, M., & Coad, A. (2013). Life satisfaction and self-employment: a matching approach", *Small Business Economics, 40*, 1009-1033. https://doi.org/10.1007/s11187-011-9413-9

Baines, S., Wheelock, J., & Gelder, U. (2003). *Riding the roller coaster: Family life and self-employment*. Policy Press.

Bowling, N.A., Eschleman, K.J., & Wang, Q. (2010). A meta-analytic examination of the relationship between job satisfaction and subjective well-being. *Journal of Occupational and Organizational Psychology, 83*, 915-934. https://doi.org/10.1348/096317909X478557

Cable, D.M., & Judge, T.A. (1996). Person–organization fit, job choice decisions, and organizational entry. *Organizational Behavior and Human Decision Processes, 67*, 294-311. https://doi.org/10.1006/obhd.1996.0081

Croson, D.C., & Minniti, M. (2012). Slipping the surly bonds: The value of autonomy in self-employment. *Journal of Economic Psychology, 33*, 355-365. https://doi.org/10.1016/j.joep.2011.05.001

Deci, E.L., & Ryan, R.M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227-268. https://doi.org/10.1207/S15327965PLI1104_01

Demerouti, E., Bakker, A.B., & Fried, Y. (2012). Work orientations in the job demands-resources model. *Journal of Managerial Psychology, 27*, 555-575. https://doi.org/10.1002/job.2595

Diener, E. (1984). Subjective Well-being. *Psychological Bulletin, 95*, 542–575. 10.1007/978-90-481-2350-6_2

Diener, E., Heintzelman, S J., Kushlev, K., Tay, L., Wirtz, D., Lutes, L.D., & Oishi, S. (2017). Findings all psychologists should know from the new science on subjective well-being. *Canadian Psychology/Psychologie Canadienne, 58*, 87. https://doi.org/10.1037/cap0000063

Dolan, P., Layard, R., & Metcalfe, R. (2011). *Measuring subjective wellbeing for public policy: Recommendations on Measures* (No. 23), Centre for Economic Performance, LSE, London, Uk.

Edwards, J.R., Caplan, R.D., & Van Harrison, R. (1998). *Person-environment fit theory: conceptual foundations, empirical evidence, and directions for future research.* In C. L. Cooper (Ed.), Theories of organizational stress (pp. 28-67). Oxford University Press.

European Commission. (2016). *Employment and social developments in Europe 2015*. available at: https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=7859&furtherPubs=yes. (accessed 25 May 2020)

European Social Survey. (2010). *ESS Round 5 Source Questionnaire*. Centre for Comparative Social Surveys, City University London, London, UK.

Frese, M., & Gielnik, M.M. (2014). The psychology of entrepreneurship. *Annual Review of Organisational Psychology and Organisational Behavioral, 1*, 413-438. doi.org/10.1146/annurev-orgpsych-031413-091326

Gallie, D. (2007). Welfare regimes, employment systems and job preference orientations. *European Sociological Review, 23*, 279-293. https://doi.org/10.1093/esr/jcm001

Gallie, D., Felstead, A., & Green, F. (2012). Job preferences and the intrinsic quality of work: the changing attitudes of British employees 1992-2006. Work, Employment & Society, 26, 806–821. https://doi.org/10.1177/0950017012451633

Gesthuizen, M., & Verbakel, E. (2011). Job preferences in Europe: Tests for scale invariance and examining cross-national variation using EVS. *European Societies, 13*, 663-686. doi.org/10.1080/14616696.2010.514353

Hannafey, F.T. (2003). Entrepreneurship and ethics: A literature review. *Journal of Business Ethics, 46*, 99-110. doi.org/10.1023/A:1025054220365

Hall, R.E., & Woodward, S.E. (2010). The burden of the non-diversifiable risk of entrepreneurship. *American Economic Review, 100*, 1163-94. 10.1257/aer.100.3.1163

Hamilton, B.H. (2000). Does entrepreneurship pay? An empirical analysis of the returns to self-employment. *Journal of Political Economy, 108*, 604-631. https://doi.org/10.1086/262131

Henrekson, M., & Sanandaji, T. (2014). Small business activity does not measure entrepreneurship. *Proceedings of the National Academy of Sciences, 111*(5), 1760–1765. doi.org/10.1073/pnas.1307204111

Kahneman, D., Diener, E., & Schwarz, N. (1999). *Well-being: Foundations of Hedonic Psychology*. Russell Sage Foundation.

Kasser, T., & Ryan, R.M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin, 22*, 280-287. doi.org/10.1177/0146167296223006

Kasser, T., & Ryan, R.M. (2001). *Be careful what you wish for: Optimal functioning and the relative attainment of intrinsic and extrinsic goals.* In P. Schmuck & K. M. Sheldon (Eds.), Life goals and well-being: Towards a positive psychology of human striving (p. 116–131). Hogrefe & Huber Publishers.

Kibler, E., Wincent, J., Kautonen, T., Cacciotti, G., & Obschonka, M. (2019) Can prosocial motivation harm entrepreneurs' subjective well-being? *Journal of Business Venturing, 34*, 608-624. https://doi.org/10.1016/j.jbusvent.2018.10.003

Kristof, A.L. (1996). Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. Personnel Psychology, 49: 1-49. doi.org/10.1111/j.1744-6570.1996.tb01790.x

Kristof-Brown, A., & Guay, R.P. (2011). *Person–environment fit.* APA handbook of industrial and organizational psychology, Vol 3: Maintaining, expanding, and contracting the organization (p. 3-50). American Psychological Association.

Kristof-Brown, A.L., Zimmerman, R.D., & Johnson, E.C. (2005). Consequences of indivisuals'fit at work: a meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology, 58*, 281-342. doi.org/10.1111/j.1744-6570.2005.00672.x

Locke, E.A., & Schattke, K. (2018). Intrinsic and extrinsic motivation: Time for expansion and clarification. *Motivation Science, 5*, 277–290.

Malka, A., & Chatman, J.A. (2003). Intrinsic and extrinsic work orientations as moderators of the effect of annual income on subjective well-being: A longitudinal study. *Personality and Social Psychology Bulletin, 29*, 737-746. doi.org/10.1177/0146167203029006006

Markman, G.D., & Baron, R.A. (2003). Person-entrepreneurship fit: Why some people are more successful as entrepreneurs than others. *Human Resource Management Review, 13*, 281-301. doi.org/10.1016/S1053-4822(03)00018-4

Minniti, M., & Bygrave, W. (2001). A dynamic model of entrepreneurial learning. *Entrepreneurship Theory and Practice, 25*, 5-16. https://doi.org/10.1177/104225870102500301

Murphy, K. R. (2008), "Explaining the weak relationship between job performance and ratings of job performance", *Industrial and Organizational Psychology, 1,* 148-160. 10.1111/j.1754-9434.2008.00030.x

Nickerson, C., Schwarz, N., Diener, E., & Kahneman, D. (2003). Zeroing in on the dark side of the American dream: A closer look at the negative consequences of the goal for financial success. *Psychological science, 14*, 531-536. doi.org/10.1046/j.0956-7976.2003.psci_1461.x

Nikolaev, B., Boudreaux, C.J., & Wood, M. (2019). Entrepreneurship and subjective well-being: The mediating role of psychological functioning. *Entrepreneurship Theory and Practice*, https://doi.org/10.1177/1042258719830314

O'Reilly III, C.A., Chatman, J., & Caldwell, D.F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal, 34*, 487-516. doi.org/10.5465/256404

Organisation for Economic Co-operation and Development (2018). *Programme for the International Assessment of Adult Competencies (PIAAC), International Pilot Study on Non-Cognitive Skills*. Data file Version 1.0.0 [ZA6941]. Cologne: GESIS Data Archive. doi:10.4232/1.13063

Organisation for Economic Co-operation and Development (2013). *Economic well-being. In OECD Framework for Statistics on the Distribution of Household Income, Consumption and Wealth.* OECD Publishing, Paris, FR. http://dx.doi.org/10.1787/9789264194830-en

Park, H.I., Monnot, M.J., Jacob, A.C., & Wagner, S.H. (2011). Moderators of the relationship between person-job fit and subjective well-being among Asian employees. *International Journal of Stress Management, 18,* 67. doi.org/10.1037/a0021854

Politis, D. (2005). The process of entrepreneurial learning: A conceptual framework. *Entrepreneurship Theory and Practice, 29*, 399-424. doi.org/10.1111/j.1540-6520.2005.00091.x

Quatraro, F., & Vivarelli, M. (2015). Drivers of entrepreneurship and post-entry performance of newborn firms in developing countries. *The World Bank Research Observer, 30*, 277-305. https://doi.org/10.1093/wbro/lku012

Rauch, A., & Frese, M. (2007). Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation, and success. *European Journal of Work and Organizational Psychology, 16,* 353-385. doi.org/10.1080/13594320701595438

Richins, M.L., & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research, 19,* 303-316. https://doi.org/10.1086/209304

Ryan, R.M., & Deci, E.L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55,* 68. doi.org/10.1037/0003-066X.55.1.68

Ryff, C.D. (2019). Entrepreneurship and eudaimonic well-being: Five venues for new science. *Journal of Business Venturing, 34*, 646-663. https://doi.org/10.1016/j.jbusvent.2018.09.003

Saks, A.M., & Ashforth, B.E. (1997). A longitudinal investigation of the relationships between job information sources, applicant perceptions of fit, and work outcomes. *Personnel Psychology, 50*, 395-426. https://doi.org/10.1111/j.1744-6570.1997.tb00913.x

Schumpeter, J. A. (1934). The theory of economic development. Harvard University Press.

Shepherd, D. A., Williams, T., Wolfe, M., and Patzelt, H. (2016). *Learning from Entrepreneurial Failure*. Cambridge University Press.

Slemp, G. R., & Vella-Brodrick, D. A. (2014). Optimising employee mental health: The relationship between intrinsic need satisfaction, job crafting, and employee well-being. *Journal of Happiness Studies, 15*(4), 957-977. doi.org/10.1007/s10902-013-9458-3

Süß, S., & Sayah, S. (2013). Balance between work and life: A qualitative study of German contract workers. European Management Journal, 31, 250-262. https://doi.org/10.1016/j.emj.2012.12.003

Slemp, G.R., & Vella-Brodrick, D.A. (2014). Optimising employee mental health: The relationship between intrinsic need satisfaction, job crafting, and employee well-being. *Journal of Happiness Studies, 15*, 957-977. https://doi.org/10.1007/s10902-013-9458-3

Shevchuk, A., Strebkov, D., & Davis, S.N. (2018). Work value orientations and worker well-being in the new economy. International Journal of Sociology and Social Policy, 38, 736–753. https://doi.org/10.1108/IJSSP-01-2018-0006

Schonfeld, I.S., & Mazzola, J.J. (2015). A qualitative study of stress in individuals self-employed in solo businesses. *Journal of Occupational Health Psychology, 20*(4), 501. https://doi.org/10.1037/a0038804

Shir, N., Nikolaev, B.N., & Wincent, J. (2019). Entrepreneurship and well-being: The role of psychological autonomy, competence, and relatedness. *Journal of Business Venturing, 34*, 105875. https://doi.org/10.1016/j.jbusvent.2018.05.002

Stephan, U. (2018). Entrepreneurs' mental health and well-being: A review and research agenda. *Academy of Management Perspectives. 32*, 290-322. https://doi.org/10.5465/amp.2017.0001

Sorgner, A., Fritsch, M., & Kritikos, A. (2017). Do entrepreneurs really earn less?. Small Business Economics. 49, 251-272. https://doi.org/10.1007/s11187-017-9874-6

Szerb, L., & Vörös, Z. (2021). The changing form of overconfidence and its effect on growth expectations at the early stages of startups. *Small Business Economics, 57*(1), 151-165. https://doi.org/10.1007/s11187-019-00297-9

Van den Broeck, A., Van Ruysseveldt, J., Smulders, P., & De Witte, H. (2011). Does an intrinsic work value orientation strengthen the impact of job resources? A perspective from the Job Demands–Resources Model. European Journal of Work and Organizational Psychology, 20, 581-609. 10.1080/13594321003669053

Van den Broeck, A., Lens, W., De Witte, H., & Van Coillie, H. (2013). Unravelling the importance of the quantity and the quality of workers' motivation for well-being: A person-centered perspective. *Journal of Vocational Behavior, 82*, 69-78. https://doi.org/10.1016/j.jvb.2012.11.005

Van Praag, C.M., & Versloot, P.H. (2007). What is the value of entrepreneurship? A review of recent research. *Small Business Economics, 29*, 351-382. https://doi.org/10.1007/s11187-007-9074-x

Vansteenkiste, M., Neyrinck, B., Niemiec, C.P., Soenens, B., De Witte, H., & Van den Broeck, A. (2007). On the relations among work value orientations, psychological need satisfaction and job outcomes: A self-determination theory approach. *Journal of Occupational and Organizational Psychology, 80*, 251-277. https://doi.org/10.1348/096317906X111024

Warr, P., & Inceoglu, I. (2018). Work orientations, well-being and job content of self-employed and employed professionals. *Work, Employment and Society, 32*(2), 292-311. 10.1177/0950017017717684

Waterman, A.S., Schwartz, S.J., Zamboanga, B.L., Ravert, R.D., Williams, M.K., Bede Agocha, V., & Brent Donnellan, M. (2010). The Questionnaire for Eudaimonic Well-

Being: Psychometric properties, demographic comparisons, and evidence of validity. *The Journal of Positive Psychology, 5*, 41-61. doi.org/10.1080/17439760903435208

Wiklund, J., Nikolaev, B., Shir, N., Foo, M.D., & Bradley, S. (2019). Entrepreneurship and well-being: Past, present, and future. *Journal of Business Venturing, 34*(4), 579-588. https://doi.org/10.1016/j.jbusvent.2019.01.002

Appendix A

Table 4. Number of Test Takers by Covariable Categories

Covariate name	Covariate category	Self-employed	Employed	Total
		N	*N*	*N*
Country	France	776	52	828
	Germany	854	98	952
	Japan	619	111	730
	Poland	824	121	945
	Spain	790	129	919
Gender	Male	2026	313	2339
	Female	1837	198	2035
Living with a spouse or partner	Yes	2567	319	2886
	No	1296	192	1488
Education	Primary school	32	5	37
	High School or equivalent	1503	175	1678
	Some college or vocational school	806	98	904
	Tertiary education	1522	233	1755
Estimated gross pay per year	Less than #10%	356	88	444
	#10% to less than #25%	470	72	542
	#25% to less than #50%	846	83	929
	#50% to less than #75%	967	101	1068
	#75% to less than #90%	694	81	775
	#90% or more	530	86	616
Subjective health	Excellent	332	54	386
	Very good	1325	142	1467
	Good	1570	216	1786
	Fair	518	79	597
	Poor	118	20	138
Age category	18-25	209	25	234
	26-35	1017	88	1105
	36-45	960	110	1070
	46-55	1195	185	1380
	56-65	482	103	585
Total		3863	511	4374