The Role of Self-Esteem in Career Success

Natalia V. Sabelnikova

SNR 2062468

Supervisor: Dr. O. Stavrova

Second assessor: Dr. B. Jaeger

Master Thesis

Work and Organizational Psychology

Tilburg University

March, 19, 2021

Abstract

High self-esteem was found to be helpful for individuals in many contexts. Previous research suggested positive association of self-esteem and occupational success. However, the question whether high self-esteem is always good for job outcomes has not been yet answered. Despite an increasing interest of researchers towards examining non-linear associations between different variables, this approach has not been applied to studies of the relationship between self-esteem and career success yet. The present longitudinal study explores possible non-monotonic links of self-esteem with objective career success (income) and subjective career success (job satisfaction). We argued that effect of self-esteem on career success is non-linear, with moderate levels of self-esteem leading to highest incomes. The study uses the panel data from the Dutch national sample for the period from 2008 until 2018 (*N*~12,000). The analysis based on Linear Mixed Models provided the evidence for the linear positive relation of self-esteem to income and career success. The expected U-shaped pattern of this relationship was not found. The analysis of the limitations and the strengths of this study provided suggestions for future research of the role of self-esteem in organizational outcomes.

Keywords: Self-esteem, career success, income, job satisfaction, inverted U-shaped association

,

The Role of Self-Esteem in Career Success

In most western cultures it is commonly believed that having a positive overall self-attitude, referred to as a high self-esteem (Rosenberg, 1965; Harter, 1990), is beneficial for an individual. Generally, individuals with high self-esteem tend to perceive themselves as bright, significant, and worthy (Zheng et al., 2020). They are usually confident in their potential and talents that makes them happy, energetic, and goal oriented (Baumeiser et al., 2003; Cheng & Furnham, 2003; Diener & Diener, 1995; Heimpel, 2006; Yuki, et. al., 2013). Whereas people having negative overall self-attitude are not that much confident in their abilities, perceive themselves in negative light (Rosenberg, 1965); compared to high self-esteem people, people with low self-esteem more often avoid setting and pursuing personal goals (Heimpel, 2006); they are more prone to depression, aggression and antisocial behavior (Baumeister et al., 2003; Donnellan, et al., 2005; Rosenberg, 1965). Past studies (Baumeiser et al., 2003; Greenhaus & Simon, 1976; Salmela-Aro & Nurmi, 2007; Cai, et al., 2015) suggest a positive relation of global self-esteem to success in different life spheres.

People often strive for success, especially success in their occupational career, in order to make living meaningful (Christiansen, 1999, p. 547); this relates to their well-being and feeling happy (Boehm & Lyubomirsky, 2008; Christiansen, 1999; Diener and Seligman 2004). Hence, individual-level antecedents of career success, in particular self-esteem, have received a great deal of researcher's attention (Ferris et al., 2010; Judge & Bono, 2001; Kammeyer-Mueller et al., 2008; Lau, & Shaffer, 1999). The assumption that high self-esteem results in career success was supported by socio-psychological theories (Betz, 1994; Korman, 1976) and empirical research (Kammeyer-Mueller et al., 2008; Kuster et al., 2013; Orth et al., 2012; Waddel, 2006). Based on the aforementioned evidence, it may seem that higher self-esteem is always better and, therefore, it is likely that raising self-esteem referred to as self-enhancement, could be a good recipe for success at work and consequently for being happy

(Kim et al., 2010). However, research has provided a contrasting evidence: boosting self-esteem by means of interventions did not yield expected benefits (Baumester et al., 2003). Also, very high levels of self-esteem were proposed to be detrimental to performance and interpersonal relationships (Baumeister with colleagues, 2003). Notably, recent analysis of existing research (Grant & Swartz, 2011) has suggested that the relationship between success and many positive traits like conscientiousness, optimism, and self-efficacy appears to take inverted U-shape: moderate levels of these positive traits lead to better outcomes than low or very high levels of these traits. Consequently, critical questions arise: Does the same U-shape pattern extends to the relationship between the level of self-esteem and career success? What is the optimum level of self-esteem for success in professional life? To the best of our knowledge these research questions have not been yet answered. Our results could contribute both to organizational psychology and self-esteem literature by obtaining an empirical evidence on the role of self-esteem in career success. and could be beneficial for psychotherapists, teachers, parents, and HR managers.

Theoretical frameworks connecting self- esteem and career outcomes

The foundations for relationship between self-esteem and career success can be provided from the perspective of at least two psychological theories- self-concept implementation theory (Betz, 1994) and self-consistency theory (Korman, 1976). According to these theories, individuals make career choices that are congruent with their self-concepts. For example, individuals having high self-esteem are looking for high-status, challenging, and rewarding jobs. Conversely, men and women with low self-esteem tend to find low status, easy, and non-demanding jobs. The suggested link from self-esteem to success in occupational sphere was widely tested in empirical studies.

Empirical support for the positive role of self-esteem in career outcomes

Existing empirical research has provided considerable indirect evidence supporting the idea of the positive role of high self-esteem in career development. For instance, the vast amount of empirical research reported positive links of high level of self-esteem with variables that are important for career success: success expectancy (Miner, 1992), greater initiative (Baumeister et al., 2003), and motivation to set challenging goals and achieve them (Crook, et al., 1984). Also, the studies on the role of employees' self-efficacy in creating self-fulfilling prophecy serve as a source of evidence of positive connection of high self-esteem and achievement (Chen, & Klimoski, 2003; McNatt, & Judge,2004). In one of the related studies, Eden (1992) tested Galatea effect model in the study of trainees in military settings. Galatea effect model presupposed that raising participants' expectations connected with assessment of their abilities would lead them to putting more effort in their work and, by this, to achievement of higher results. As a result of the experiment, the trainees demonstrated high achievement fulfilling their own "prophecy" of self-effectiveness. In a similar vein, Chen and Klimoski (2003) also established indirect positive link of newcomers' self-efficacy to their role performance through their previous experiences and performance expectations in their field study with work teams. These findings point to a positive association between self-esteem and work performance which is essential for career success.

In addition, high self-esteem appeared to be related to more adaptive self-regulatory strategies and greater flexibility than low self-esteem when attaining career-related goals. In particular, high self-esteem and high efficacy perceptions were found to be predictors of high task-related persistence (Audia, Locke, & Smith, 2000) and precursors of success in overcoming a failure and regaining persistence or quitting when it is more advantageous (Baumeister et al., 2003). It was also posited that high self-esteem individuals experienced less distress after failure than low self-esteem ones (Dutton & Braun, 1997). Likewise,

Greenhaus' s study reported the link between self-esteem and resistance to social pressures in occupational decisions (Greenhaus, 1971, as cited in Greenhaus, 1976 p.52).

Another family of studies revealed a positive link between self-esteem and career adaptability in young adults. For example, recent meta-analysis (Rudolf et al., 2017) has revealed positive relation of self-esteem to career adaptability. The study of Cai et al. (2015) evidenced that self-esteem predicted future work self and career adaptability. Similarly, the Atac et al., (2019) study depicted the role of high self-esteem as an important resource for adjustment to the changing work environments and transitions of their careers. The authors suggested that individuals with higher levels of self-esteem were more likely to take the responsibility and feel more control over their careers (Atac et al., 2019, p. 59). Likewise, the Öncel (2014) study showed the self-esteem relation to career control and career concern. Conversely, low self-esteem was found to be negatively correlated with career adaptability (Rossier et al., 2012). Career adaptability, in turn, was found to be positively connected with career-related outcomes (job search outcomes, employment status, and career anxiety) (e.g., Guan et al., 2013; Pouyaud, et al., 2012; Rossier et al., 2012).

Furthermore, past research has found the empirical evidence on the relationship between self-esteem and performance (Campbell and Fairey, 1985; Jude & Bono, 2001; Jude et al., 2003) which is also considered to be an indicator of occupational success (Dries et al., 2008; Igbaria &. Wormley, 1992). However, the causal relationship has not been established (Baumeister et al., 1990).

Summing up, there is a substantial empirical evidence on the positive role of self-esteem in different career outcomes like employment, career adaptability, adjustment to changing work environment, work goals persistence and performance. Next, we will look deeper into research linking self-esteem to direct objective and subjective indicators of career success.

Self-esteem relationship with subjective and objective career success

Career success is determined as a range of psychological and work-related positive outcomes of individual's work experiences (Seibert et al., 1999, p.417). The relevant literature distinguishes intrinsic (subjective) and extrinsic (objective) career success (Abele et al., 2011; Kuijpers et al., 2006). Self-esteem was found to relate to both extrinsic career success (e.g., income, occupational prestige, promotion history, prestige of one's occupation, position; Ferris et al., 2010; Judge & Bono, 2001; Kammeyer-Mueller et al., 2008)) and intrinsic career success (e.g., perception of career related achievement, future perspectives, respect, and job satisfaction; Ferris et al., 2010; Judge & Bono, 2001; Kammeyer-Mueller et al., 2008).

Objective career success. To illustrate, the analysis of eight-year period longitudinal data from National Longitudinal Survey of Youth 1979 performed by Kammeyer-Mueller and Judge (2008) examined reciprocal relationship between self-esteem and income using a cross-lagged regression design. The results indicated that self-esteem was predictive of income and occupational prestige in the same year and seven years later. However, the objective indicators of career success didn't influence self-esteem. Alike, Waddell's research (2006) found that low self-esteem measured in adolescence was related negatively to income and employment status 14 years later. In a study by Orth et al. (2012), self-esteem predicted the pay and occupational status across several waves of data, although these career-related outcomes did not predict self-esteem.

Subjective career success. Numerous studies had documented positive relation of high self-esteem to job satisfaction (Judge & Bono, 2001; Orth et al., 2012). In a similar vein, Alavi and Askaripur (2003) in their correlational study found a positive relationship of self-esteem and job satisfaction in such domains as promotion, salary and wages, supervision, working with cooperation. Salmela-Aro and Nurmi's longitudinal study (2007) showed that

high self-esteem in students predicted their wages, job-satisfaction, employment status, and the level of burnout ten years later.

In addition, Kuster and colleagues (2013) in their study analyzed the data taken from two independent longitudinal samples conducted during 8 months (five waves) and 2 years (three waves). They found that across both samples, high self-esteem predicted better prospective job satisfaction and job success. The reverse links between the variables were non-significant.

The conflicting evidence

Taken together, the many studies reviewed above bear the theoretical and empirical evidence to positive role of self-esteem in subjective and objective career success. However, some research suggests contrasting results on the link of high self-esteem and career outcomes. For instance, Baumeister with colleagues (2003) conducted the analysis of a significant number of articles extracted from initial pool of 15,059 papers on self-esteem which examined the impact of self-esteem on personal and social development. Surprisingly, they found that most cross-sectional and longitudinal studies found only weak positive effects of self-esteem on academic achievement, job and task performance across multiple studies. More interesting, some research documented even reverse relationship between high self-esteem and performance outcomes. High self-esteem and self-efficacy were reported to be connected with overconfident risky behaviors (Elmer, 2001, as cited in Baumeister et al., 2003, p.37; Taylor & Brown, 1997) and poor decision-making outcomes (Stone, 1994; Vancouver et al., 2002). For instance, Stone's study showed that high expectations concerning performance produced more overconfidence in choice accuracy and led to less effort and lower performance comparing with mildly or strongly negative expectations. Similarly, high levels of self-efficacy led to overestimation of one's abilities and reduction of time and effort for learning and planning, as well as to producing logic errors (Vancouver &

Kendal, 2006). In addition, in some experimental studies self-enhancement resulted in low effort and less attention that was also harmful for performance (Kim et al., 2010). Similarly, Whyte and Saks research (2007) revealed a link between high self-efficacy and persistence in wrong strategies. In their laboratory study, high self-efficacy geologists persisted longer on finding oil investing more resources in a failing venture than geologists with low self-efficacy.

Finally, Baumeister with colleagues (2003), having summarized a wide range of research findings in their analytical review, contended that at very high levels, self-esteem can be costly to performance, interpersonal relationships, and well-being. In regard to career outcomes, it may mean that extremely high self-esteem may hamper career advancement due to inefficient interpersonal communication with their coworkers and supervisors, whose support is commonly considered a strong predictor of career success (Birel & Waters, 2007; Ensher et al., 2001). Also, people, who are viewing themselves as exceptional, may form a dismissive attitude to their current or potential jobs that could become detrimental to their career success (Clayson, 2005)

Summing up, it becomes evident that the results showing positive effect of high self-esteem on performance and career outcomes are mixed and that there is evidence that higher self-esteem is not always better for consequences at work. Very high self-esteem may lead to overconfidence, risky behaviors, poor decision-making outcomes and harm relationships with colleagues. However, to the best of our knowledge, there are no available research on adverse or non-linear effect of high self-esteem on career satisfaction or on income. Of note, the inverted U-shape associations of various positive factors with individual's well-being have become of a particular interest for many researchers in recent decade.

Inverted U relationship studies

A substantial number of recent studies has been devoted to exploration of non-linear relationship between different psychological variables (Grant & Schwartz, 2011; Rose& Stavrova, 2019; Stavrova & Ren, 2020; Stouten et al, 2013); many of those have shown that inverted U-shape phenomenon is broadly disseminated in psychology (Grant & Swartz, 2011, p.71). This branch of research is grounded in Aristotle's concept of the virtues mean (Aristotle, 1999), according to which, the right amount of a good thing lies between two extremes, and effect of positive phenomena turns to negative at a certain point. For example, Rose's and Stavrova's study (2019), based on the data of more than five thousand people observed during 10 years, found an inverted U-shaped relationship between life satisfaction and reemployment likelihood. Likewise, Brown and Marshal (2001) revealed inverted U-shaped association between optimism and performance with the highest performance at the moderate level of optimism; very high-level optimism decreased planning and resulted in risk underestimation.

Consistent with this concept, Grant & Swartz' (2011) analysis of a number of studies showed that the relationship between success and many positive traits like conscientiousness, optimism, and self-efficacy appeared to take an inverted U-shape: moderate levels of these positive traits led to better outcomes than low or very high levels of these traits. In particular, they proposed that relationship between self-esteem and performance may be non-monotonic: at high levels self-esteem may have negative effect on performance, moderate level of self-esteem can provide better preparing for challenging tasks and lead to better performance than low or extremely high levels of self-esteem. However, this assumption has not been empirically tested.

Also, U-shaped effect of self-esteem on extrinsic or intrinsic career success has not been investigated yet. The studies connecting self-esteem to career success were aimed at revealing linear relations between them. The performed review of the research on

associations of self-esteem with work and career related outcomes, allows us to formulate hypotheses on non-monotonic relationship of self-esteem with extrinsic career success (e.g., income) and intrinsic career success (e.g., job satisfaction). We propose that low self-esteem people have the lowest career success because low trust in themselves (Zheng et al., 2020), fear of failure (Elliot & Sheldon, 1997), and low initiative (Baumeister, 2003) prevent them from setting large personal career advancement goals (Heimpel et al., 2006) and in turn restrict their achievements and recognition (Elliot & Church, 2003), leads to low satisfaction with their jobs (Roberson, 1990). Moderate and slightly high self-esteem relates to the highest levels of income and job satisfaction because it is beneficial for adequate goal setting, more accurate evaluation of the situations, greater flexibility while acting in challenging situations, and healthy communication at work place. Very high level of self-esteem relates to lower levels of income and job satisfaction since it can promote overconfidence which, in turn, may lead to taking highly risky choices for acquiring higher pay and status. That is why they are less satisfied with their careers than people with moderate or slightly high level of self-esteem. Also, feeling personal grandiosity and demonstrating dominance in personal relationships with colleagues may lead individuals with extremely high self-esteem to disruption of healthy communication at work place (Baumeister et al., 2003; Heimpel et al., 2006) and thus impair job outcomes (Pincus, 1986; Otto et al., 2019). In addition, high self-esteem people having higher aspirations and overestimating their abilities may think that they get less than they deserve.

The present study

Based on the analysis of aforementioned research linking self-esteem and career outcomes and Aristotle's idea, stating that a certain characteristic is favorable for positive life outcomes until it reaches some level at which it becomes harmful, we expect that a moderate level of self-esteem is best for career success, namely, for income and job satisfaction.

Hypothesis 1: The effect of self-esteem on income is non-linear, with moderate levels of self-esteem leading to highest incomes.

Hypothesis 2: The effect of self-esteem on job satisfaction is non-linear, with moderate levels of self-esteem leading to highest job-satisfaction.

We assume that age and gender may affect the dynamics of relationships between self-esteem and career success reflected on the inverted U-shaped curve; therefore, we will use gender and age as control variables. These variables have been chosen due to the following reasons. First, it is important to control for age because it influences career success relating for both promotions and income. (Van der Heijden et al., 2009). It is known that in the Netherlands like in many other countries, wages increase with age. Additionally, older people usually have a higher hierarchical position in establishments due to their experience and expertise comparing with younger workers. That makes it more difficult for older employees to make a decision to change their careers since they have more to lose. That is why they may stay at their workplace even if they are not satisfied with their jobs and think that their job doesn't fit their self-esteem (Kuijpers et al., 2006). This is a way in which age is likely to affect external and internal career success Also, gender relates to career success since very often women receive lower salaries and less promotion than men (Abele & Spurk, 2009; Frear et al., 2018; Igbaria & Chidambaram, 1997). Notably, men and women differ in their career related values. For instance, males generally more often prioritize career over family than females (Block et al., 2018), females, in contrast to males, value altruism rather than status in careers (Weisgram, Bigler, & Liben, 2010).

Thus, in our research we will explore a U-shape relationship between career success (intrinsic and extrinsic) and self-esteem which could be helpful for answering the research question stated above: What is the optimum level of self-esteem for success in professional life?

Method

Procedure and participants

This is a correlational study with the data taken from the Longitudinal Internet Studies for the Social Sciences (LISS panel). LISS panel is a large-scale Dutch national survey starting in 2008 and containing ten core studies (modules) dealing with different issues, ranging from economic situation to personality. LISS Core Study Survey was administered to 8722 panel participants (49,2% males and 50,8% females) aged from 15 to 94 years in 2008, who afterwards completed the measures annually. Each module consisted of questionnaires, aimed at acquiring a broad range of social core information about the panel members. For example, Personality module included 12 psychological measures of personality like 49-item Big Five questionnaire (IPIP, Goldberg), 134-item Rokeach value survey, 10-item Rosenberg self-esteem scale, etc. The present study was based on the datasets from three modules—Work and Schooling (that included measures job satisfaction), Personality (that included self-esteem measure) and Background Variables (that contained information on participants' age gender and personal gross monthly income in Euros). Data from the waves 1-8 and 10-11 (years 2008-2015 and 2017-2018) were used in the present research. The wave 9 was not included in the analysis because the module "Work and schooling" was not utilized in the Survey. The number of the participants taking part in the survey in each wave is shown in the Table A in Appendix A.

Measures

Self-esteem. To measure self-esteem Rosenberg Self-Esteem Scale (RSE, Rosenberg, 1979) form was employed in the study. The scale contained 10 items (Cronbach's α vary between .90 and .91, depending on the wave). Sample question is "On the whole, I'm satisfied with myself". Each item was rated on a 7-point Likert scale ranging from 1(disagree strongly) to 7 (agree strongly).

Measures of career success. Two components of career success – job satisfaction and income were considered in the study. *Satisfaction with job* was measured by respondent's answer to the question "How satisfied are you in your job?" rated on 11-point Likert scale (from 0 = *not at all satisfied* to10 = *fully satisfied*). *Income* was measured in the survey with the question "What is your personal gross monthly income in numbers?"

Demographic and control variables. Information on gender (1 = *male*, 2 = *female*) and age (*in years*) was used as controls in the study.

Statistical Analyses

First, we calculated zero-order correlations between all variables under analysis: self-esteem, job satisfaction, income, gender, and age.

Next, to test hypothesis 1 we investigated the non-linear effect of X (Self-esteem) on Y (Income) using quadratic regression. We computed lagged values of X (Self-esteem) and Y (Income). After that, we centered X (Self-esteem) and calculated its quadratic term. Thereafter, we used multilevel regression with waves (t) nested within participants. The models included random intercepts at the level of participants.

We made use of the longitudinal data structure by estimating whether X (Self-esteem) at t-1 and X (Self-esteem)-squared at t-1 predicted Y (Income) at t while controlling for Y (Income) at t-1.We controlled for lagged Y (Income) in order to avoid unwanted biases and auto-correlational effects which may weaken the results (Wilkins, 2018) since we expected that the current level of the Y was heavily determined by its past level.

In **Model 1**, Y (Job-satisfaction) at t was regressed on X (Self-esteem) at t-1, X (Self-esteem)-squared at t-1 and Y (Job-satisfaction) at t-1. We expected that the significance of the quadratic term will provide evidence of the non-linear pattern of the relationship between self-esteem and job satisfaction.

In **Model 2**, we added the control variables factors (gender and age) and saw whether the shape of the curve change.

To investigate hypothesis 2, we explored the non-linear effect of X (Self-esteem) on Y (Income) in the same way as while testing hypothesis 1. Following this, quadratic regression analysis was implemented in the same way as when testing Hypothesis 1.

In **Model 3**, we regressed Y (Income) at t on X (Self-esteem) at t-1, X (Self-esteem)-squared at t-1 and Y (Income) at t-1.

In **Model 4**, we included additional variables gender and age in regression analysis. Again, we expected that significance of the quadratic term would provide the evidence of the non-linear pattern.

Results

Descriptive statistics and zero-order correlations

Descriptive statistics, including means and standard deviations together with zero-order correlations among the variables included in analysis are shown in Table 1.

Table 1

Descriptive Statistics and Zero-Order Correlations

	M	*SD*	Gender	Age	Self-esteem	Job Satisfaction
Gender	1.51	.50	-			
Age	48.96	17.56	-.068**	-		
Self-esteem	71.57	12.27	-.098**	.144**	-	
Job Satisfaction	3.14	.65	.001	.107**	.235**	-
Monthly income	1751.47	4098.69	-.082**	.078**	.032**	.125**

Note. N ranges between 23.682 and 122.378. Correlations were computed using average values across the waves.
Gender: 1=male, 2=female.
** Correlation is significant at the .001 level (2-tailed).

Results indicate that participants had high levels of self-esteem (*M* = 71.57, *SD* = 12.27) and medium levels of job satisfaction (*M* = 3.14, *SD* = .65).

The independent sample t-tests indicated significant difference between male and female respondents, favoring males, on self-esteem and income but not on job satisfaction (Tables B1 and B2 in Appendix B).

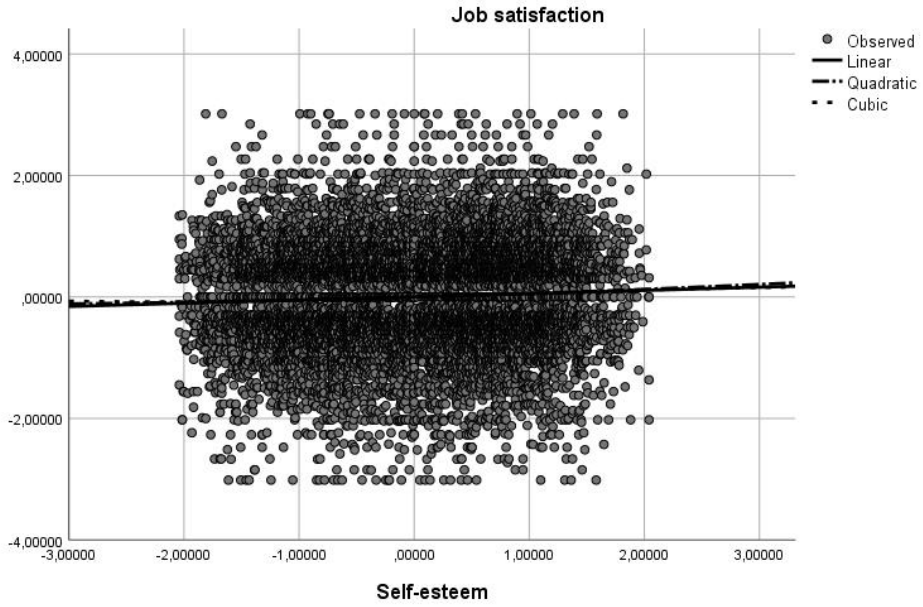
The intercorrelations among self-esteem, job satisfaction, gender and age were investigated using Pearson product–moment correlation coefficients indicated significant but weak associations were found for self-esteem and job satisfaction (r=.235, p<.001), and for self-esteem and income (r=.032, p<.001). In addition, significant but weak positive relationships for age with self-esteem, job satisfaction and income were found. Also, monthly income significantly correlated with job satisfaction. However, this association was also very weak (r=.125, p<.01). Age positively correlated with self-esteem, income, and job satisfaction (r=.144, p<.001; r=.078, p<.01 and r=.107, p<.01 respectively).

Next, in Model 1, we regressed job satisfaction on linear and quadratic terms of self-esteem and income in a previous year. Multilevel regression results are presented in the Table 2 and in the Figure1. The results indicate that the linear term was significant (b=.053*, p<.001). The liner term was robust against adding gender and age variables.

Critically, there was no evidence for the quadratic term. In addition, the model showed that job satisfaction in previous year negatively predicted job satisfaction in current period of time. Controlling for age and gender did not provide an evidence of the significant effect of these demographical variables on the link between self-esteem and job satisfaction (Table 2, Model 2).

Figure 1

Self-esteem (time t-1) and job satisfaction (time t)



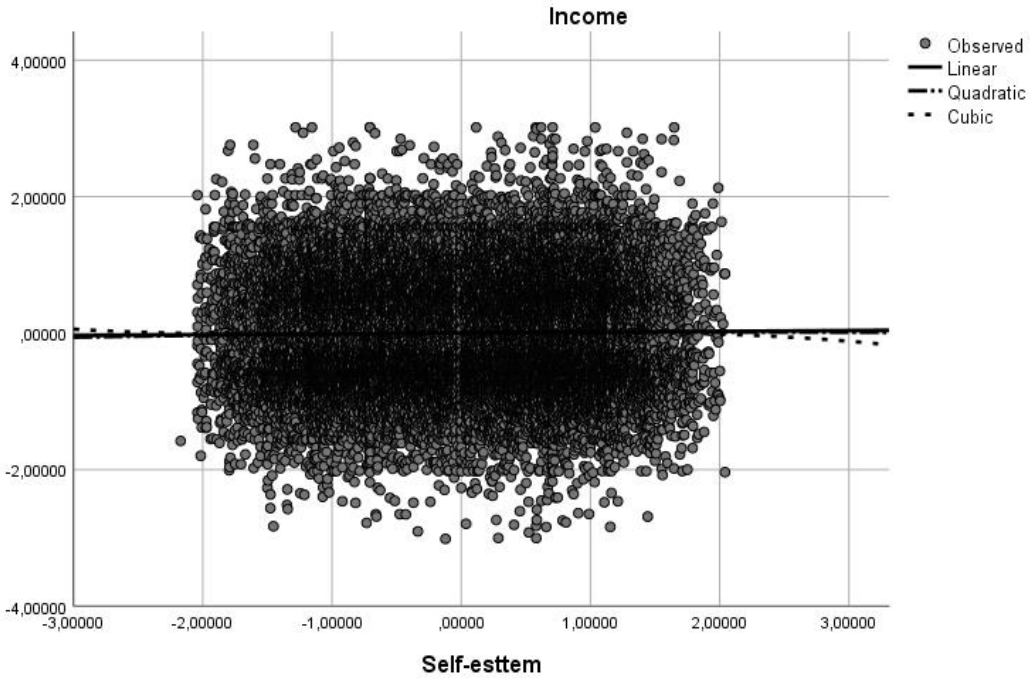
Thus, our results did not confirm the Hypothesis 1, which suggested the non-linear effect of self-esteem on job satisfaction, with moderate levels of self-esteem leading to highest job-satisfaction.

Next, we tested the Model 3, in which we regressed income on linear and quadratic terms of self-esteem and on income in previous year. According to the Table 2 and the Figure 2, showing the shape of the effect curves, contrary to expectations, neither the linear coefficient, nor the quadratic coefficient was significant. As such, there is no relationship between self-esteem and income.

Controlling for age and gender did not provide an evidence of the significant effect of these demographical variables on the link between self-esteem and income (Table 2, Model 4).

Figure 2

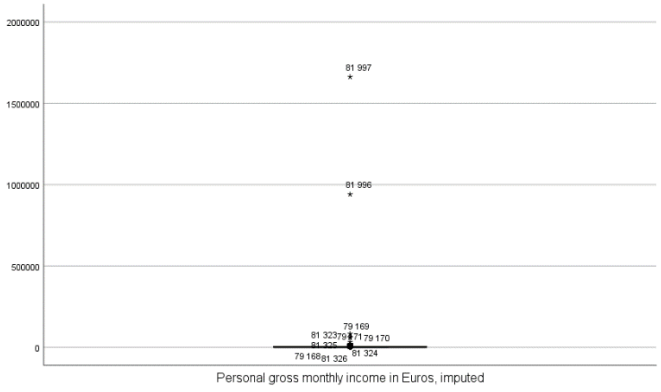
Self-esteem (t-1) and Income (t)



Receiving no significant results, we looked deeper into our data. The dataset contained some significant outliers (Figure 3).

Figure 3

95% confidence interval of mean (before dealing with outliers)

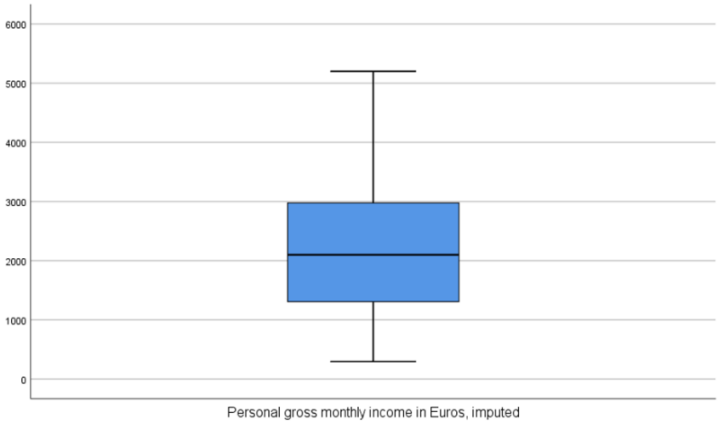


The outliers were detected by boxplot and 5% trimmed mean. Since the outliers were influential - high leverage and high residual we removed them. Deletion of 8820 outliers with the values higher than 5202,23 resulted in a sample of 73710 observations with the mean of 2219,59 and standard deviation 1116,48 (Figure 4). Next, we rerun the regression; the results

are presented in Table 3 (Model 5 and Model 6). Still, the positive skewness was observed in the distribution.

Figure 4

95% confidence interval of mean (after dealing with outliers)



Next, to tackle the skewness we made natural ln transformation to correct to the distribution. Log-transformation corrected the distribution (Figure 5) but not significantly improved the model fit. The results are shown in Table 3 (Model 7 and Model 8). According to these results the linear relationship between self-esteem and income are marginally significant (b=.009; p=.079). Quadratic model didn't fit the data like in all the other models. Thus, Hypothesis 2 was not supported.

Figure 5

Histogram of distribution

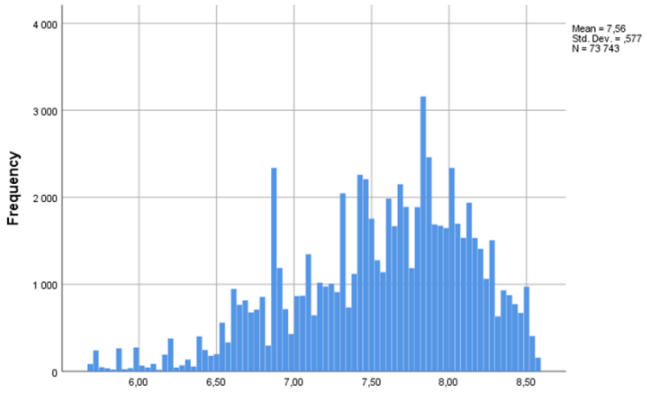


Table 2

Multilevel Regression Results

Predictors	Dependent Variable: Job Satisfaction				Dependent Variable: Monthly income			
	Model 1		Model 2		Model 3		Model 4	
	b	95% CI	*b*	95% CI	*b*	95% CI	*b*	95% CI
Fixed effects								
Job_Satisfaction (zlagged)	-.050*	[-.068, -.032]	-.046*	[-.064, -.028]	-	-	-	-
Self-Esteem (zlagged)	.057*	[.038, .076]	.056*	[.037, .075]	.007	[-.002, .016]	.007	[-.003, .018]
Self-Esteem, squared	.002	[-.017, .023]	.012	[-.019, .022]	-.007	[-.019, .007]	-.006	[-.018, .005]
Income (zlagged)	-	-	-	-	.496*	[.486, .506]	.492*	[.481, .502]
Gender	-	-	-.017	[-.050, .016]	-	-	-.011	[-.031, .008]
Age	-	-	-.001	[-.002, .001]	-	-	-.001*	[-.001, .000]

Note. Gender: 1=male, 2=female. This parameter is set to zero because it is redundant.
* $p<.001$

Table 3

Multilevel Regression Results

Predictors	Dependent Variable: Monthly income				Dependent Variable: Monthly income (ln-transform)			
	Model 5		Model 6		Model 7		Model 8	
	b	95% CI	*b*	95% CI	*b*	95% CI	*b*	95% CI
Fixed effects								
Income	.485*	[.474, .496]	.482*	[.471, .493]	.475*	[.464, .485]	.472*	[.462, .483]
(zlagged)								
Self-Esteem (zlagged)	.009^{T}	[-.001, .021]	.009^{T}	[-.001, .020]	.008	[-.002, .003]	.008	[-.002, .020]
Self-Esteem (squared)	-.008	[-.020, .003]	-.006	[-.018, .006]	-.008	[-.020, .003]	-.007	[-.019, .005]
Gender	-	-	-.072*	[-.092, .052]	-	-	-.001*	[-.043, .024]
Age	-	-	-.001*	[-.003, .002]	-	-	.041*	[-.002, .001]

Note. Gender: 1=male, 2=female. This parameter is set to zero because it is redundant.
* $p<.001$, ^{T} $p<.10$

Discussion

As reviewed in the introduction, a substantial number of studies examined the linear relationship between self-esteem and career success. Despite the growing interest of researchers to non-monotonic effects of many positive traits on individual's life and work, the inverted U-shape effect of self-esteem on career has not yet been investigated. Therefore, in this research, we examined the non-monotonic relations between self-esteem and career success. The strength of the current study should be its longitudinal character and a large sample-size. Data were taken from a longitudinal panel study with a large sample, including eleven assessments over 12-year period. The total number of the participants taking part in the survey from 2008 until 2018 was about12,000. The final sample of this study consisted of 3039 respondents. However, Personality Block of the survey had a lot of missing values in 2015 and 2019, when only 504 and 784 respondents respectively filled out the Self-esteem questionnaire. Nonetheless, this number of participants was good enough for the current study.

We were looking for inverted U-shaped relationship between self-esteem and career success. More specifically, we predicted that the optimal level of self-esteem for job satisfaction and income will not be the highest level of self-esteem, but a moderately high level of self-esteem. Moreover, we expected that age and gender may affect the dynamics of relationships between self-esteem and career success reflected on the inverted U-shaped curve.

To find out if these expectations were correct, the data were subjected to Linear Multilevel Regression Modelling. Job Satisfaction and Income were included in the analysis as dependent variables, Self-Esteem was included as independent variable. We used multilevel regression with waves nested within participants. We tested four models: Models 1 and 2 explored how self-esteem in previous year predicted job satisfaction and income

current self-esteem controlling for job satisfaction in the previous year. In Models 3 and 4 the control variables – age and gender– were added to explore their influence on the shape of the curve.

Contrary to our expectations, the obtained results showed no inverted U-shaped relationship between self-concept and job satisfaction (rejecting *Hypothesis 1)* and between self-concept and income (rejecting *Hypothesis 2*). Instead, our longitudinal analysis suggested that self-esteem affects job satisfaction and income in a linear way: The higher self-esteem an individual possesses the more money he or she earns and the more satisfied he or she is with his job. Gender and age did not affect the dynamics of relationships between self-esteem and career success. Moreover, in our research neither linear nor quadratic relationship between self-esteem and income was established. In addition, we revealed the negative effect of lagged job satisfaction on current job satisfaction. Next, we will look our findings in more detail and look for explanation of our results.

First, in our study we were looking for quadratic relationship between self-esteem and job satisfaction. Against expectations, our findings do not support a U-shaped pattern of this relationship. Our results have shown that the higher individuals' self-esteems are the higher is their satisfaction with their job. The very high self-esteem did not appear to be detrimental for subjective career success. The explanation of the obtained results may refer to greater initiative of high self-esteem people and their optimism about future (Crocker & Park, 2004) which lead them to career success. Even if they have problems at work related to overestimation of their abilities or feeling grandiosity, they more likely will confront and successfully tackle these problems at their current workplace or just change their job in accordance with their inflated believes about what they deserve (Niessen et al., 2016), raising by this their job satisfaction (Boswel et al., 2005). Notably, high self-esteem people usually have higher qualified professions and high-status jobs (Salmela-Aro & Nurmi, 2007; Kuster

et al., 2013); that provides them more options for finding a new job (Karasek, 1979). Changing jobs was found to predict prospective higher job satisfaction (Boswel et al., 2005). Moreover, in situations with multiple job changes, satisfaction levels rise with each subsequent job change (Boswel et al., 2005).

Interestingly, one more effect has been obtained for this model - the negative effect of lagged job satisfaction on current job satisfaction. Possibly, dissatisfaction with the job in previous year motivated individuals to put more effort into their work or to craft their job in more efficient and pleasant way; this resulted in more pleasant work-related experiences and greater job satisfaction next year. The results of this study indicate that the use of job crafting strategies to change job demands and job resources is related to higher work engagement and flourishing (Demerouti et al., 2015, p.22). Hakanen et al. (2018) also found a link from job dissatisfaction to job crafting. Also, job dissatisfaction increases the probability of quit and voluntarily job change (Kristensen & Westergård-Nielsen, 2004) resulting in greater job satisfaction next year (Boswel et al., 2005). The reverse relationship between job satisfaction at t and job satisfaction at t-1 is in line with the study (Boswel et al., 2005), revealing that honeymoon effect of changing jobs may be followed by a decline in job satisfaction next year. Another possible explanation of such relationship is that high satisfaction with job may be connected with low activation (Hakanen et al.; 2018) less involvement and challenges; this, in turn, makes the work boring and less satisfying (Abdolahi, et al., 2011). This speculation proposes a new hypothesis on the existence of inverted U-shape relationship between the level of demands at work and job satisfaction which could be tested in the next research. In addition, the honeymoon effect of changing jobs may be followed by a decline in job satisfaction next year (Boswel et al., 2005).

Next, no significant results were found both for linear and quadratic relationship between self-esteem and income. Dealing with outliers and correcting the distribution using

ln-transformation did not improve the model fit. According to the obtained results, self-esteem does not significantly predict income.

Comparison of Model 1 and Model 3 shows that documented the data fit the linear pattern of self-esteem-job satisfaction relationship and didn't fit the linear pattern of self-esteem-income relationship. This finding is partly consistent with the results of meta-analysis on predictors of objective and subjective career success received by Ng and colleagues (2005), suggesting that individual characteristics are more predictive for career satisfaction as compared to wages and promotion. The alternative explanation of incongruity of associations of intrinsic and extrinsic career success with self-esteem may relate to measurement issues: intrinsic success and self-esteem were assessed by subjective measures of Job Satisfaction and Rosenberg self-esteem scale respectively and were significantly associated by linear pattern, whereas income was assessed by objective amount of money received monthly and was not predicted by self-esteem.

Summing up, the results did not support the hypothesis of the study However, we gathered some important evidence on the role of self-esteem in intrinsic and extrinsic career success. These results could be taken as a starting point for future research. The analysis of the limitations of this research could help to outline future directions of the subsequent studies.

Limitations, future research, and practical implications

At first, this study has a limitation concerns the usage of the common method of data collection. In other words, self-esteem and job satisfaction were assessed in the same way, using self-report measures; that might lead to shared variance (Spector & Brannick, 2009). According to Siemsen and colleagues (2009), quadratic term can be critically flattened through common method variance, making it more difficult to detect (Siemsen et al., 2009, p. 456). Usually, to avoid or minimize potential common method bias, researchers have to use

different measures for different constructs, preferably, collecting dependent and independent variables from different sources Chang (et al., 2010). Certainly, self-esteem and job satisfaction can be collected only from one source - the person participating in the study. Nonetheless, implicit indirect measures like Name-Letter Test measure (Nuttin, 1985; Krizan & Suls, 2008) can be used in future studies along with questionnaires to avoid common method bias. Another issue is connected with the focus on objective data in our research: this study is based on self-reported variables: self-esteem, job satisfaction, and even income was reported by participants. Therefore, future research has to focus more on objective data by collecting information about extrinsic career success (e.g., income) based on objective sources rather than asking people about their income, which will help to obtain more reliable results.

In addition, this study has a limitation related to significant attrition (Waves 3,5, 8,and 11; see Appendix A) which can result in a selection bias and, thus, influence the findings. Volunteer bias also could cause threats to the validity of this study based on the panel data because the participants of the study may be different from the target population of the study.

Besides this, there are also some other suggestions for future research not linked to the limitations of this study. This study did not find out the evidence of the inverted U-shape relationships between self-esteem and career success. This finding is in line with the Baumeister's suggestion that there are "relatively few personal costs to self-esteem", however very high self-esteem can be detrimental for others (Baumeister et al., 2003, p.37). This can be further investigated in future research. The non-linear relationship of self -esteem with work-outcomes for the group and subordinates can be explored using design of the current study. Exploring these relationships in regard to leader's self-esteem could be of special interest.

Practical implication of the findings are as follows: the findings might be practically important for HR managers while hiring employees and using their working potential.

Conclusion

In conclusion, the current study did not the evidence of non-monotonic relationships between self-esteem and career success. Only linear relationship between self-esteem and job satisfaction was detected. This means that extremely high levels of self-esteem are not detrimental for individuals and their success. Future research aiming at exploring the factors that moderate the relationship of self-esteem and career success and the mechanisms that underlie the association between self-esteem and career success as well as exploring the relationship between individual's self-esteem and group success may have significant implications for predicting and optimizing performance of individuals and groups at the workplace.

References

Abdolahi, B., Damirchi, G. V., & Ganjeh, H. (2011). Surveying of job boredom proneness effect on job satisfaction and job involvement. *Interdisciplinary Journal of Contemporary Research in Business, 3*(3), 1332-1338.

Abele, A. E., & Spurk, D. (2009). The longitudinal impact of self-efficacy and career goals on objective and subjective career success. *Journal of Vocational Behavior, 74*(1), 53–62. https://doi.org/10.1016/j.jvb.2008.10.005

Alavi, H. R., & Askaripur, M. R. (2003). The relationship between self-esteem and job satisfaction of personnel in government organizations. *Public Personnel Management, 32*(4), 591-598. https://doi.org/10.1177/009102600303200409

Aristotle. (1999). *Nicomachean ethics (W. D. Ross, Trans.).* Kitchener, Ontario, Canada: Batoche Books.

Ataç, L.O., Dirik, D. & Tetik, H.T. (2018). Predicting career adaptability through self-esteem and social support: A research on young adults. *International Journal of Educational and Vocational Guidance 18*(1)**,** 45–61. https://doi.org/10.1007/s10775-017-9346-1

Audia, P. G., Locke, E. A., & Smith, K. G. (2000). *The Paradox of Success: An Archival and a Laboratory Study of Strategic Persistence Following Radical Environmental Change. Academy of Management Journal, 43(5), 837–853.* https://doi.org/10.5465/1556413

Baumeister, R.F., Heatherton, T. F., & Tice, D. M. (1993). When ego threats lead to self-regulation failure: Negative consequences of high self-esteem. *Journal of Personality and Social Psychology, 64*(1), 141-156.

Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does High Self-Esteem Cause Better Performance, Interpersonal Success, Happiness, or Healthier

Lifestyles? *Psychological Science in the Public Interest, 4*(1), 1–44. https://doi.org/10.1111/1529-1006.01431

Betz, N. E. (1994). Self-concept theory in career development and counseling. *The Career Development Quarterly, 43*(1), 32–42.

Birrell, S. & Waters, L. (2001). The role of mentoring and peer support in contributing to perceived progress towards small business success: A cross sectional study. *International Journal of Organizational Behaviour, 12*(1),33–48.

Block, K., Gonzalez, A. M., Schmader, T., & Baron, A. S. (2018). Early Gender Differences in Core Values Predict Anticipated Family Versus Career Orientation. *Psychological Science, 29*(9), 1540-1547. https://doi.org/10.1177/0956797618776942

Bonanno, G.A., Field, N.P., Kovacevic, A., & Kaltman, S. (2002). Self-enhancement as a buffer against extreme adversity: Civil war in Bosnia and traumatic loss in the United States. *Personality and Social Psychology Bulletin*, *28,* 184–196. https://doi.org/10.1177/0146167202282005

Boswell, W. R., Boudreau, J. W., & Tichy, J. (2005). The Relationship Between Employee Job Change and Job Satisfaction: The Honeymoon-Hangover Effect. *Journal of Applied Psychology, 90*(5), 882–892. https://doi.org/10.1037/0021-9010.90.5.882

Brown, J. D., & Marshall, M. A. (2001). Great expectations: Optimism and pessimism in achievement settings. In E. C. Chang (Ed.), *Optimism & pessimism: Implications for theory, research, and practice* (p. 239–255). American Psychological Association. https://doi.org/10.1037/10385-011

Cai, Z., Guan, Y., Li, H., Shi, W., Guo, K., Liu, Y., & Hua, H. (2015). Self-esteem and proactive personality as predictors of future work self and career adaptability: An examination of mediating and moderating processes. *Journal of Vocational Behavior, 86 (1),* 86–94.

Chang, SJ., van Witteloostuijn, A. & Eden, L. (2010). From the Editors: Common method variance in international business research. *Journal of International Buiness Studies, 41,* 178–184. https://doi.org/10.1057/jibs.2009.88

Chen, G., & Klimoski, R.J. (2003). The impact of expectations on newcomer performance in teams as mediated by work characteristics, social exchanges, and empowerment. *Academy of Management Journal, 46*(2), 591–607.

Cheng, H., & Furnham, A. (2003). Personality, self-esteem, and demographic predictions of happiness and depression. *Personality and Individual Differences, 34*(6), 921-942, https://doi.org/10.1016/S0191-8869(02)00078-8.

Clayson, D. E. (2005). Performance overconfidence: Metacognitive effects or misplaced student expectations? *Journal of marketing education,27*(2), 122-129. https://doi.org/10.1177/0273475304273525

Converse, P. D., Pathak, J., DePaul-Haddock, A. M., Gotlib, T., & Merbedone, M. (2012). Controlling your environment and yourself: Implications for career success. *Journal of Vocational Behavior, 80(1), 148–159.* https://doi.org/10.1016/j.jvb.2011.07.003

Crocker, J., & Park, L. E. (2004). The Costly Pursuit of Self-Esteem. *Psychological Bulletin, 130*(3), 392–414. https://doi.org/10.1037/0033-2909.130.3.392

Crook, R. H., Healy, C. C., & O'Shea, D. W. (1984). The linkage of work achievement to self-esteem, career maturity, and college achievement. *Journal of Vocational Behavior*, *25*(1), 70–79. https://doi.org/10.1016/0001-8791(84)90037-X

Diener, E., & Diener, M. (1995). Cross-cultural correlates of life satisfaction and self-esteem. *Journal of Personality and Social Psychology, 68*(4), 653-663. http://dx.doi.org/10.1037/0022-3514.68.4.65

Diener, E., Nickerson, C., Lucas, R.E. (2002). Dispositional Affect and Job Outcomes. *Social Indicators Research,* 59, 229–259. https://doi.org/10.1023/A:1019672513984

Dries, N., Pepermans, R., & Carlier, O. (2008). Career success: Constructing a multidimensional model. *Journal of Vocational Behavior, 73*(2), 254-267. https://doi.org/10.1016/j.jvb.2008.05.005

Donnellan, M. B., Trzesniewski, K. H., Robins, R. W., Moffitt, T. E., & Caspi, A. (2005). Low Self-Esteem Is Related to Aggression, Antisocial Behavior, and Delinquency. *Psychological Science, 16*(4), 328–335. https://doi.org/10.1111/j.0956-7976.2005.01535.x

Dutton, K. A., & Brown, J. D. (1997). Global self-esteem and specific self-views as determinants of people's reactions to success and failure. *Journal of Personality and Social Psychology, 73*(1), 139–148. https://doi.org/10.1037/0022-3514.73.1.139

Eden, D. (1992). Leadership and expectations: Pygmalion effects and other self-fulfilling prophecies in organizations. *Leadership Quarterly, 3*(4), 271–305. https://doi.org/10.1016/1048-9843(92)90018-B

Elliot, A. J., & Church, M. A. (2002). Client-articulated avoidance goals in the therapy context. *Journal of Consulting and Clinical Psychology, 49*(2), 243–254. https://doi.org/10.1037/0022-0167.49.2.243

Elliot, A.J., & Church, M.A. (2003). A Motivational Analysis of Defensive Pessimism and Self-Handicapping. *Journal of Personality, 71*(3), 369-396. https://doi.org/10.1111/1467-6494.7103005

Elliot, A., & Sheldon, K. (1997). Avoidance achievement motivation: A personal goals analysis. Journal of Personality and Social Psychology, 73, 171–185.

Emler, N. (2001). *Self-esteem: The costs and consequences of low self-worth*. York, England: York Publishing Services.

Ensher, E.A., Thomas, C. & Murphy, S.E. (2001). Comparison of Traditional, Step-Ahead, and Peer Mentoring on Protégés' Support, Satisfaction, and Perceptions of Career

Success: A Social Exchange Perspective. *Journal of Business and Psychology. 15***,** 419–438. https://doi.org/10.1023/A:1007870600459

Felson, R. B. (1984). The effect of self-appraisals of ability on academic performance. *Journal of Personality and Social Psychology, 47*, 944–952. https://doi.org/10.1037/0022-3514.47.5.944

Ferris, D. L., Lian, H., Brown, D. J., Pang, F. J., & Keeping, L. M. (2010). Self-esteem and job performance: the moderating role of self-esteem contingencies. *Personnel Psychology, 63*(3), 561-593. https://doi.org/10.1111/j.1744-6570.2010.01181.x

Frear, K. A., Paustian-Underdahl, S. C., Heggestad, E. D., & Walker, L. S. (2018). Gender and Career Success: A Typology and Analysis of Dual Paradigms. *Journal of Organizational Behavior*. https://doi.org/10.1002/job.2338

Grant, A. M., & Schwartz, B. (2011). Too Much of a Good Thing: The Challenge and Opportunity of the Inverted U. *Perspectives on Psychological Science, 6*(1), 61–76. https://doi.org/:10.1177/1745691610393523

Greenhaus, J. H., & Simon, W. E. (1976). Self-esteem, career salience, and the choice of an ideal occupation. *Journal of Vocational Behavior, 8*(1), 51–58. https://doi.org/10.1016/0001-8791(76)90033-6

Guan, Y., Deng, H., Sun, J., Wang, Y., Cai, Z., Ye, L., … Li, Y. (2013). Career adaptability, job search self-efficacy and outcomes: A three-wave investigation among Chinese university graduates. *Journal of Vocational Behavior*, *83*, 561-570. https://doi.org/10.1016/j.jvb.2013.09.003

Harter, S. (1998). The development of self-representations. In W. Damon & N. Eisenberg (Eds.), *Handbook of child psychology* (pp. 553–617). New York: Wiley.

Heimpel, S.A., Elliot, A.J., & Wood, J.V. (2006). Basic personality dispositions, self-esteem, and personal goals: An approach-avoidance analysis. *Journal of Personality, 74*(5), 1293–1320. https://doi.org/10.1111/j.1467-6494.2006.00410.x

Hirschi, A., Jaensch, VK. (2015). Narcissism and career success: Occupational self-efficacy and career engagement as mediators. *Personality and Individual Differences, 77*, 205-208, https://doi.org/10.1016/j.paid.2015.01.002.

Hogg, M.A., & Terry, D.J. (2000). Social identity and self-categorization processes in organizational contexts. *Academy of Management Review, 25*(1), 121–140. https://doi.org/10.5465/amr.2000.2791606

Huysse-Gaytandjieva, A., Groot, W., Pavlova, M., & Joling, C. (2015). Low self-esteem predicts future unemployment. *Journal of Applied Economics, 18*(2), 325–346. https://doi.org/10.1016/S1514-0326(15)30014-3t

Igbaria, M. & and Wormley, W.M., (1992). Organizational Experiences and Career Success of MIS Professionals and Managers: An Examination of Race Differences. *Management Information Systems Quarterly,16*(4), 507-529. https://doi.org/10.2307/249734

Igbaria, M. & Chidambaram, L. (1997). The impact of gender on career success of information systems professionals: A human-capital perspective. *Information Technology & People, 10*(1), 63-86. https://doi.org/10.1108/09593849710166165

Judge, T., & Bono, J. (2001). Relationship of Core Self-Evaluations Traits—Self-Esteem, Generalized Self-Efficacy, Locus of Control, and Emotional Stability—With Job Satisfaction and Job Performance: A Meta-Analysis. *The Journal of Applied Psychology. 86*(1), 80-92.

Judge, T. A., Erez, A., & Bono, J. E. (2003). The core self-evaluations scale: Development of a measure. *Personnel Psychology, 56*(2), 303–331.

https://doi.org/10.1111/j.1744-6570.2003.tb00152.x

Kammeyer-Mueller, J. D., Judge, T. A., & Piccolo, R. F. (2008). Self-Esteem and Extrinsic Career Success: Test of a Dynamic Model. *Applied Psychology, 57*(2), 204–224. https://doi.org/10.1111/j.1464-0597.2007.00300.x

Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly, 24*(2), 285-308. https://doi.org/10.2307/2392498

Kim, Y.-H., Chiu, C.-y., & Zou, Z. (2010). Know thyself: Misperceptions of actual performance undermine achievement motivation, future performance, and subjective well-being. *Journal of Personality and Social Psychology, 99*(3), 395–409. https://doi.org/10.1037/a0020555

Korman, A.K. (1976). Hypothesis of work behavior revisited and an extension. *Academy of Management Review, 1*(1), 50–63. https://doi.org/10.2307/257359

Krisan, Z. &Suls, J. (2008). Are implicit and explicit measures of self-esteem related? A meta-analysis for the Name-Letter Test. *Personality and Individual Differences, 44*(2), 521-531. https://doi.org/10.1016/j.paid.2007.09.017

Kristensen, N. & Westergard-Nielsen, N. C. (2004). Does Low Job Satisfaction Lead to Job Mobility? *IZA Discussion Papers, 1026.* Institute of Labor Economics (IZA). https://ideas.repec.org/p/iza/izadps/dp1026.html

Kuijpers, M. A. C. T., Schyns, B., & Scheerens, J. (2006). Career Competencies for Career Success. *The Career Development Quarterly, 55*(2), 168–178. https://doi.org/10.1002/j.2161-0045.2006.tb00011.x

Kuster, F., Orth, U., & Meier, L. L. (2013). High Self-Esteem Prospectively Predicts Better Work Conditions and Outcomes. *Social Psychological and Personality Science, 4*(6), 668–675. doi:10.1177/1948550613479806

Lau, V.P., & Shaffer, M.A. (1999). "Career success: the effects of personality". *Career Development International*, *4*(4), 225-231. https://doi.org/10.1108/13620439910270607

McNatt, D. B., & Judge, T. A. (2004). Boundary Conditions of the Galatea Effect: A Field Experiment and Constructive Replication. *Academy of Management Journal, 47*(4), 550–565. https://doi.org/10.2307/20159601

Miner, J.B. (1992). *Industrial-Organizational Psychology.* N.Y.: McGraw-Hill.

Niessen, C., Weseler, D., & Kostova, P. (2016). When and why do individuals craft their jobs? : The role of individual motivation and work characteristics for job crafting. *Human Relations, 69*(6), 1287-1313. https://doi.org/10.1177/0018726715610642

Ng, T. W. H., Eby, L. T., Sorensen, K. L., & Feldman, D. C. (2005). Predictors of objective and subjective career success: A meta-analysis. *Personnel Psychology, 58*(2), 367–408. https://doi.org/10.1111/ j.1744-6570.2005.00515.x

Nuttin, J. M. Jr., (1985). Narcissism beyond Gestalt and awareness: The name letter effect. European *Journal of Social Psychology, 15*(3), 353–361. https://doi.org/10.1002/ejsp.2420150309

Öncel, L. (2014). Career Adapt-Abilities Scale: Convergent validity of subscale scores. *Journal of Vocational Behavior, 85(1), 13–17.* https://doi.org/10.1016/j.jvb.2014.03.006

Orth, U., Robins, R. W., & Widaman, K. F. (2012). Life-span development of self-esteem and its effects on important life outcomes. *Journal of Personality and Social Psychology,102*(6), 1271–1288. https://doi.org/10.1037/a0025558

Otto, K., Sobiraj, S., Schladitz, S., Vásquez, M.E.G., Roe, R., Mabunda, B.M. (2019). Do Social Skills Shape Career Success in the Psychology Profession? A Mixed-Method

Approach**.** *Zeitschrift für Arbeits- und Organisations psychologie A&O, 63*, 88-99. https://doi.org/10.1026/0932-4089/a000293

Pincus, J. D. (1986). Communication Satisfaction, Job Satisfaction, and Job Performance. *Human Communication Research, 12*(3), 395–419. https://doi.org/10.1111/j.1468-2958.1986.tb00084.x

Pouyaud, J., Vignoli, E., Dosnon, O., & Lallemand, N. (2012). Career adapt-abilities scale-France form: Psychometric properties and relationships to anxiety and motivation. *Journal of Vocational Behavior, 80*(3), 692–697. https://doi.org/10.1016/j.jvb.2012.01.021

Roberson, L. (1990). Prediction of job satisfaction from characteristics of personal work goals. *Journal of Organizational Behavior, 11*(1), 29–41. https://doi.org/10.1002/job.4030110106

Rose, D., Stavrova, O. (2019). Does life satisfaction predict reemployment? Evidence form German panel data. *Journal of Economic Psychology***,** 72, 1-11. https://doi.org/10.1016/j.joep.2018.12.008

Rosenberg, M. (1965). *Society and the Adolescent Self-Image*. Princeton: Princeton University Press.

Rossier, J., Zecca, G., Stauffer, S. D., Maggiori, C., & Dauvalder, J. P. (2012). Career adapt-abilities scale in a French-speaking swiss sample: Psychometric properties and relationships to personality and work engagement. *Journal of Vocational Behavior, 80*, 734–743. https://doi.org /10.1016/j.jvb.2012.01.004

Rudolph, C. W., Lavigne, K. N., & Zacher, H. (2017). Career adaptability: A meta-analysis of relationships with measures of adaptivity, adapting responses, and adaptation results. *Journal of Vocational Behavior, 98, 17–34.* https://doi.org/10.1016/j.jvb.2016.09.002

Salmela-Aro, K., & Nurmi, J.-E. (2007). Self-esteem during university studies predicts career characteristics 10 years later. *Journal of Vocational Behavior, 70*(3), 463–477. https://doi.org/10.1016/j.jvb.2007

Seibert, S. E., Crant, J. M., & Kraimer, M. L. (1999).Proactive Personality and Career Success. *Journal of Applied Psychology, 84*(3), 416-427.

Siemsen, E., Roth, A., & Oliveira, P. (2009). Common method bias in regression models with linear, quadratic, and interaction effects. *Organizational Research Methods, 13*(3), 456–476. https://doi.org/10.1177/1094428109351241

Spector, P.E. , & Brannick, M.T. (2009). Common method variance or measurement bias? The problem and possible solutions. In D. Buchanan & A. Bryman (Eds.), *Handbook of organizational research methods* (Vol. 10, pp. 346-362). London, UK: Sage.

Stavrova, O., & Ehlebracht, D. (2016). Cynical beliefs about human nature and income: Longitudinal and cross-cultural analyses. *Journal of Personality and Social Psychology, 110*(1), 116–132. https://doi.org/10.1037/pspp0000050

Stavrova, O., & Ren, D. (2020). Is more always better? Examining the Nonlinear Association of Social Contact Frequency with Physical Health and Longevity. *Social Psychological and Personality Science, 194855062096158.* https://doi.org/10.1177/1948550620961589

Stone, D. N. (1994). Overconfidence in initial self-efficacy judgments — effects on decision-processes and performance. *Organizational Behavior and Human Decision Processes, 59*(3), 452-474. https://doi.org/10.1006/obhd.1994.1069

Stouten, J., van Dijke, M., Mayer, D. M., De Cremer, D., & Euwema, M. C. (2013). Can a leader be seen as too ethical? The curvilinear effects of ethical leadership. *The Leadership Quarterly, 24*(5), 680–695. https://doi.org/10.1016/j.leaqua.2013.05.002

Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behavior, 16*(3), 282–298. https://doi.org/10.1016/0001-8791(80)90056-1

Swann, W. B., Jr., Griffin, J. J., Predmore, S. C., & Gaines, B. (1987). The cognitive-affective crossfire: When self-consistency confronts self-enhancement. *Journal of Personality and Social Psychology, 52* (3), 881–889.

Tajfel, H., Billig, M. G., & Bundy, R. P. (1971). Social categorization and intergroup behavior. *European Journal of Social Psychology*, *1*(2), 149–178. https://doi.org/10.1002/ejsp.2420010202

Taylor, Sh. E., Brown, J. D. (1998). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin, 103*(2), 193-210.

Trzesniewski, K. H., Donnellan, M. B., & Robins, R. W. (2003). Stability of self-esteem across the life span. *Journal of Personality and Social Psychology*, *84*(1), 205–220. https://doi.org/10.1037/0022-3514.84.1.205

Van der Heijden, B. I. J. M., de Lange, A. H., Demerouti, E., & Van der Heijde, C. M. (2009). Age effects on the employability–career success relationship. *Journal of Vocational Behavior, 74*(2), 156-164. https://doi.org/10.1016/j.jvb.2008.12.009.

Vancouver, J. B., & Kendall, L. N. (2006). When self-efficacy negatively relates to motivation and performance in a learning context. *Journal of Applied Psychology*, *91*(5), 1146–1153. https://doi.org/10.1037/0021-9010.91.5.1146

Vancouver, J. B., Thompson, C. M., Tischner, E. C., & Putka, D. J. (2002). Two studies examining the negative effect of self-efficacy on performance. *Journal of Applied Psychology*, *87*(3), 506–516. https://doi.org/10.1037/0021-9010.87.3.506

Vygotsky, L.S. (1978). *Mind in society* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Cambridge, MA: Harvard University Press.

Waddell, G. R. (2006). Labor-market consequences of poor attitude and low self-esteem in youth. *Economic Inquiry, 44*(1), 69 –97. https://doi.org/10.1093/ei/cbj005

Weisgram, E. S., Bigler, R. S., & Liben, L. S. (2010). Gender, values, and occupational interests among children, adolescents, and adults. *Child Development, 81(*3), 778–796. https://doi.org/10.1111/j.1467-8624.2010.01433.x

Wilkins, A.S. (2018). To lag or not to lag?: Re-evaluating the use of lagged dependent variables in regression analysis. *Political Science Research and Methods,6 (2),*393 – 411. https://doi.org/10.1017/psrm.2017.4

Wood, J. V., Heimpel, S. A., Newby-Clark, I. R., & Ross, M. (2005). Snatching Defeat From the Jaws of Victory: Self-Esteem Differences in the Experience and Anticipation of Success. *Journal of Personality and Social Psychology*, *89*(5), 764–780. https://doi.org/10.1037/0022-3514.89.5.764

Whyte, G., & Saks, A. M. (2007). The Effects of Self-Efficacy on Behavior in Escalation Situations. *Human Performance*, *20*(1), 23–42. https://doi.org/10.1080/08959280709336927

Yudofsky, S. C. (2005). *Fatal Flaws: Navigating Destructive Relationships with People with Disorders of Personality and Character*. Washington, DC: American Psychiatric Publishing, Inc.

Zafar, N., Mubashar, T., Tariq, Sh., Masood, S., Kazmi, F., & Zahid, A. (2014). Self-Esteem and Job Satisfaction of Teachers in Public and Private Schools in Pakistan. *Pakistan Journal of Social and Clinical Psychology,12* (1), 46-50.

Zheng, L. R., Atherton, O. E., Trzesniewski, K., & Robins, R. W. (2020). Are Self-Esteem and Academic Achievement Reciprocally Related? Findings from a Longitudinal Study of Mexican-Origin Youth. *Journal of Personality.* doi:10.1111/jopy.12550

Appendix A

Table A

Number of the participants per variable across the waves

Wave	Year	Modules				
		Background information			Work and schooling	Personality
		Gender	Age	Income	Job Satisfaction	Self-esteem
1	2008	12235	6935	11646	6383	6743
2	2009	13286	5692	12611	3986	5606
3	2010	11281	6354	10707	4114	1363
4	2011	11500	5354	10871	3346	5274
5	2012	10409	6003	9814	3528	1459
6	2013	9633	5457	9083	3023	5050
7	2014	11893	6563	11184	3779	6504
8	2015	10687	6232	10020	3474	504
10	2017	11624	5919	10862	3172	6030
11	2018	10276	5671	9613	3039	784

Appendix B

Table B1

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Personal gross monthly income in Euros, imputed	Male	51805	2146.61	1994.923	8.765
	Female	53888	1195.73	1294.972	5.578
Self	Male	17131	72.8527	11.32500	.08653
	Female	20021	70.4455	12.92088	.09132
Everything considered, I am satisfied with my job.	Male	17311	3.14	.647	.005
	Female	18679	3.14	.664	.005

Table B2

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Income	Equal variances assumed	6357.621	.000	92.261	105691	.000	950.882	10.306
	Equal variances not assumed			91.524	88339.303	.000	950.882	10.389
Self	Equal variances assumed	404.655	.000	18.41	37150	.000	2.40719	,12709
	Equal variances not assumed			19.135	37128.557	.000	2.40719	,12580
Job satisfaction.	Equal variances assumed	8.528	.003	-.227	35988	.820	-.002	.007
	Equal variances not assumed			-.227	35898.993	.820	-.002	.007