**EMPIRICAL RESEARCH ON THE IMPACT OF EMPLOYEES' AGE GROUPS ON THE PERCEPTION OF A PSYCHOLOGICAL CONTRACT**

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***Abstract:*** *The values ​​and needs of individuals of different generations are created in various social, market and political conditions. As confirmed by numerous studies, this reflected on their perception of the mutual relationship with the employer. The research aims to identify generational differences in the perception of the psychological contract among employees in educational institutions within Leskovac and Vlasotince. The dependence and the degree of agreement between the observed phenomena were examined using the descriptive, comparison, and the sample methods, the χ2 test and the correlation coefficient. The survey contains questions that are adjustments to the questionnaire that Denise M. Rousseau used in her research. Twelve hypotheses were defined, the research results and the conclusions that arise from them are presented in this paper. Understanding the generational differences in the content of the psychological contract can help increase work productivity and employee motivation, the degree of innovation, as well as corporate social responsibility. This paper can be useful to experts in human resource management and all interested parties who want to get acquainted with this topic.*

***Keywords:*** *psychological contract, age, job content,* *correlation, education.*

**1. INTRODUCTION**

According to [1], a psychological contract refers to the implicit expectations of employees and the organisation in terms of mutual expectations about their mutual exchange. As stated in [2], according to its nature, the type of psychological contract can be an open, transactional and relational psychological contract. An open type of psychological contract is created within a global company, and employees and the organisation itself have long-term participation in their careers. The relational psychological contract is represented in the colonial enterprise and reflects the mutual commitment of employees and the organisation, while the transactional type of psychological contract is specific to professional companies that are focused on knowledge and expertise. According to [3], four types of psychological contract are identified: transactional and transitional as short-term and balanced and relational as long-term. Transitional and relational are weak psychological contracts, while the rest are specific in their own way. The transaction agreement can be explained by the phrase: "fair work for a fair wage", while the relational agreement is defined by the words "the job is my life", as pointed out in [4]. Research conducted by CIPD (UK Chartered Institute of Personnel Development), according to [5], shows that nowadays, employees form one of the following three types of psychological contract: traditional, open, and independent. Traditional is characteristic for people looking for a permanent job and overtime, open is specific to individuals for whom work has no primary significance in life and which are not emotionally attached to their employers, while independent is established by well-qualified individuals and those who seek shorter employment, but high rewards. The widely accepted classification of the psychological contract, as stated in [6], is into old and new, with stability, predictability, tradition, permanence and mutual respect being emphasised as the characteristics of the old psychological contract, while the new psychological contract is characterised by short-term, flexibility and achievements and results. Based on the old, new, transactional and relational psychological contracts' features, we can say that the relational psychological contract bears the characteristics of old psychological contracts and the transaction contract of new psychological contracts.

**2. GENERATIONAL DIFFERENCES IN PSYCHOLOGICAL CONTRACT**

According to [7], generation is defined as a group that can be identified and divided by the years of birth, age location and significant life events in critical developmental stages, separated by intervals ranging from five to seven years into the first wave, the primary group and the last wave. Earlier research has shown that the evaluation of a psychological contract varies between generations. Unfortunately, the studies on this topic are scarce, and the results obtained by researchers differ from each other. Back in 1974, research on this topic was conducted, and the published results in [8] and [9] showed that members of different generations react differently to the fulfilment of certain elements that make up the content of a psychological contract, such as job description, obligations related to career development, organisational policy and social environment. Thus, in [10], Singer and Abramson point out that in the observed twelve-year period, they did not identify changes in the value of employees, even though an increase in salaries was recorded in that period. In contrast, in his research published in 1983 Rhodes [11] concluded that employees change their attitudes, beliefs and job satisfaction as they go through different stages of their careers. Also, authors such as Furnham in [12], Parker and Cusmir in [13], Tang and Tzeng in [14] and Wentworth and Chell in [15] confirmed that employees change their beliefs, attitudes and job satisfaction over the years.

As stated in [16], generations are divided into Generation Y, Generation X, and "Baby Boomers". Years of birth were taken as a criterion for division. Generation Y consists of those born between 1981-1993, Generation X between 1965-1980 and "Baby Boomers" between 1945-1964. While "Baby Boomers" are raised with expectations of a good life and are therefore optimistic and team-oriented, Generation X is cynical and distrustful, has a pronounced need for mentoring while viewing teams as support for their individual effort. These characteristics of Generation X members result from the financial, family and social insecurities in which they were raised, as pointed out in [17].

As the authors point out in [18], Generation X and Y expect the employer to enable development and advancement within the company, regardless of whether it is a vertical, horizontal or step-by-step career. This is less important to "Baby Boomers" probably because they are nearing the end of their careers, so they can afford lower job satisfaction given that their overall satisfaction comes more from other areas of life, whether it is family, hobby or something else. Furthermore, Generation X responds best to the fulfilment of obligations arising from organisational policy, and most of all generations require better work-life balance, as well as greater independence and security at work than Generation Y. According to [19], Generation Y attaches particular importance to job substance and career development opportunities by the employer, while a pleasant social environment is more important for "Baby Boomers" and Generation X for work motivation. When it comes to remuneration policy and system, research has shown that all generations of employees are directly correlated with rewards, and that there is a greater correlation among Generation Y employees. According to [20], "Baby Boomers" usually like to be balanced during the making of the contract, Generation X usually builds a relational and balanced type of psychological contract, while Generation Y is characterised by transitional, relational and balanced types of psychological contracts.

3. OBJECTIVE, RESEARCH METHODS AND sample

3.1. Objective of the Research

This research aimed to determine which type of psychological contract prevails among employees working in institutions of primary, secondary and tertiary education in Leskovac and Vlasotince, depending on their age. The research problem relates to the examination of differences in the content of the psychological contract according to the age of the respondents.

* Hypothesis 1: The assumption is that younger employees (Generation Y) will form a transactional (new) psychological contract.
* Hypothesis 2: The assumption is that younger employees (Generation Y) will form a relational (old) psychological contract.
* Hypothesis 3: The assumption is that older employees (Generation X) will form a transactional (new) psychological contract.
* Hypothesis 4: The assumption is that older employees (Generation X) will form a relational (old) psychological contract.
* Hypothesis 5: The assumption is that younger female employees (Generation Y) will form a transactional (new) psychological contract.
* Hypothesis 6: The assumption is that younger female employees (Generation Y) will form a relational (old) psychological contract.
* Hypothesis 7: It is assumed that younger male employees (Generation Y) will form a transactional (new) psychological contract.
* Hypothesis 8: The assumption is that younger male employees (Generation Y) will form a relational (old) psychological contract.
* Hypothesis 9: It is assumed that older female employees (Generation X) will form a transactional (new) psychological contract.
* Hypothesis 10: The assumption is that older female employees (Generation X) will form a relational (old) psychological contract.
* Hypothesis 11: The assumption is that older male employees (Generation X) will form a transactional (new) psychological contract.
* Hypothesis 12: The assumption is that older male employees (Generation X) will form a relational (old) psychological contract.

**3.2. Research Methods**

To assess the content of the psychological contract, a questionnaire was created based on the one used by Denise M. Rousseau in her research [21]. In addition to questions related to the content of the psychological contract, the questionnaire also includes socio-demographic questions. The survey of the target group of respondents was conducted via social networks and e-mail. An appropriate form of an online questionnaire has been created for this purpose.

The questionnaire consists of three parts and contains elimination questions. The first part of the survey questionnaire deals with socio-demographic questions that include gender, age, education, length of service and salary. The second and third parts of the questionnaire refer to the content of the psychological contract, and there are questions about the intentions to leave the organisation, the degree of loyalty, job satisfaction and opportunities for progress, investing in personal development and the like. Specifically, the second part of the questionnaire examines the beliefs about the employer's obligations to the employee, while the third part examines the employee's beliefs about his obligations to the employer. The Likert scale from 1 ("not at all") to 5 ("largely") was used to evaluate the answers to the questions. If the respondents gave scores of three or more, we consider that the corresponding statement fully characterises them, the statement with a score of two to three partially characterises them, while the statement that received a score of less than two does not characterise them at all. In the analysis of the collected data, and for the purpose of proving the assumed hypotheses, the coefficient of linear correlation and χ2 test was used, and the calculation was performed with the help of IBM SPSS Statistics 20.

In [22], it is shown how the analysis is performed using the χ2 test. Using the χ2 test, we examined whether there is a relationship between age and attitude of employees for each question from the survey questionnaire. In Hypothesis Ho, we stated the assumption that the answer does not depend on the age of the respondents, while in Hypothesis H1 there is an opposite statement. The critical values ​​for the χ2 test were obtained from the table of critical values ​​according to the pattern χ2 (r-1) (s-1);α. If the value obtained by the χ2 test is less than the critical value, we will accept hypothesis H0, which states that the respondents' answers do not depend on their age, and if the value obtained by the χ2 test is higher than the critical value, we will accept hypothesis H1, which states that the respondents' answers depend on their age.

According to [23], the linear correlation coefficient is a measure of the strength of the linear relationship between two variables, X and Y. In [24] it is pointed out that Pearson's linear correlation coefficient is a number that shows the direction and strength of the statistical relationship between the two observed variables. According to [25], a value of the correlation coefficient less than 0.2 indicates that there is a weak direct correlation. The value of the correlation coefficient from 0.2 to 0.5 indicates that there is a moderate direct correlation. If the correlation coefficient has a value from 0.5 to 0.7, then there is a significant direct correlation, from 0.7 to 0.9 strong direct correlation, while at values ​​over 0.9 there is a very strong direct correlation. The values ​​for inverse correlation are interpreted in the same way by the difference that they then have a minus sign.

**3.3. Sample**

The survey was conducted on a suitable sample of employed persons in primary school and college in Leskovac and high school in Vlasotince. A total of 115 employees were surveyed, of which 52 were male. The average age of the respondents was 43.74 years (SD = 8.25 years). Women are slightly younger than average (Mean = 42 years; SD = 7.46), while the average age of men is 45 years with a minimum average deviation of 7.46 years. The average length of service of all respondents is 12 years (SD = 0.32). Approximately 50% of respondents have more than 10 years of work experience (which also applies to women), of which 93% are employed indefinitely. About 42% of men have more than 10 years of work experience, of which 82% are employed indefinitely. The analysis of the sample according to the level of education shows that highly educated employees make up 83.48% of the sample, of which slightly more than half are women. When it comes to marital status, 76% of respondents are married or living with a partner in a marriage community, but with equal participation of both partners. Observing the career development of employees and based on the results obtained from the survey analysis, we notice that 35% of respondents (of which 63% are women) kept their first job until the day of completing the survey questionnaire.

The results of descriptive statistics by gender for respondents belonging to the age group marked as Generation Y are given in Tables 1 and 2.

We notice that for all questions concerning the old psychological contract, there are answers greater than 3 and range from 3.15-4.50. Based on the previously defined criteria, we can say that these statements fully characterise the respondents of the Generation Y group. The analysis of the answers given by the respondents from the Generation Y group showed that ten out of seventeen questions related to the new psychological contract identified scores higher than three, but less than four, and based on them, it is concluded that they also significantly characterise the group, while the remaining seven statements partially characterise them. These ten issues relate to limited work responsibilities, performing precisely defined tasks in accordance with the employment contract, the ability to leave a current job without a sense of obligation to the employer and finding opportunities to improve their knowledge and skills to increase their future employability. By comparing the scores related to the old and the new psychological contract, we can conclude that the respondents have higher individual scores on the issues associated with the old one than the issues related to the new psychological contract and that they identify more with the given statements. Based on these results, we will reject the first hypothesis regarding the assumption that younger employees (Generation Y) will form a transactional (new) psychological contract and accept the second hypothesis in which it is defined that younger employee (Generation Y) will form a relational (old) psychological contract.

The results of descriptive statistics by gender for respondents belonging to the age group marked as Generation X are given in Tables 3 and 4.

We notice that in ten of the fourteen questions concerning the old psychological contract, the scores are higher than 3 and range from 3.02-4.06. Based on the previously defined criteria, we can say that these statements fully characterise the respondents. The remaining four questions relate to the employer's concern for the health and well-being of employees and opportunities for employee advancement and promotion. Respondents gave slightly lower scores than 3 to these questions, so we can say that these claims partially characterise them. Given that Generation X includes older employees who have probably already progressed in their careers and feel some health problems that occur at that age, low scores on the previous question are in a way expected.

The analysis of the answers given by the respondents from the Generation X group showed that in eight of the seventeen questions related to the new psychological contract, the scores were higher than three, but less than four, and based on them, it was concluded that they significantly, while the remaining nine statements partially characterise them. These nine issues relate to limited work responsibilities, performing tasks for which they are paid, and finding opportunities to improve their own knowledge and skills to increase their future employability. By comparing the scores related to the old and the new psychological contract, we can conclude that the respondents have higher individual scores on the issues related to the old ones concerning the issues related to the new psychological contract and that they identify more with the given statements. Based on these results, we will reject the third hypothesis related to the assumption that older employees (Generation X) will form a transactional (new) psychological contract and accept the fourth hypothesis, which defines that older employee (Generation X) will form a relational (old) psychological contract.

Table 1: Descriptive Statistics Generation Y – Old Psychological Contract

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Generation Y | Total  Mean | Total  St. Dev. | Total | | M  Mean | M  St. Dev. | M  N | F  Mean | F  St. Dev. | F  N |
| Gender |  |  | 34 | |  |  | 9 |  |  | 25 |
| Employer is concerned for my personal welfare | 3,85 | 1,395 | 34 | | 3,78 | 1,716 | 9 | 3,88 | 1,301 | 25 |
| Employer takes care of my health and well-being | 3,68 | 1,296 | 34 | | 3,78 | 1,563 | 9 | 3,64 | 1,221 | 25 |
| Employer makes decisions that are in my interest as well | 3,82 | 1,314 | 34 | | 3,89 | 1,453 | 9 | 3,80 | 1,291 | 25 |
| Employer cares about my long-term well-being | 3,62 | 1,477 | 34 | | 3,33 | 1,658 | 9 | 3,72 | 1,429 | 25 |
| Employer supports me in order to achieve a higher level of performance | 3,88 | 1,365 | 34 | | 3,78 | 1,641 | 9 | 3,92 | 1,288 | 25 |
| Employer supports me in order to achieve a higher level of performance | 3,91 | 1,311 | | 34 | 3,78 | 1,394 | 9 | 3,96 | 1,306 | 25 |
| I see an opportunity for development within this firm | 3,88 | 1,343 | 34 | | 3,56 | 1,740 | 9 | 4,00 | 1,190 | 25 |
| I see an opportunity for advancement within the firm | 3,71 | 1,404 | 34 | | 3,56 | 1,740 | 9 | 3,76 | 1,300 | 25 |
| Opportunity for promotion | 3,32 | 1,364 | 34 | | 3,11 | 1,537 | 9 | 3,40 | 1,323 | 25 |
| I am ready to make personal sacrifices for this organisation | 3,15 | 1,438 | 34 | | 3,44 | 1,590 | 9 | 3,04 | 1,399 | 25 |
| I understand the problems of the organisation personally | 3,32 | 1,342 | 34 | | 4,22 | ,833 | 9 | 3,00 | 1,354 | 25 |
| I protect the reputation of this organisation | 4,50 | ,826 | 34 | | 4,78 | ,441 | 9 | 4,40 | 0,913 | 25 |
| I am fully committed to this organisation | 4,24 | 1,017 | 34 | | 4,44 | ,882 | 9 | 4,16 | 1,068 | 25 |
| I promote myself to be valuable to the employer | 4,18 | ,904 | 34 | | 4,22 | ,833 | 9 | 4,16 | 0,943 | 25 |

Significantly, all responses of Generation Y respondents to questions related to the old psychological contract have scores greater than three and range from 3.11 - 4.78 for men and 3.00 - 4.40 for women. Based on the previously defined criteria, we can say that these statements fully characterise the respondents of both genders, which would mean that both men and women identify more with the old psychological contract.

Table 2: Descriptive Statistics Generation Y– New Psychological Contract

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Generation Y | Svi  Mean | Svi  St. Dev. | Svi | M  Mean | M  St. Dev. | M  N | Ž  Mean | Ž  St. Dev. | Ž  N |
| Gender |  |  | 34 |  |  | 9 |  |  | 25 |
| Limited engagement in the organisation | 2,82 | 1,290 | 34 | 2,56 | 1,509 | 9 | 2,92 | 1,222 | 25 |
| It provides me with training only for the existing job | 3,06 | 1,413 | 34 | 2,78 | 1,563 | 9 | 3,16 | 1,375 | 25 |
| My job is limited to specific, precisely defined responsibilities | 3,35 | 1,368 | 34 | 2,89 | 1,537 | 9 | 3,52 | 1,295 | 25 |
| The employer helps me develop marketable skills | 3,29 | 1,447 | 34 | 3,33 | 1,581 | 9 | 3,28 | 1,429 | 25 |
| I get assignments that increase my employability outside the organisation | 2,65 | 1,454 | 34 | 2,56 | 1,333 | 9 | 2,68 | 1,520 | 25 |
| I am looking for potential employment opportunities outside the organisation | 2,38 | 1,477 | 34 | 2,56 | 1,509 | 9 | 2,32 | 1,492 | 25 |
| I develop contacts that create employment opportunities elsewhere | 2,26 | 1,355 | 34 | 2,67 | 1,414 | 9 | 2,12 | 1,333 | 25 |
| I only do the necessary work | 2,15 | 1,258 | 34 | 2,11 | 1,453 | 9 | 2,16 | 1,214 | 25 |
| I only do what I get paid to do | 2,62 | 1,457 | 34 | 2,11 | 1,691 | 9 | 2,80 | 1,354 | 25 |
| I have limited liability | 3,03 | 1,218 | 34 | 3,22 | 1,302 | 9 | 2,96 | 1,207 | 25 |
| I only do the job for which I have signed an employment contract | 3,18 | 1,466 | 34 | 3,00 | 1,581 | 9 | 3,24 | 1,451 | 25 |
| I have no future obligations to the employer | 3,24 | 1,437 | 34 | 3,78 | 1,716 | 9 | 3,04 | 1,306 | 25 |
| I can leave work at any time | 3,03 | 1,403 | 34 | 3,33 | 1,500 | 9 | 2,92 | 1,382 | 25 |
| I increase my visibility to potential employers outside the organisation | 2,74 | 1,421 | 34 | 3,00 | 1,323 | 9 | 2,64 | 1,469 | 25 |
| I am increasing my ability to increase my future employability | 3,47 | 1,354 | 34 | 3,67 | 1,414 | 9 | 3,40 | 1,354 | 25 |
| I find tasks that improve my employability | 3,44 | 1,260 | 34 | 3,33 | 1,500 | 9 | 3,48 | 1,194 | 25 |
| I am actively searching and finding opportunities for training and personal development | 3,88 | 1,175 | 34 | 3,89 | 1,269 | 9 | 3,88 | 1,166 | 25 |

The analysis of the answers to the questions given by the surveyed male employees from the Generation Y group concerning the new psychological contract showed that nine out of seventeen questions were given scores above 3, ranging from 3.00 - 3.89. Based on the previously defined criteria, we can say that these claims significantly characterise them, while the remaining eight claims partially characterise them. These eight questions are related to limited engagement in the organisation, precisely defined responsibilities on the job, performing tasks for which they are paid and developing contacts and creating employment opportunities outside the organisation. Eight of the seventeen answers to the questions of females from Generation Y had scores higher than three and range from 3.04 - 3.88. These are mostly the same questions as in the male group. The remaining nine questions refer to the same claims as those of the opposite sex, with the difference that women point out that the employer provides them with training for the current job, while men partially agree with this statement.

By comparing the scores related to the old and the new psychological contract, we can conclude that the respondents of both sexes of Generation Y have higher individual scores on the questions related to the old than the questions associated with the new psychological contract. Therefore, they identify more with the former rather than the latter. Based on these results, we will reject the fifth and seventh hypotheses related to the assumptions that younger female and male employees (Generation Y) will form a transactional (new) psychological contract and accept the sixth and eighth hypotheses in which it is defined that younger female employees and males (Generation Y) to form a relational (old) psychological contract.

Table 3: Descriptive Statistics Generation X – Old Psychological Contract

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| GeNERATION X | Total  Mean | Total  St. Dev. | Total | M  Mean | M  St. Dev. | M  N | F  Mean | F  St. Dev. | F  N |
| Gender |  |  | 81 |  |  | 43 |  |  | 38 |
| Employer is concerned for my personal welfare | 3,10 | 1,375 | 81 | 2,74 | 1,364 | 43 | 3,50 | 1,289 | 38 |
| Employer takes care of my health and well-being | 2,95 | 1,378 | 81 | 2,77 | 1,377 | 43 | 3,16 | 1,366 | 38 |
| Employer makes decisions that are in my interest as well | 3,14 | 1,311 | 81 | 2,88 | 1,366 | 43 | 3,42 | 1,200 | 38 |
| Employer cares about my long-term well-being | 2,96 | 1,364 | 81 | 2,70 | 1,264 | 43 | 3,26 | 1,427 | 38 |
| Employer supports me in order to achieve a higher level of performance | 3,04 | 1,327 | 81 | 2,77 | 1,250 | 43 | 3,34 | 1,361 | 38 |
| Employer supports me in order to achieve a higher level of performance | 3,07 | 1,321 | 81 | 2,74 | 1,217 | 43 | 3,45 | 1,350 | 38 |
| I see an opportunity for development within this firm | 3,10 | 1,347 | 81 | 3,05 | 1,362 | 43 | 3,16 | 1,346 | 38 |
| I see an opportunity for advancement within the firm | 2,94 | 1,288 | 81 | 2,88 | 1,219 | 43 | 3,00 | 1,375 | 38 |
| Opportunity for promotion | 2,80 | 1,219 | 81 | 2,72 | 1,098 | 43 | 2,89 | 1,351 | 38 |
| I am ready to make personal sacrifices for this organisation | 3,02 | 1,294 | 81 | 3,14 | 1,187 | 43 | 2,89 | 1,410 | 38 |
| I understand the problems of the organisation personally | 3,20 | 1,355 | 81 | 3,19 | 1,367 | 43 | 3,21 | 1,359 | 38 |
| I protect the reputation of this organisation | 4,06 | 1,208 | 81 | 3,93 | 1,261 | 43 | 4,21 | 1,143 | 38 |
| I am fully committed to this organisation | 4,01 | 1,078 | 81 | 3,77 | 1,109 | 43 | 4,29 | ,984 | 38 |
| I promote myself to be valuable to the employer | 3,67 | 1,173 | 81 | 3,35 | 1,131 | 43 | 4,03 | 1,127 | 38 |

An analysis of the answers given by the men of Generation X, related to the old psychological contract, showed that in eight of the fourteen questions, the scores were lower than three, so we can say that they partially characterise them. The remaining six questions relate to motivation for personal development and opportunities for development within the firm, sacrifice and commitment to the organisation, identification with the organisation's problems, and preserving the organisation's reputation. These questions have scores between 3.05 and 3.93, so we can say that these statements fully characterise them. Furthermore, among women, twelve of the fourteen claims received a score higher than three, and the scores ranged from 3.6 to 4.29 so that these claims characterise them as well. The remaining two questions are scored close to three and relate to opportunities for promotion and readiness for personal sacrifice in the organisation's interest. By comparing the average scores for women and men of Generation X related to the old psychological contract, we can conclude that women have higher individual scores than men and that they identify to a greater extent with the given statements from persons of the opposite sex.

Table 4: Descriptive Statistics Generation X – New Psychological Contract

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| GENERATION X | Total  Mean | Total  St. Dev. | Total | M  Mean | M  St. Dev. | M  N | F  Mean | F  St. Dev. | F  N |
| Gender |  |  | 81 |  |  | 43 |  |  | 38 |
| Limited engagement in the organisation | 2,83 | 1,243 | 81 | 2,91 | 1,087 | 43 | 2,74 | 1,408 | 38 |
| It provides me with training only for the existing job | 2,85 | 1,379 | 81 | 2,65 | 1,307 | 43 | 3,08 | 1,440 | 38 |
| My job is limited to specific, precisely defined responsibilities | 3,00 | 1,360 | 81 | 3,05 | 1,234 | 43 | 2,95 | 1,506 | 38 |
| The employer helps me develop marketable skills | 2,65 | 1,266 | 81 | 2,70 | 1,245 | 43 | 2,61 | 1,306 | 38 |
| I get assignments that increase my employability outside the organisation | 2,17 | 1,082 | 81 | 2,05 | 1,068 | 43 | 2,32 | 1,093 | 38 |
| I am looking for potential employment opportunities outside the organisation | 2,20 | 1,198 | 81 | 2,21 | 1,186 | 43 | 2,18 | 1,227 | 38 |
| I develop contacts that create employment opportunities elsewhere | 2,52 | 1,314 | 81 | 2,56 | 1,278 | 43 | 2,47 | 1,370 | 38 |
| I only do the necessary work | 3,07 | 1,412 | 81 | 3,28 | 1,161 | 43 | 2,84 | 1,636 | 38 |
| I only do what I get paid to do | 3,14 | 1,394 | 81 | 3,30 | 1,186 | 43 | 2,95 | 1,593 | 38 |
| I have limited liability | 3,11 | 1,294 | 81 | 3,28 | 1,120 | 43 | 2,92 | 1,459 | 38 |
| I only do the job for which I have signed an employment contract | 3,11 | 1,440 | 81 | 3,33 | 1,286 | 43 | 2,87 | 1,580 | 38 |
| I have no future obligations to the employer | 2,95 | 1,312 | 81 | 3,12 | 1,349 | 43 | 2,76 | 1,261 | 38 |
| I can leave work at any time | 2,89 | 1,541 | 81 | 2,93 | 1,421 | 43 | 2,84 | 1,685 | 38 |
| I increase my visibility to potential employers outside the organisation | 2,98 | 1,284 | 81 | 2,95 | 1,290 | 43 | 3,00 | 1,294 | 38 |
| I am increasing my ability to increase my future employability | 3,19 | 1,379 | 81 | 3,12 | 1,313 | 43 | 3,26 | 1,465 | 38 |
| I find tasks that improve my employability | 3,33 | 1,235 | 81 | 3,30 | 1,166 | 43 | 3,37 | 1,324 | 38 |
| I am actively searching and finding opportunities for training and personal development | 3,56 | 1,194 | 81 | 3,37 | 1,176 | 43 | 3,76 | 1,195 | 38 |

When it comes to women, five of the seventeen questions have answers greater than three in the range of 3.00 - 3.76 and these statements characterise them to a large extent, while the remaining twelve statements partially characterise them. By comparing the average grades for women and men of generation X related to the new psychological contract, we can conclude that women have lower individual grades than men and that they identify to a lesser extent with the given statements from persons of the opposite sex. By comparative analysis of average scores of the statements in the old and new psychological contract provided by Generation X women, we can say that they identify more with the statements that make up the content of the old psychological contract than with the claims that characterise the new psychological contract. Based on this, we will reject the ninth assumption that older female employees (Generation X) will form a transactional (new) psychological contract and accept the tenth hypothesis in which it is assumed that older female employees (Generation X) will form a relational (old) psychological contract. Through the analysis of the answers to the questions given by Generation X men, related to the new psychological contract, it is noticed that nine out of seventeen questions have answers between 3.05 and 3.37, which indicates that these statements fully characterise them, while the remaining eight statements partially characterise them. By comparing the average scores for Generation X men for the claims in the old and the new psychological contract, we can say that they are a shade more identified with the statements that make up the content of the new psychological contract. Based on this, we will reject the twelfth assumption that older male employees (Generation X) will form a relational (old) psychological contract and accept the eleventh hypothesis in which it is assumed that older male employees (Generation X) will form a transactional (new) psychological contract.

**4. RESEARCH RESULTS AND DISCUSSION**

Data analysis of both generations of respondents was performed using the χ2 test. Through this analysis, we have identified the relationship between the age of the Generation Y respondents and one answer to the given statements concerning the new psychological contract, which is: *I perform only the necessary tasks*. In the remaining questions, no relationship was identified between the given statements and age based on the results of the conducted χ2 test. The value obtained by the χ2 test is given in Table 5.

**Table 5:** Data Analysis of Generation Y by using χ2 test

|  |  |
| --- | --- |
| Df 12  α=0,05  χ2(r-1)(s-1);α=21,026 | New Psychological Contract  I perform only the necessary tasks. |
| Pearson Chi-Square Value | 22,070a |
| N of Valid Cases | 34 |

**Table 6:** Data Analysis of Generation X by using χ2 test sta

|  |  |
| --- | --- |
| Df 8  α=0,05  χ2(r-1)(s-1);α=15,507 | New Psychological Contract  The employer helps me develop marketable skills |
| Pearson Chi-Square Value | 19,386a |
| N of Valid Cases | 81 |

Also, the analysis using the χ2 test showed that one question related to the new psychological contract has a relationship between age and answers to questions, and it is about the support of employees in the development of marketable skills by the employer. In the remaining questions, no relationship was identified between the given statements and age based on the results of the conducted χ2 test. The value obtained by the χ2 test is given in Table 6.

**Table 7:** Data analysis of both generations using correlation

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Generation Y | | I only do the necessary work | | | |
| Total | | Women (Female) | Men (Male) |
| How old are you? | Pearson Correlation | 0,322 | | 0,309 | 0,406 |
| Sig. (2-tailed) | 0,064 | | 0,132 | 0,279 |
| Generation X | | The employer helps me develop marketable skills | | | |
| Total | Women (Female) | | Men (Male) |
| How old are you? | Pearson Correlation | - 0,129 | 0,048 | | - 0,285 |
| Sig. (2-tailed) | 0,252 | 0,773 | | 0,064 |

The results obtained by applying the χ2 test were additionally examined using Pearson 's correlation coefficient to identify the degree of agreement between these two statements relating to the new psychological contract and age. The results of this analysis are given in Table 7. The decision on whether Generation Y employees will perform only the necessary tasks does not depend on age because the value of the obtained correlation coefficient is 0.322 (r = 0.309 for women; r = 0.406 for men) and shows that there is a slight direct correlation. The opinion of Generation X employees on how much the employer helps them develop marketable skills does not depend on age because the value of the obtained correlation coefficient is -0.129 (r = 0.048 for women; r = -0.285 for men) and shows the existence of a low inverse correlation.

Within each generation group, we individually analysed the existence of a relationship between the gender of the respondents and the given statements. We also examined the degree of agreement between the genders and the given statements (Table 8). In four questions, the existence of gender dependence was identified for Generation X respondents, while in Generation Y, the presence of gender dependence was not identified. The questions in which dependence was identified by applying the χ2 test relate to the old psychological contract and the support by the employer in order to achieve higher performance and improve personal performance to be more valuable to the employer, while two issues relate to the new psychological contract and performance only necessary jobs and specific precisely defined responsibilities in work.

**Table 8:** Generation X gender dependence testing using χ2 test and correlation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Df 4  α=0,05  χ2(r-1)(s-1);α=9,488 | Old Psychological Contract | | New Psychological Contract | |
| The employer supports me in order to achieve a higher level of performance | I promote myself to be valuable to the employer | My job is limited to specific, precisely defined responsibilities | I only do the necessary work |
| Pearson Chi-Square Value | 11,153a | 12,584 a | 12,511 a | 12,380 a |
| Pearson Correlation | 0,217 | 0,290\*\* | - 0,037 | - 0,155 |
| Sig. (2-tailed) | 0,051 | 0,009 | 0,746 | 0,166 |
| N of Valid Cases | 81 | 81 | 81 | 81 |

\*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

Based on the value of Pearson's correlation coefficient in Generation X between gender and the above statements concerning the old psychological contract, we conclude that there is a slight direct correlation, while in the case of statements concerning the new psychological contract, there is a low inverse correlation.

**5. CONCLUSION**

This paper analyses the existence of a relationship between the age of the respondents and the content of the psychological contract that they build individually. The sample consists of employees in educational institutions in Leskovac and Vlasotince, which for the purposes of analysis, are divided into two groups: Generation Y and Generation X. The results of the research should provide an answer to twelve defined hypotheses. In the first step, the data were analysed using descriptive statistics. Based on the value of arithmetic means of twelve hypotheses, we accepted the second hypothesis, which contains the assumption that younger employees (Generation Y) will form a relational (old) psychological contract, the fourth hypothesis which it is defined that older employees (Generation X) will form a relational (old) psychological contract, the sixth and eighth hypotheses in which it is defined that younger female and male employees (Generation Y) will form a relational (old) psychological contract, the tenth hypothesis in which it is assumed that older female employees (Generation X) will form relational (old) psychological contract and the eleventh hypothesis in which it is assumed that older male employees (Generation X) will form a transactional (new) psychological contract. In the second step of the analysis, the dependence between the answers to the given questions and the age of both groups of respondents was examined by the χ2 test. In two questions which both refer to a new psychological contract, the existence of dependence was identified. We further checked the degree of dependence on the above questions with the help of the correlation coefficient. The results of the study showed that there is a low and insignificant correlation between age and the stated claims for the total number of respondents by these groups, but also by gender. Based on the applied method of empirical research in this study, certain limitations were identified. The sample of respondents is small, especially after the division into the two groups, so the results we obtained from his analysis cannot be attributed to all educational institutions. In addition, the questionnaire is concise and does not contain a sufficient number of items to examine the attitude of employees and identify the characteristics of the psychological contract with which they are most characterized. In order to overcome these limitations, future research should be based on a larger sample and expand the number of questions in each segment of the survey questionnaire.

**REFERENCES**

1. Kotter J. The psychological contract: managing the joining up process, Californian Management Review, 15, 1973:91-9.
2. Salai L. Razvoj međunarodne karijere, *Škola biznisa*, 4, 2011: 145-159.
3. Rousseau D., Wade-Benzoni, K. Linking strategy and human resource practices: How employee and customer contracts are created, Human Resource Management, 33(3), 1994: 463-489.
4. Tomovski S., Jovanoska C., Tairi I., Uloga psihološkog ugovora kao supstancijalni concept u procesu smanjenja rizika pri upravljanju pravno-ekonomskim entitetima, *Novi economist*, 19, 2016: 228-238.
5. Guest D., Conway N., Employee Well-Being and the Psychological Contract Research Report. London: CIPD; 2004.
6. Hiltrop J. Managing the changing psychological contract, Employee Relations, 1(18), 1996: 36-50.
7. Kupperschmidt B. Multigeneration employees: strategies for effective management, The Health Care Manager, 19, 2000: 65–76.
8. Cherrington D., Condie S. England J. Age and work values, Academy of Management Journal, 22, 1979: 617–623.
9. Cherrington D. The Work Ethic: Working Values and Values that Work. New York: Amacom; 1980.
10. Singer H., Abramson P. Values of business administrators: a longitudinal study, Psychological Reports, 33, 1973: 43–46.
11. Rhodes S. Age-related differences in work attitudes and behavior: a review and conceptual analysis, Psychological Bulletin, 93, 1983: 328–367.
12. Furnham A. The Protestant Work Ethic: The Psychology of Work-Related Beliefs and Behaviours. New York: Routledge; 1990.
13. Parker B, Cusmir L. A generational and sex-based view of managerial work values, Psychological Reports, 66, 1990: 947–951.
14. Tang T., Tzeng J. Demographic correlates of the protestant work ethic, Journal of Psychology, 126, 1992: 163–170.
15. Wentworth D., Chell R. American college students and the protestant work ethic, Journal of Social Psychology, 137, 1997: 284–297.
16. Hess N., Jepsen D. Career stage and generational differences in psychological contracts, Career Development International, 14(3), 2009: 261-283.
17. Smola K., Sutton C. Generational differences: revisiting generational work values for the new millennium, Journal of Organizational Behavior, 23, 2002: 363-82.
18. Lub X., Nije Bijvank, B., Matthijs B., Blomme R., Schalk R. Exploring the psychological contract and commitment of different generations of hospitality workers, International Journal of Contemporary Hospitality Management, 24(4), 2012: 553-573.
19. Lub X., Matthijs B., Blomme R., Schalk R. One job, one deal...or not: Do generations respond differently to psychological contract fulfillment?, The International Journal of Human Resource Management, 26, 2015: 1-28.
20. Hyder S., Syed S., Bashir Memon S. Individual level generational differences in the development of psychological contract: The case of Pakistan, Journal of Business Strategies,13(1), 2019: 19–44.
21. Rousseau D. Psychological contract inventory technical report. Pennsylvania: Heinz School of Public Policy and Graduate School of Industrial Sdministration Carnegie Mellon University Pittsburgh; 2000.
22. Panik M. Advanced statistics from an elementary point of view. USA: Elsevier Academic Press; 2005.
23. Anderson D., Sweeney D., Williams T., Freeman J., Shoesmith E. Statistics for business and economics. USA: South-Western Cengage Learning; 2010.
24. Sharma K. Business statistics. Noida: Vikas Publishing House; 2018.
25. Marjanović M., Mihailović I., Spasić K. Statistika u ekonomiji i poslovanju sa zbirkom rešenih zadataka. Leskovac: Visoka poslovna škola strukovnih studija; 2016.

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