

THE ROLE OF TERTIARY EDUCATION IN THE CASE OF JOB SATISFACTION IN THE NOVÉ ZÁMKY DISTRICT

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Abstract

There is a general perception that people after tertiary education can be more satisfied with their jobs. This perception can rightly arise the question, whether people with higher educational attainment are more satisfied with their current jobs? The employees' job satisfaction is pivotal for them and the businesses either. In the last year and a half, the life of the people has completely changed. The unknown COVID-19 has put enormous pressure on people's daily habits. A myriad of factors has influenced jobs to become vulnerable. Not only did the virus change the circumstances of working, but it also did change job satisfaction. The paper investigates whether there is a positive monotonous trend between respondents' educational attainment and job satisfaction. A rank-based nonparametric Jonckheere-Terpstra test was used to analyse the formulated hypothesis. The representative study has taken place in the Nové Zámky district in Western Slovakia at the end of 2020. After a statistically significant Jonckheere-Terpstra test, the value of Kendall's tau-b was also used to analyse whether the trend is either positive or negative. Thanks to the results, it can be concluded that there is a statistically significant increasing monotonic trend between the analysed variables.

Key words: job satisfaction, tertiary education, work environment, COVID-19, performance

JEL Code: J28, O15, J81

Introduction

Every company or institution has a strong interest in employing productive and responsible employees who are willing to work effectively and with a great moral. There are several ways to encourage an employee to perform better, not only to feel satisfaction towards the job but also to benefit the employer. Nevertheless, it is a complex and hard process. From a managerial point of view, somewhat it's also their responsibility to significantly contribute to the employees' job satisfaction. Workplace satisfaction of myriad workers can be increased tangibly with some perks, such as a company car, mobile phone, or even some extra money or something extra advantage given because of good performance. However, it is essential to

mention that budget available for the companies is finite, and sometimes they have to curb the spending. In this sense, they not always can afford to give some extra advantages to employees. Apart from the perks, some psychological factors can also have a significant influence on the analysed subject. We hold the view that it is vital to properly motivate the employees as they can be more satisfied with their current workplace when they gain recognition for their work. The question can legitimately arise whether the employees can influence their satisfaction and, if yes, then how. Moreover, a myriad of factors exists that can contribute to a higher level of satisfaction, and theoretically, educational level is one of those. According to Minárová's (2016), research, which was conducted in the public service the average level of job satisfaction can increase simultaneously with a higher degree of educational attainment. The least satisfied are those who finished secondary school, and the most satisfied are those respondents who have a third-level higher education. There is a large number of studies that examine job satisfaction from different aspects, but only a limited amount of them analyse the effect of tertiary education on job satisfaction, especially in Slovakia paying particular attention to one district, which is the Nové Zámky district. The district is located in the Nitra Region of western Slovakia. Given the fact that we are talking about a relatively small district, we found it interesting to examine whether individuals with higher educational attainment are more satisfied with their current job.

1 Theoretical overview

In every organization, those employees who are satisfied with the atmosphere of the work and with the work, in general, will be more supportive towards their colleagues. Thanks to this, they can offer help when necessary. Nevertheless, more satisfied workers will be also more productive, and their job performance will tangibly increase, which helps to earn success for either party. (Sadeghi et al., 2021) Based on the fact that higher job satisfaction has a myriad positive results for businesses and non-business organizations either, it is pivotal to create and maintain a favourable workplace for the employees. (Bezdrob & Šunje, 2021) Job satisfaction can be taken as an optimistic emotional phase. This positive feeling highly contributes to the personal fulfillment of each employee. This positivity can be understood in each employees' work which enables them to meet the job values and their own values at the same time. (Padmanabhan, 2021) As claimed by Jensen, Liu and Schött (2017), life satisfaction is strongly associated with the job satisfaction and the balance between work and family. It means that job satisfaction can strongly enhance life satisfaction.

According to Kitsios and Kamariotou (2021), leadership is pivotal in order to form the basis of the necessary circumstances within a company to achieve its goals. Regarding leadership, it is influenced by the employees' behaviours, and that in fact, can influence the entire performance of the business and the job satisfaction either. A leader's characteristics can either positively or negatively influence the employee's performance and job satisfaction.

Based on the fact we have written so far, from different research, we know that job satisfaction is a highly complex issue and is influenced by a myriad of factors. The question may legitimately arise whether those individuals who work in schools on a daily basis, i.e. teachers are satisfied with their work or not as they make a huge part of a student's life. According to Demirtas (2010), teachers in primary schools are overall satisfied with their jobs. That research used different statistical methods such as the one-way ANOVA to analyse the differences between age averages. From those results, we can observe a nuanced difference in job satisfaction as the teacher aged between 36-40 are a bit more satisfied with their current jobs.

According to Kravčáková et al's.,(2011), research which was conducted between 11 universities in Slovakia, doctoral students' self-esteem is positively correlated with career satisfaction. In this sense, it supports Minárová's results which were mentioned in the introduction section. Based on the results of Kravčáková et al's research, it is worth mentioning that doctoral students' career satisfaction simultaneously increases with higher earnings.

Based on Kaliská et al. (2021), their linear analysis of global emotional intelligence in the case of life satisfaction, in general, it can be said that Slovak university students on average are satisfied with their lives. Given that a total of 100 Slovak university students participated in this research, it is not certain that the obtained results can be fully reflected to the whole sample. According to an another research, especially Köverová's (2019), research where 982 professionals have taken part (such as health professionals, educators, social workers, psychologists, teachers and managers) there is a strong correlation between job satisfaction and the nature of work. In this sense, this fact also adequately supports the fact that job satisfaction can be influenced by a myriad of factors, such as the work environment created by colleagues and employees. Based on the results of each research presented in theory, we can state the following: workplace satisfaction is an extremely complex field of research. We can say that each individual is motivated by different factors, and satisfaction can differ for everyone. In general, colleagues, managerial behaviour and the work environment can

strongly affect the analysed subject. Nevertheless, higher education can contribute to a more prestigious job, which can positively affect job satisfaction.

2 Methods

The main aim of the research was to explore the effect of tertiary education on job satisfaction. In our descriptive research, we chose the one-time cross-sectional research method, as we have taken a single sample of the elements of the population once. The target population was those who had a permanent or temporary residency in the analysed district. The data collection was performed between September 2020 and November 2020. During this time, we have collected 512 responses by bilingual online questionnaire as it ensured us to collect as many responses as possible. According to Wiley (1999), it is pivotal to calculate the required sample size to derive meaningful inference in our research. For this purpose, we used the following formula:

$$n = \frac{Z^2 P(1 - P)}{d^2} \quad (1)$$

Where n = sample size is 117 428 according to ŠÚSR (2020), critical value at 95% confidence level, $Z=1.96$, P = expected prevalence =40%=0.4 and d =precision=5%=0.05. Based on our calculation, 368 answers would be appropriate to get the proper results which can be traced back to the whole population. Based on this fact, the research with 512 answers can be taken as representative research, as we had 258 responses on the Slovak survey, whereas 254 responses on the Hungarian survey.

In our research we have formulated 1 hypothesis, which is the following:

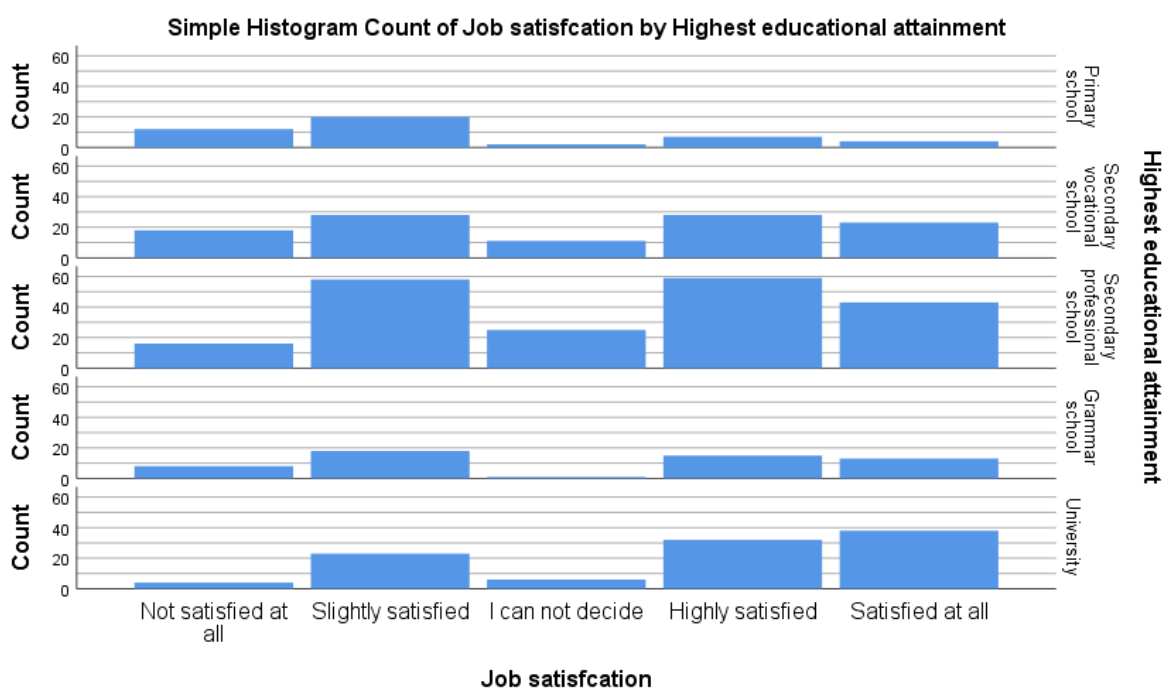
H0: There is no positive monotonous trend between respondents' educational attainment and job satisfaction.

H1: There is a positive monotonous trend between respondents' educational attainment and job satisfaction.

To analyse a monotonous trend, we have chosen the Jonckheere-Terpstra trend test. To carry out such a high-quality analysis, we have to meet six assumptions. In our case, we have fulfilled all the assumptions, since based on the first assumption, our dependent variable can be measured on an ordinal measurement level. Based on the second assumption, it can be said that our independent variable has at least two groups since we have classified five groups as the education was measured on five different categories. In the case of the third assumption, it can be declared that the observations are independent since one respondent is included only in

one group. Based on the fourth assumption, we can say that the order of the attributes in the case of the dependent variable has also been determined since we can talk about data measured on a five-point Likert scale. In the case of the fifth assumption, the alternative hypothesis was formulated in the proper direction as we assumed a linearly increasing trend, whereas in our sixth assumption, it is necessary to examine the form of the attributes of the ordinal independent variable as a Jonckheere-Terpstra test can only be performed in case of the same or similar form. For this purpose, we have created a histogram which is shown in the figure below.

Fig. 1: Histogram of the highest educational attainment and job satisfaction



Source: own editing in the SPSS software based on the primary data collection

Based on the above shown histogram, the forms of each attribute take on a somewhat-similar shape. In this case, the analysis is based on the effects, rather than medians. However, according to the rules, it is also necessary to indicate the medians in the summary. Regarding to the histogram, in the case of the null hypothesis we assume the following: $\tau_{\text{primary school}} = \tau_{\text{secondary vocational school}} = \tau_{\text{secondary professional school}} = \tau_{\text{grammar school}} = \tau_{\text{university}}$ where the τ represents the effect of the independent variable. In the case of the alternative hypothesis we assume the following: $\tau_{\text{primary school}} \leq \tau_{\text{secondary vocational school}} \leq \tau_{\text{secondary professional school}} \leq \tau_{\text{grammar school}} \leq \tau_{\text{university}}$ with at least one strict inequality

3 Results

The following table illustrates the observed medians of the dependent variable within each group of the independent variable. We can also notice a pattern of differences.

Tab. 1: Medians

Job Satisfaction

Highest Educational Attainment	N	Median
Primary school	45	2.00
Secondary vocational school	108	3.00
Secondary professional school	201	4.00
Grammar school	55	4.00
University	103	4.00
Total	512	4

Based on the value of Standardized Test Statistic (4.928) which can be seen in the table above, we can observe an increasing positive linear monotonous trend. As can be seen in the table the value of Asymp. Sig (2 sided) is $p < 0.001$ which forms a statistically increasing positive linear monotonous trend. During the hypothesis we assumed that there would be a positive increasing linear monotonous trend in job satisfaction and highest educational attainment. Based on the Jonckheere-Terpstra test, we can conclude that there is a statistically significant trend, since $p < 0.001$. In the case of a statistically significant trend, it is also necessary to examine the value of Kendall's tau-b which can be seen in the following table:

Tab. 3: Kendall's tau-b

			Job satisfaction level	Highest educational attainment
Kendall's tau_b	Job satisfaction level	Correlation Coefficient	1.000	0.179
		Sig. (1-tailed)	.	0.000
		N	512	512
	Highest educational attainment	Correlation Coefficient	0.179	1.000
		Sig. (1-tailed)	0.000	.
		N	512	512

Source: own editing in the SPSS software based on the primary data collection

Based on Kendall (1938), the value can range from +1 to -, which indicates either a positive (+1) or negative (-1) association. The zero value indicates no monotonic association between the analysed variables. In our case, Kendall's tau-b is positive, so we can conclude that there is a positive monotonous relationship between the variables. This means that if the value of one variable increases the value of other variable will also increase. As a result, Kendall's tau-b was 0.179 among the highest educational attainment and job satisfaction

To sum up our hypothesis analysis:

The job satisfaction median in the five education groups were 2 for the "primary school" group (n=45), 3 for the "secondary vocational school" group (n=108), 4 for the "secondary professional school" (n=201), 4 for the "grammar school" group (n=55), and 4 for the "university" group (n=103). Distributions of highest educational attainment was somewhat

similarly-shaped which was assessed by the histogram. It was hypothesized that there would be an increasing monotonic trend in highest educational attainment and job satisfaction. A Jonckheere-Terpstra test determined that there was a statistically significant increasing monotonic trend between the analysed variables, $p < 0.001$. Kendall's τ_b between the variables was 0.179. There was a statistically significant monotonic trend ($p < 0.001$). Therefore, we can reject the null hypothesis and accept the alternative hypothesis.

Conclusion

In the theoretical part of our research, the results of several domestic and foreign research were compared. From its results, we can declare that this complex field of research is extremely difficult to examine, since workplace satisfaction can be influenced by many factors in a negative or positive direction either. These factors include the salary, colleagues and managerial behaviour, working hours, different perks and the education also. In the Nové Zámky district, we analysed whether a tertiary education can form a good basis of work satisfaction. The Jonckheere-Terpstra trend test has shown that tertiary education is essential to increase tangibly the chance of the work satisfaction. It is important to mention that there is no university located in the analysed district, even though the citizens who have finished a tertiary education across the country are more satisfied with their jobs than those who haven't. We hold the view that in most cases it is vital to pursue studies at a university as it can unlock myriad possibilities to have a prestigious job or to work for a prominent company. Nevertheless, it is first and foremost that students can not rely only on their diplomas. It is worth mentioning that students should seize opportunities during their study years. For example, they should take part in some traineeship programs as they could see first-hand how businesses work and they can gain skills that are required in the labour market. These programs can significantly contribute to acquire myriad skills that can be used in the future.

It is important to acknowledge some limitations which can form a good basis for further research. Our representative research was conducted in a specific district which is located in the Nitra Region of Western Slovakia. It would be relevant to enlarge the research for several districts which surround the analysed district. It would be interesting to examine the opinions of numerous people, thus gaining a more comprehensive picture of the relationship between job satisfaction and tertiary education in several districts. Nevertheless, we will pay huge attention to retain the research's representativeness.

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