THE RELATIONSHIP BETWEEN SOCIO-DEMOGRAPHIC VARIABLES AND JOB SATISFACTION: THE CASE OF THE REPUBLIC OF CROATIA

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Abstract: This paper examines the relationship between socio-demographic variables and job satisfaction in the Republic of Croatia. Job satisfaction is a critical factor affecting employee well-being and organizational performance. Understanding the socio-demographic variables that influence job satisfaction is crucial for formulating effective human resource strategies and activities to improve the overall job satisfaction level of employees. This study utilizes a quantitative research design, collecting data from a sample frame of employees across various industries and sectors in the Republic of Croatia. Socio-demographic variables such as age, gender and hierarchy level are analysed relating to job satisfaction by applying t-test and one-way ANOVA analysis. The analysis conducted on the sample of 284 employees showed that respondents' job satisfaction differed in terms of age and hierarchy level. Specifically, younger workers are happier with their jobs than older and senior management compared to workers. These findings contribute to the existing literature by providing insights into the unique socio-demographic factors influencing job satisfaction in the Republic of Croatia. The results can guide organizations in developing targeted strategies to enhance employee satisfaction, such as tailored training programs, flexible work arrangements, and career development opportunities.

Keywords: employees, job satisfaction, age, gender, hierarchy level.

JEL classification: O15, M54
1. Introduction

One of the most investigated work-related attitudes that have been the subject of the most research is job satisfaction (Locke & Latham, 2000; Sanjeev, 2017). However, this topic still deserves and receives attention from researchers from all over the world, suggesting that in this field there is still space for new insights and new conclusions. The fruitful background for new research in this field lies in the fact that job satisfaction matters from at least three perspectives: it has a humanitarian perspective, it is related to organizationally relevant job behaviour and it can be a reflection on organizational functioning (Spector, 1997).

Since job satisfaction is an important phenomenon for both, employees and organizations, in an attempt to better understand the factors that influence it, many empirical investigations in this field have been conducted so far. These findings are beneficial from the perspective of creating effective mechanisms for enhancing it.

When it comes to investigating the factors of job satisfaction, it appears that special attention was put on demographic ones, such as gender (DeVaney & Chen, 2003; Paul & Phua, 2011; Azim et al. 2013; Chirchir, 2016), age (Clark et al., 1996; Bernal et al., 1998; Kooij et al., 2007; Cavanagh et al., 2020), or social, such as marital status (Azim et al., 2013), rank on the hierarchical position (Robie et al., 1998; Oshagbemi, 2003; Eyupoglu & Saner, 2009; Paul & Phua, 2011; Adamchik et al., 2022) or type of employment contract (Ferrer-i-Carbonell & van Praag, 2006), indicating that these variables explain a lot when it comes to the employees’ satisfaction with their job.

The socio-demographical factors of employee job satisfaction are important variables to be investigated in the case of the Republic of Croatia as well since the empirical evidence shows that many people leave this country in an attempt to find adequate employment or any employment at all, indicating that they are not satisfied with the employment situation in this country. That emigration of employees in the Republic of Croatia is a severe problem shows the data of the State Institution of Statistics: the number of emigrants in 2012 was 12,877 while in 2021 the total number was 40,424 (State Institution of Statistics, 2022). Although there is immigration in this country as well, the net migration is still negative. More precisely, since the crisis in 2009 and becoming a member of the EU in 2013, the Republic of Croatia has had a negative net migration balance (Tomić et al., 2019). The large emigration caused labour shortages, especially in accommodation and food service, but also in construction, medical and IT sectors (Tomić et al. 2019), so the state authorities were forced to increase the quotas for the import of foreign workers (Vladisavljević, 2019).

In order to better understand the problem of emigration in the Republic of Croatia, the aim of the paper is to investigate how current employees are satisfied with their jobs in terms of their socio-demographic characteristics so that a custom
retaining mechanism could be designed. An empirical investigation was carried out for the purpose of this work. The sample included 284 employees in companies in the Republic of Croatia. The contribution of this paper is that it serves the managers of companies to make more effective mechanisms for enhancing the employees' job satisfaction and, consequently, to reduce emigration from this country.

The paper is structured as follows: the first part of the paper deals with the literature review on job satisfaction and hypothesis development, the second part of the paper contains the results of the empirical study and their discussion, and at the end of the paper, the implication for human resource management the concluding remarks are made.

2. Literature review

The research on job satisfaction has a long tradition that dates since the thirties of the twentieth century when Hoppock (1935) defined this category as any combination of psychological, physiological, and environmental circumstances that cause a person to say truthfully - I am satisfied with my job (Hoppock, 1935). Since that time, as a researched variable in companies, employee job satisfaction has highly surpassed all other variables (Abdulla et al., 2011). Consequently, many definitions, views, and approaches to this phenomenon have emerged so far.

When it comes to defining job satisfaction as a category, literature shows that different authors have different perspectives. When defining job satisfaction, some authors put an emphasis on the emotional aspect of job satisfaction (as Hoppock did), while others include other aspects, such as cognitive (evaluative) or behavioural.

Emotional and cognitive (evaluative) aspects in defining job satisfaction could be found in Spector's (1997) definition. According to this author, job satisfaction refers to the way how people feel about their jobs and their various aspects; it also refers to the extent to which workers like or dislike their jobs (Spector, 1997). This author also states that there are two evaluative mechanisms upon which employees’ emotions regarding job satisfaction could arise: global and facets and both of them are useful. Global, when overall attitude about a job is important or when researchers investigate the effects of people liking or disliking their job. Facets, when it is crucial to determine which component of work results in people being satisfied or dissatisfied (Spector, 1997) in order to improve those that are not satisfying.

Emotional and evaluative aspects in defining job satisfaction are present in Locke’s (1976) definition of job satisfaction as well. This author, for example, defines job satisfaction as "a pleasurable or positive emotional state resulting from the evaluation of one's work experience" (Locke, 1976).
Judge et al. (2001), also define job satisfaction from cognitive (evaluative) and emotional perspectives as they state that job satisfaction is a result of a person's cognitive, emotive, and evaluative response to numerous job-related factors.

The cognitive perspective in defining job satisfaction is particularly present in McShane’s (2004) view of job satisfaction. He states that job satisfaction represents the level of divergence between what a worker expects to receive and what he/she actually experiences in the workplace (McShane, 2004). That means that employees conduct some kind of mental calculations to analyse what they expected from the job and what they received.

A similar opinion regarding job satisfaction has Fako et al. (2009). These authors also state that job satisfaction depends on what one expects and receives from a job. In the line, they state that if one expects little from a job and receives little in return, he/she will be just as content as someone who expects much and receives plenty. Consequently, when somebody expects a lot from work but only receives a bit of it, that person feels unhappy with his/her job (Fako et al., 2009 in Djordjević et al. 2017).

In addition to the emotional and cognitive perspectives in defining job satisfaction, Hulin and Judge (2003) believe that job satisfaction includes behavioural perspective as well. According to these authors, “job satisfaction refers to internal cognitive and affective states accessible using verbal or other behavioural and emotional responses“ (Hulin & Judge, 2003, pp. 259).

Some authors, like Porter et al. (1975) completely focused on the behavioural aspect when defining job satisfaction since according to them job satisfaction is one’s reaction to his/her occupation or organization.

In addition to the fact that the literature on job satisfaction is very rich when it comes to defining this phenomenon, in this field many empirical studies have been conducted so far as well. Since job satisfaction is an important phenomenon for both employees and organizations, many aspects of employees’ job satisfaction influence have been investigated. For example, it was found that if the employees are satisfied with their job, they have lower turnover intentions (Azeez et al. 2016; Le et al., 2022), demonstrate organizational citizenship behaviour (Vatsa, 2013; Wahyuni & Dirbawanto, 2022), they are committed to their organizations (Azeez et al. 2016; Candelario et al., 2020), have higher job performances (Bin, 2016; Inayat & Khan, 2021) and positively influence organizational performances in general (Latif et al., 2013; Imran et al., 2021).

For the purpose of investigating the level of job satisfaction, several instruments have been developed so far. One of the most implemented is an instrument developed by Spector (1997) which is originally developed for the social service sector but is widely used for other sectors as well. This instrument contains 36 items that measure the employee's attitude towards the nine aspects of the job, such as pay, promotion, fringe benefits, contingent rewards, supervision,
operating procedures, co-workers, nature of work, and communication. The response format is a six-point Likert scale, ranging from ‘disagree very much’ (1) to ‘agree very much’ (6).

The next instrument widely used is The Minnesota Satisfaction Questionnaire (MSQ). This is a standardized questionnaire available in three versions. Long versions are from 1977 and 1967 (Weiss et al. 1967a), while the short version is from 1967 (Weiss et al., 1967b). The most used version is the short one which consists of 20 questions with a Likert scale from 1 to 5. With this scale, it is also possible to measure both intrinsic and extrinsic dimensions of job satisfaction, since the questions were chosen in such a way as to cover all 20 subscales of the longer form of the MSQ. The questions are also formed in such a way that they encompass both intrinsic and extrinsic dimensions that together make up the overall employee job satisfaction.

3. Hypothesis development

Socio-demographic variables connected to employees were widely investigated in terms of their job satisfaction. However, a conclusive relationship is still missing since the studies conducted so far have shown mixed results. Therefore, investigating the relationship between these variables and job satisfaction is still fruitful for new research and new insights.

When it comes to the investigation of relationships between age and job satisfaction, Sanjeev (2017) noted that evidence shows that the relationship between age and job satisfaction could be positive, negative, and curvilinear. Bernal et al. (1998) earlier noted that even five possible relationships between these variables are found: positive linear relationship, negative linear relationship, "U" shaped relationship, inverted "U" relationship, and no significant relationship (Bernal et al., 1998 in Djordjević et al. 2017).

Cavanagh et al. (2020) state that as workers aged, they are more motivated by those characteristics of their jobs that have more social and emotional aspects, such as autonomy, and social interactions with coworkers, and less motivated by aspects of their job connected with accumulation resources, such as salary, job training, etc. At the same time, these job characteristics affect how older workers are satisfied with their jobs. However, there is some evidence that older employees sometimes are motivated and highly value salary (Kooij et al., 2007) as well.

On the other hand, the majority of studies support the idea that younger workers tend to place more value on pay and advancement chances (Clark et al., 1996). Clark et al. (1996) also state that very young employees who just entered into the employment world tend to be very excited and satisfied with their job since as employees they are for the first time, in a position to gain their own financial resources, which provide them to live by their own (Clark et. al 1996 in Djordjević et al., 2017).
Since the cognitive perspective of job satisfaction suggests that employees mentally calculate what expect and receive from their job, young employees tend to have greater, and often unrealistic expectations of their job (Greenhaus et al., 2018), which often result in their disappointment and, consequently, lower job satisfaction. On the other side, older employees tend to have more realistic expectations, so the gap between what they expect and what they receive from a job is lower, so they tend to be more satisfied (Clark et al., 1996 in Djordjević et al., 2017). In other words, there is a great probability that employees’ job satisfaction is different regarding their age.

Based on the above, the first hypothesis that is going to be tested in the paper is as follows:

**H1: There is a statistically significant difference in job satisfaction of employees of different ages in the companies in the Republic of Croatia.**

One of the most investigated demographic characteristics of employees whose influence on job satisfaction was researched is gender, as well. However, the results of the empirical studies conducted regarding the influence of this variable are mixed, as they are for the most of the demographic variables. For example, in the study conducted by Chirchir (2016), it was found that there were significant differences in the level of satisfaction of male and female teachers regarding administrative duties and satisfaction with teaching. In fact, it was found that male teachers were more satisfied with administrative duties and teaching than female teachers.

DeVaney and Chen (2003) also discovered that besides other demographic variables, gender had an effect on job satisfaction as well. On the other hand, in the study conducted by Paul and Phua (2011), it was concluded that gender had no influence on job satisfaction.

Although certain studies show that there is no gender difference in employees’ levels of job satisfaction (Paul & Phua, 2011), it appears that in many of them, evidence shows that such difference still exists (DeVaney & Chen, 2003; Cantarelli et al., 2016; Jonsdottir et al., 2020). As García-Mainar et al. (2016) noted, there are several explanations for that: men and women differ in the referents for measuring job satisfaction, i.e., different job characteristics have different importance for them, further, there are differences in expectations of job between men and women; they differ in the perception of the same subjective aspects of the job etc. The above-mentioned authors state that these reasons could be summarized in two ways: different expectations and different preferences that men and women have influence differences in their job satisfaction.

Since most of the previous research suggests that there are differences in job satisfaction between men and women, as well as that statistical data in the Republic of Croatia, within the population of 20 to 60 years, men are more likely to emigrate
from the country, compared to women (State Institution of Statistics, 2022), the second hypothesis that is going to be tested in the paper is as follows:

**H2: There is a statistically significant difference in job satisfaction of employees of different gender in the companies in the Republic of Croatia.**

The research also dealt with the investigation of the influence of the hierarchical position of employees, i.e., job position or job rank, on employees’ job satisfaction. The studies mostly show that this factor positively influences this phenomenon since the hierarchic rank is closely related to formal power, autonomy, salary, workplace status, etc. In that line, a meta-analysis conducted by Robie et al. (1998) showed that 35 analysed studies indicate a positive relation between the hierarchical position of employees and their job satisfaction (although moderate), meaning that job satisfaction increases with the hierarchical rank.

Further, in the study conducted by Paul and Phua (2011) it was discovered that job position (as well as age) influenced the level of job satisfaction. More recently, in the study conducted by Adamchik et al. (2022) it was also discovered that hierarchical rank is positively related to job satisfaction.

There are also studies that did not confirm that job satisfaction progressively increased with hierarchical rank. For example, Eyupoglu & Saner (2009) concluded that only 4 of 20 job-related factors were statistically associated with academic rank (advancement, pay, coworkers, and variety).

Although in some studies, positive relationship between the hierarchical position and job satisfaction was not found, Oshagbemi (2003) noted that most of the studies conducted in this area suggest that hierarchical level, i.e., job position, is a reliable predictor of job satisfaction, meaning that if the employees’ hierarchical level or job position increases, those employees are generally are more satisfied with their jobs compared to employees at a lower position.

Based on the abovementioned, the third hypothesis that is going to be tested in the paper is as follows:

**H3: There is a statistically significant difference in the job satisfaction of employees of different hierarchical levels in the companies in the Republic of Croatia.**

4. Research design

*Research method and context.* For the purpose of analysing an influence of socio-demographic variables on job satisfaction, quantitative research was conducted. The quantitative research offers an opportunity to explain complex phenomenon through data and make generalizations supported by real datasets and results of their analysis. Furthermore, the context of the research makes the respondents from the Republic of Croatia, different in terms of gender, age, size of the employee's company, type of work contract, the highest level of education that a person holds,
position on the hierarchy ladder etc. But the analysis in the paper focuses only on the age, gender and hierarchy level differences of participants’ job satisfaction. The survey included 284 respondents.

Data collection. The results were obtained through the dissemination of questionnaires from March 2022 to February 2023. The companies whose employees were surveyed were selected through the list of business entities at the Croatian Chamber of Commerce in order to track the ownership, the size of the company, and the place where the company is headquartered. The surveys were sent by e-mail to the representatives whose addresses were indicated on those lists and the recipients of the e-mail forwarded the questionnaire to employees. Half of the questionnaires were sent by e-mail using Google Forms, while the other half was obtained on paper through the company’s representative. Therefore, a random sampling technique was applied in terms of employees surveyed. On the other hand, their anonymity was secured without personal contact with researchers.

The questionnaire was previously double-translated, standardized and used as such in the research. Since the questionnaire is already validated in the literature, the pilot research process was not carried out for the same reasons.

Sample information. Dataset was made of 284 responses of employees currently working in enterprises in the Republic of Croatia. From a total of 284 respondents, 65 (22.9%) had definite, while 219 (77.1%) had indefinite contract. In terms of size of enterprise where the respondents work, sample distribution was almost equal, micro 21.8%, small 26.1%, medium 27.1% and big 25%. Dominantly, the respondents hold high school diploma (137 or 48.2%), while 112 (39.4%) have finished bachelor, master or doctorate. Only 2 respondents had completed primary school and 33 higher school education. It can be concluded that the sample was rather diversified when socio-demographic characteristics were observed. Additionally, the socio-demographic structure of respondents that is used in this study is presented in the following Table 1.

<table>
<thead>
<tr>
<th>Table 1: Sample structure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Item</strong></td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>18-25</td>
</tr>
<tr>
<td>26-35</td>
</tr>
<tr>
<td>36-45</td>
</tr>
<tr>
<td>46-55</td>
</tr>
<tr>
<td>56-65</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Males</td>
</tr>
<tr>
<td>Females</td>
</tr>
<tr>
<td>Position in organisation</td>
</tr>
<tr>
<td>Worker</td>
</tr>
<tr>
<td>Low-level management</td>
</tr>
<tr>
<td>High-level management</td>
</tr>
</tbody>
</table>

*Source: Authors’ calculation*
Analysed variables. The questionnaire used in this study consists of two sections. In the first section, respondents were asked to mark their biographical data: gender, age, education, size of the company where the respondent is employed, type of work contact with the company, hierarchy level and monthly earnings. The second part of the survey was focused on assessing the level of respondents’ job satisfaction. The measurement scale applied was already widely used in the research on the topic of the employee’s job satisfaction. It is the Job Satisfaction Survey developed by the author Paul Spector (1994). The survey used has 36 items for assessing 9 aspects of job satisfaction. The items were rated on the 6-point Likert scale from 1 - Disagree very much to 6 - Agree very much. Moreover, 19 items were negatively stated so recoding was made in order to achieve the same measuring scale. The reliability of the used scale was acceptable and Cronbach alpha 0.950 was calculated. Finally, the respondents stated that their average job satisfaction was 3.8868 (SD=.93612).

Statistical analysis. For the purpose of statistical analysis, the program IBM SPSS, version 23 was applied. The frequencies and descriptive statistics were firstly conducted, reliability of measurement scale assessed by Cronbach alpha, and finally, differences among demographic groups were measured after testing normality and homogeneity of variance. This is why t-test and one-way ANOVA were applied. Specifically, t-test was used to capture the differences between males and females, while one-way ANOVA was applied when number of groups was greater than two or in terms of age and hierarchy level in the organization. For post hoc analysis, Scheffe was used when the equal variances were assumed (Soldić-Aleksić, 2015).

5. Results

In order to test the first hypothesis (H1), one-way ANOVA test was performed. Considering age group as an independent variable, there were established five categories.

<table>
<thead>
<tr>
<th>Age group (in years)</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-25</td>
<td>26</td>
<td>3.7767</td>
<td>.73015</td>
<td>.14319</td>
</tr>
<tr>
<td>26-35</td>
<td>87</td>
<td>3.8966</td>
<td>.94019</td>
<td>.10080</td>
</tr>
<tr>
<td>36-45</td>
<td>64</td>
<td>4.2322</td>
<td>.86240</td>
<td>.10780</td>
</tr>
<tr>
<td>46-55</td>
<td>70</td>
<td>3.5083</td>
<td>.98896</td>
<td>.11820</td>
</tr>
<tr>
<td>56-65</td>
<td>36</td>
<td>4.0648</td>
<td>.83336</td>
<td>.13889</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>283</strong></td>
<td><strong>3.8868</strong></td>
<td><strong>.93612</strong></td>
<td><strong>.05565</strong></td>
</tr>
</tbody>
</table>
b) test of homogeneity of variances

<table>
<thead>
<tr>
<th>Levene Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>.647</td>
<td>4</td>
<td>278</td>
<td>.629</td>
</tr>
</tbody>
</table>

c) ANOVA

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>19.126</td>
<td>4</td>
<td>4.782</td>
<td>5.830</td>
</tr>
<tr>
<td>Within Groups</td>
<td>227.995</td>
<td>278</td>
<td>.820</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>247.121</td>
<td>282</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

d) Multiple comparisons – Scheffe post hoc test

<table>
<thead>
<tr>
<th>(I) Age</th>
<th>(J) Age</th>
<th>Mean Diff. (I- J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% CI</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>36-45</td>
<td>46-55</td>
<td>.72387</td>
<td>.15662</td>
<td>.000</td>
<td></td>
<td>.2382</td>
<td>1.2096</td>
</tr>
</tbody>
</table>

Note: *The mean difference is significant at the 0.05 level.

Source: Authors’ calculation

Table 2a presents descriptive statistics for the multigroup respondents and their job satisfaction. It can be noted that age group between 34 and 45 has the highest mean value of job satisfaction (mean=4.2322, SD=.86240), while the lowest has the group between 46 and 55 (mean=3.5083, SD=.98896). Levene’s test of equality of variances is not significant so the hypothesis of homogeneity of variances is accepted (Table 2b). The analysis of variance showed that equal variances could be assumed among age groups of employees in terms of their job satisfaction, while it is not confirmed that there is equal average job satisfaction between five age groups (Table 2c). It can be concluded that the first hypothesis stated that there are significant differences between the employees of different age in terms of their job satisfaction is supported. Lastly, post hoc test showed that two age groups, from 36-45 and from 46-55, significantly differ and that the first age group has higher job satisfaction than older one.

In order to test the second hypothesis (H2), firstly group statistics was tested and then the independent samples t-test. Table 3 indicates the acquired results.

Table 3a shows that among the interviewed employees 111 were men and their average job satisfaction was 3.9349 (SD=.9094). On the other hand, females were 172 and their average job satisfaction was 3.8558 (SD=.9543). Afterwards, independent t-test was performed to test the differences in gender perception of job satisfaction (Table 3b). As Levene’s test for equality variances was not significant and t-test is also insignificant, the second hypothesis which stated that there were differences in job satisfaction between genders is not accepted.

In order to test the third hypothesis (H3), one-way ANOVA test was performed. Considering the hierarchy level as a grouping variable and also as an independent variable, there were established three categories.
### Table 3: Independent-Samples T-Test for gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job_satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>111</td>
<td>3.9349</td>
<td>.9094</td>
<td>.0863</td>
</tr>
<tr>
<td>Female</td>
<td>172</td>
<td>3.8558</td>
<td>.9543</td>
<td>.0728</td>
</tr>
</tbody>
</table>

#### b) Levene's Test for Equality of Var. and t-test for Equality of Means

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>Sig.</th>
<th>t</th>
<th>df</th>
<th>Sig.</th>
<th>Mean Diff.</th>
<th>Std. Error Diff.</th>
<th>95% CI</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS</td>
<td>.122</td>
<td>.728</td>
<td>.694</td>
<td>281</td>
<td>.488</td>
<td>.07915</td>
<td>.11408</td>
<td>~1.4540</td>
<td>~3.0371</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.701</td>
<td>242.959</td>
<td>.484</td>
<td>.07915</td>
<td>.11290</td>
<td>.14323</td>
<td>~3.0153</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ calculation

### Table 4: One-Way ANOVA test for hierarchy level

#### a) descriptives

<table>
<thead>
<tr>
<th>Hierarchy level</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>worker</td>
<td>212</td>
<td>3.7761</td>
<td>.92734</td>
<td>.06369</td>
</tr>
<tr>
<td>low-level management</td>
<td>44</td>
<td>4.1136</td>
<td>.87507</td>
<td>.13192</td>
</tr>
<tr>
<td>high-level management</td>
<td>27</td>
<td>4.3868</td>
<td>.90145</td>
<td>.17348</td>
</tr>
<tr>
<td>Total</td>
<td>283</td>
<td>3.8868</td>
<td>.93612</td>
<td>.05565</td>
</tr>
</tbody>
</table>

#### b) test of homogeneity of variances

<table>
<thead>
<tr>
<th>Levene Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>.068</td>
<td>2</td>
<td>280</td>
<td>.934</td>
</tr>
</tbody>
</table>

#### c) ANOVA

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2</td>
<td>5.807</td>
<td>6.904</td>
<td>.001</td>
</tr>
<tr>
<td>Within Groups</td>
<td>280</td>
<td>.841</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>282</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### d) Multiple comparisons – Scheffe post hoc test

<table>
<thead>
<tr>
<th>(I) Hierarchy level</th>
<th>(J) Hierarchy level</th>
<th>Mean Diff. (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% CI</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>worker</td>
<td>higher-level management</td>
<td>-.61076</td>
<td>.18740</td>
<td>.005</td>
<td>-1.0719</td>
<td>-.1496</td>
<td></td>
</tr>
</tbody>
</table>

Note: *The mean difference is significant at the 0.05 level.

Source: Authors’ calculation
Descriptive statistics for the three-group respondents according to their level on the hierarchy ladder and their job satisfaction is presented in Table 4a. The group of employees marked as "workers" has the lowest job satisfaction (mean=3.7761, SD=.92734), while the group of "high-level management" has the highest job satisfaction (mean=4.3868, SD=.90145). Levene’s test of equality of variances is not significant so the hypothesis of homogeneity of variability of variances is accepted (Table 4b). The analysis of variances showed that equal variances could be assumed among groups of employees on different levels on hierarchy ladder in terms of their job satisfaction, while it is not confirmed that there is equal average job satisfaction between the three age groups (Table 3c). Therefore, the third hypothesis, which defined that there are significant differences between the employees on different hierarchy level in organization - in terms of their job satisfaction is supported. Lastly, Scheffe post hoc test showed that two groups of employees, those declared as "workers" and "high-level management", significantly differ, and that the first group has higher job satisfaction than the second one.

6. Discussion

The study results indicate that the younger group of employees in the Republic of Croatia (aged between 36 and 45) is more satisfied with their job than the group of respondents between 46 and 55. The literature demonstrates that there is a curvilinear link between age and job satisfaction in this age range, with a slope that may be slightly flatter for those over 40 and significantly steeper for those under 30 (Sanjeev, 2017). Paul and Phua (2011) propose a U-shaped relationship where younger generations are more satisfied with their jobs due to the novelty of work. Furthermore, the same authors also did not find any difference between males and females in terms of their job satisfaction even though the literature mostly suggests that job satisfaction level varies between genders due to their different perspective of assessing it. Lastly, the data on differences between the employees on different hierarchy levels in organisations in the Republic of Croatia showed that high-level management is more satisfied with their job than the group of employees named "workers". Several researchers also came to similar results (Paul & Phua, 2011; Adamchik et al., 2022). The reason behind these results is that the employees in higher hierarchical positions have more incentives received at the job than the workers on the lower levels. Therefore, the results of this study are in line with the literature on this topic.

7. Implication for human resource management

The results of the study conducted on a sample of employees in Croatia showed that in terms of age the lowest job satisfaction (3.5083) have the employees
between the age of 46-55. Since this part of the sample mostly belongs to Generation X and Y, as previous research in this field suggests, these are the employees for which satisfaction with their job is very important, even more than a promotion (Enkhbaatar et al. 2021). Some research also suggests that these employees may be not motivated by money; however, if their salaries become insufficient, they will eventually incline towards demotivation and inactivity (Hank Karp, 2002 in Enkhbaatar et al. 2021). This leads to the conclusion that salary alone is not enough sufficient to keep these employees satisfied, but the level of salary is an important factor in their productivity and task accomplishment (Enkhbaatar et al. 2021). Therefore, in order to raise the job satisfaction of employees of these ages, managers should provide them with interesting and challenging jobs which are sufficiently paid. If it is missing, there is a great probability that these employees will leave the company in order to find a better place to work.

The part of the sample of employees who are the least satisfied with the job consists partly of the employees who belong to Generation Y as well. According to Treuren and Kathryn (2010), these employees in general are ambitious, technologically equipped, hardworking, ready for change, forward-thinking, want to get a lot in a short time, prefer high salaries and constant challenges (Treuren & Kathryn, 2010 in Enkhbaatar et al. 2021). Having in mind these general characteristics of these employees, in order to keep them motivated and satisfied with their jobs, and hence to retain them in their companies, managers should provide them with challenging tasks, opportunities for innovations, and adequate salaries.

As evidence from the study also shows, relatively low levels of satisfaction with jobs have employees aged 18 to 25 (3.7767) and from 26 to 35 (3.8966). According to the survey, this generation of employees called Z is innovative, and values transparency, flexibility, and individual freedom (Schawbel, 2014 in Enkhbaatar et al. 2021). As such, in order to be satisfied with companies and be loyal to them, managers should provide these employees with designs of job tasks that will meet these characteristics.

The study's findings are consistent with the expectations when it comes to the impact of hierarchical rank on job satisfaction. In order to increase the job satisfaction of employees at lower hierarchical levels it is necessary to investigate deeply which characteristics of their job are most dissatisfying, which will be the subject of further investigation of the authors. However, the effective mechanism for raising job satisfaction generally lies in redesigning the job in order not to be repetitive or mechanistic, as well as to provide adequate salary for the efforts that employees make.
8. Conclusion

This paper deals with the job satisfaction of employees in Croatia in terms of some socio-demographic variables (age, gender, and hierarchical rank). The goal of the study was to determine whether there were any disparities in the job satisfaction of employees in relation to these factors in order to identify those who would eventually leave their organizations or even the country as a result of their low job satisfaction. The knowledge of that could be beneficial for the management of the companies in order to design adequate mechanisms for retaining their employees.

The results of the study show that there is a statistically significant difference in job satisfaction of employees of different ages and of different hierarchical level. However, when it comes to gender, the hypothesis did not confirm. In other words, there is a statistically significant difference in job satisfaction of employees of different gender in the companies in the Republic of Croatia. According to the findings, some recommendations for human resource management were made in order to enhance employees’ satisfaction and retain them in a company.

However, this paper is not without limitations. The first limitation refers to the sample which could not be considered as representative since the survey included only employees working in the private sector in Croatia. Further, in the study job satisfaction of employees was not investigated in terms of specific job characteristics, but it was analysed in general. Therefore, the recommendations that are made in the paper could not be more concrete. Finally, in the study, only socio-demographic variables were analysed in terms of their relationship with job satisfaction. However, there are more other variables that could be investigated influencing job satisfaction, such as leadership style, organizational culture, ownership of the capital of the companies, personal characteristics of employees, etc.

These limitations, at the same time, set the directions in which the authors of the paper will continue their research in this field.

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References


**ODNOS SOCIO-DEMOGRAFSKIH VARIJABLI I ZADOVOLJSTVA POSLOM: SLUČAJ REPUBLIKE HRVATSKOE**

**Rezime:** U radu se ispituje odnos socio-demografskih varijabli i zadovoljstva poslom u Republici Hrvatskoj. Zadovoljstvo poslom je ključni faktor koji utiče na dobrobit zaposlenih i organizacioni učinak. Razumevanje socio-demografskih varijabli koje utiču na zadovoljstvo poslom je ključno za formulisanje efikasnih strategija ljudskih resursa i aktivnosti za poboljšanje ukupnog nivoa zadovoljstva poslom zaposlenih. Ova studija koristi kvantitativni dizajn istraživanja, prikuplajući podatke iz uzorka zaposlenih u različitim industrijama i sektorima.
u Republici Hrvatskoj. Socio-demografske varijable kao što su starost, pol i hijerarhijski nivo se analiziraju u vezi sa zadovoljstvom poslom primenom t-testa i jednosmerne ANOVA analize. Analiza sprovedena na uzorku od 284 zaposlenih pokazala je da se ispitanici razlikuju po starosti i hijerarhijskom nivou u pogledu zadovoljstva poslom. Naime, mladi radnici su zadovoljniji svojim poslom od starijih, a viši menadžment u poređenju sa radnicima. Ovi rezultati doprinose postojećoj literaturi pružajući uvid u jedinstvene socio-demografske faktore koji utiču na zadovoljstvo poslom u Republici Hrvatskoj. Rezultati mogu da usmere organizacije u razvoju ciljanih strategija za povećanje zadovoljstva zaposlenih, kao što su prilagođeni programi obuke, fleksibilni radni aranžmani i mogućnosti za razvoj karijere.

**Ključne reči:** zaposleni, zadovoljstvo poslom, starost, pol, hijerarhijski nivo.

**Authors’ biographies**

**Rajka Rade** was born in Ogulin, Republic of Croatia. After secondary School of Economics, she worked for several years in the banking sector, and then for 20 years she held an executive managerial position in the hospitality and tourism industry. In the meantime, she continued her education in economics and humanities. Since her field of interest is human psychology she completed studies in applied psychology and attended many training programs in this field. She also obtained a master's degree in Gestalt psychotherapy. Currently, she is also a Ph.D. student at the Faculty of Business and Administrative Sciences in Novo Mesto. Today she lives and works in Rijeka as the owner of a counselling and psychotherapy business.

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