

# DIRECT AGE DISCRIMINATION OF OLDER AND YOUNG EMPLOYEES IN THE SCIENTIFIC AND HIGHER EDUCATION SYSTEM OF THE REPUBLIC OF CROATIA

---

**Bjelić Gaćeša, Dragana**

*Source / Izvornik:* **International Journal Vallis Aurea, 2021, 7, 5 - 19**

**Journal article, Published version**

**Rad u časopisu, Objavljena verzija rada (izdavačev PDF)**

<https://doi.org/10.2507/IJVA.7.2.1.83>

*Permanent link / Trajna poveznica:* <https://um.nsk.hr/um:nbn:hr:112:193564>

*Rights / Prava:* [Attribution-NonCommercial-NoDerivatives 4.0 International/Imenovanje-Nekomercijalno-Bez prerada 4.0 međunarodna](#)

*Download date / Datum preuzimanja:* **2025-02-22**



**VELEUČILIŠTE U POŽEGI**  
STUDIA SUPERIORA POSEGANA

*Repository / Repozitorij:*

[Repository of Polytechnic in Pozega - Polytechnic in Pozega Graduate Thesis Repository](#)





Bjelić Gaćeša, Dragana <sup>1</sup>

*This paper is based on a part of the data collected within the implementation of a wider research the basic goal of which was to verify the existence of age discrimination in the system of science and higher education of the Republic of Croatia.*

## DIRECT AGE DISCRIMINATION OF OLDER AND YOUNG EMPLOYEES IN THE SCIENTIFIC AND HIGHER EDUCATION SYSTEM OF THE REPUBLIC OF CROATIA

### Abstract:

Age discrimination comes to the fore at all stages of the employment process and can imply a number of negative consequences for both young and older people.

The goal of this paper is to check the existence of direct age discrimination of older and young workers in the hiring process in the system of science and higher education of the Republic of Croatia. The paper should answer the questions of whether and to what extent respondents have ever personally experienced discrimination in employment by being told or written that they are too young or too old.

In order to achieve the said goal, an empirical research was conducted, and employees of two Croatian universities were selected for the research group: Josip Juraj Strossmayer University of Osijek and the University of Rijeka.

Data collection was conducted using an online questionnaire posted on the Google Drive platform between May 29 and June 21, 2017. The list of contacts and e-mail addresses of the respondents were obtained from the official websites of the constituent universities and their

Rectors' offices, and a total of 2958 addresses were identified: 1506 at the University of Rijeka and 1452 addresses at the Josip Juraj Strossmayer University in Osijek.

The empirical research results indicated the following:

1. 12.97% of respondents experienced direct age discrimination in the hiring process by being told/informed in writing that they were too young
2. 7.52% of respondents experienced direct age discrimination in the hiring process by being told/informed in writing that they were too old
3. there is a statistically significant difference between respondents with regard to age. Elderly respondents were more likely to experience direct age discrimination by being told/informed in writing that they were too old
4. there is a statistically significant difference between respondents with regard to years of service. Respondents who were told/informed in writing in the hiring process that they were too old on average have more years of work experience (21,05 years) than those who were not told/informed in writing (15, 47 years)

### Keywords:

direct age discrimination; hiring process; science and higher education system

### Author's data:

<sup>1</sup> dr. sc. Dragana Bjelić Gaćeša, college professor, Poytechnic in Požega, Vukovarska 17, Požega, dbjelic@vup.hr

## Introduction

6 Since the paper deals with the issue of age discrimination of older and young workers, it is necessary to indicate at the very beginning who is considered an older and who a young worker. According to the World Health Organization, every person over the age of 60 is considered older, while according to the Organization for Economic Cooperation and Development, a person aged 55 to 64 is considered an older worker, and a person aged 15 to 24 is considered a young worker. For the purposes of this paper, the age limits provided by the said Organization will be used. The emphasis in the paper is on age discrimination, which is when one particular age group is treated differently from another age group based on chronological age. [12] In this sense, age discrimination can be considered a practical manifestation of ageism, which is generally reflected negatively in relation to the elderly. Age discrimination can be defined as different and discriminatory treatment based on age, a series of prejudices or negative assumptions and stereotypes about the elderly. [10] Furthermore, it should be noted that age discrimination in the hiring process consists in using the age of the individual as a decisive factor in making decisions related to employment, dismissal, promotion, but also mandatory retirement. Since some authors consider the institute of compulsory retirement as a "form of age discrimination par excellence", it is necessary to look back at the situation in the Republic of Croatia with regard to the above issues. In accordance with the provisions of Article 112. of the Labour Law, employment, inter alia, terminates at the age of 65. However, it should

be noted that there are exceptions to this rule which, as such, are provided by special regulations. Speaking of exceptions, there are categories of workers who, according to the provisions of special laws, may remain in employment after the age of 65, and on the other hand, those categories of workers who are by special regulations allowed to exercise the right to an old-age pension before the age of 65. [4] There is no doubt that in practice "ageism" and age discrimination will be closely intertwined, for example, in the way that employers' negative prejudices stemming from their fear of their own aging and inability in some way affect staffing policy towards older workers. [8] Research shows that 11% of older people in Europe often experience discrimination and that older people with higher levels of education as well as those with higher incomes experience discrimination less often than the others. [16] Research conducted by psychologists to determine the existence of age discrimination in older workers in the hiring process has shown that respondents would usually choose a younger one between two candidates. [6] Van den Heuvel and van Santvoort conducted a survey on the experience of age discrimination in 2011 focusing on direct age discrimination against the elderly (aged 65 and over) in 28 EU countries. The results showed that women aged 62 and over experienced age discrimination to a greater extent than men. Furthermore, research has shown that people with a higher level of education, people with high incomes, older people who are satisfied with their lives, who are in good health and who have confidence in their fellow citizens experience age discrimination to a lesser extent. The question

arises as to why employers are reluctant to hire older workers? The reason for this seems to lie in the prejudices that employers have towards older workers. Namely, aging usually results in negative prejudices [17, 11, 14], and they lead to discrimination against the elderly. Speaking about the prejudices of employers towards older workers, it should be pointed out that employers see the main reason for not hiring older workers in the unprofitability of investing in human capital which has a shorter potential. Other reasons for not hiring older workers cited by employers concern the prejudice that older workers have less energy, are less flexible and expect higher wages. Furthermore, employers have higher expenditures than older workers when it comes to various forms of social security and fear of frequent sick leave. Older workers are perceived by employers as unprepared for training and as an obstacle to the advancement of younger workers. Finally, the reason for not employing older workers lies in the suspicion of employers regarding their competencies, but also in the fear of possible lawsuits for discrimination to which older workers could expose them. [6, 18] One of the reasons for not employing older workers certainly lies in the fact that employers perceive them as less productive compared to younger workers. Since it is only a matter of prejudice, research is needed to determine why employers prefer younger workers. This approach to older workers has changed in recent years due to demographic changes that are reflected in the reduction of workforce. In the context of discrimination against young people, it should be emphasized that in 2016, according to estimates, young people accounted for over 35% of all unemployed

people in the world. [6] If we address the issue of youth employment or unemployment in the world, the data published in "The World Factbook" by the Central Intelligence Agency of the US government are relevant. According to the Agency, Bosnia and Herzegovina ranks first in the world in terms of unemployment with 62%, while Croatia is in the ninth place with 43% of unemployed young people. [21] Today, indirect discrimination against young people is increasingly present in the labor market, especially in the form of their employment on the basis of fixed-term employment contracts and part-time employment contracts as one of the atypical forms of employment. This is especially true if we keep in mind that workers employed under atypical employment contracts do not exercise the same rights compared to workers employed under permanent employment contracts with full-time employment. [2,3] The situation is not better in the Republic of Croatia either. Namely, the research conducted in 2010 as part of the project "Youth in the labor market" shows that about 52% of young people were employed under a permanent employment contract, while other employees concluded a permanent employment contract in about 87% of cases. Furthermore, the same survey showed that young people were twice as often employed under a fixed-term contract (16%) as other employees (9%). [5] Furthermore, during 2014, employers in the Republic of Croatia hired a total of 171,693 persons through atypical forms of employment (temporary service contract, author's contract, student contract, contract through a temporary employment agency), which is about 52.5% of total employment under an employment contract. [1] Numerous

studies support the existence of age discrimination against young people. However, according to some authors, discrimination against young people differs from discrimination against the elderly. In this regard, Sargeant states that discrimination to which young people are exposed because of their age may be different from that which affects the elderly, but still constitutes direct or indirect discrimination and harassment. [13] Of exceptional importance in the context of the possibility of recognizing areas in which age discrimination may occur, is a study cited in 2001 on a limited number of people between the ages of 16 and 30, which concerned the perception of discrimination. [13,20] This study showed that discrimination can be present in the field of employment, [9] in particular where various job advertisements containing the lowest age limit are taken into account. Furthermore, the area of selection is also subject to age discrimination when it comes to, for example, entering a service for which a minimum age of 18 is required. Age discrimination is also present in terms of the amount of paid salary, since the results of the research showed that younger people are paid less compared to other people who do the same or similar work. It is interesting to note that regarding the existence of age discrimination in the field of "training", the opinions of the respondents were divided. While some felt that younger workers were in a better position than others in this respect, others felt that for employers their own promotion was a priority. [9] Speaking of discrimination against young people, it is important to mention a study conducted by the UK Department of Labour and Pensions in 2012. [18] The importance of the

study is reflected in the fact that it gave rise to several possible reasons for discrimination against young workers. Namely, according to the study, younger workers are perceived as more demanding compared to other workers, and what may be disincentive for the employer who wants to hire them are the expectations of young workers to have a flexible schedule of work and leisure. Furthermore, the study showed that the apparent lack of responsibility of younger workers may speak in favor of their discrimination. [18] The allegations of discrimination against young people are also stated by Stern and others, according to whom young people are poor in terms of the quality needed for employment, and to a greater extent cynical, and less motivated in terms of the opportunity to do a good job. [15]

In view of all the above, it could be concluded that recent trends in labor markets in OECD countries and related to young workers (reduction in the relative amount of wages and reduction in the employability rate) support the fact that age discrimination can play an important role in their marginalization.

## Methodology

Data collection was conducted using an online questionnaire posted on the Google Drive platform in the period from May 29 to June 21, 2017. The questionnaire consisted of 22 questions, three of which were open-ended (no pre-offered answers) and the rest closed-ended. Attitudes about discrimination were measured using Likert-type questions with five levels of agreement (from "completely agree" to "strongly disagree"). Such a questionnaire

was sent by e-mail with a request to participate in the research to all employees of the aforementioned universities. It is important to point out that, in addition to the invitation to participate in the research, the respondents are also guaranteed the anonymity of their answers. Anonymity, which was extremely important in this case due to the sensitivity of the topic, was complete, taking into account the fact that the identity of the research participants could in no way be revealed from their answers, and the Google Drive platform does not allow the person who posted the questionnaire to identify the person who filled it out (using IP addresses or in any other way), with which fact the respondents were familiar. A total of 96 messages remained undelivered as part of this research, mainly because the addresses were non-existent (due to out-of-date lists on the university website) or due to the e-mail boxes being full. A total of 532 completed questionnaires were received, which makes a response rate of 18.59% that can be considered acceptable for this type of research. In relation to variables of nominal type, i.e. when there was no more-or-less ratio between the categories, the chi-square test was used and Cramer's V as a correlation coefficient if the chi-square indicator was statistically significant. It should be noted that within the subject research, in addition to the frequency of answers to certain questions, demographic differences in the answers to the questions were also investigated with regard to age, gender, level of education, type of job, year of service, type of employment contract, and belonging to one of the universities covered by the research (University of Osijek or University of Rijeka).

## Results of empirical research

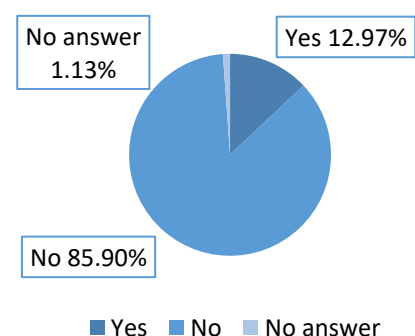
In order to check the existence of direct age discrimination of older and young workers in the hiring process in the system of science and higher education of the Republic of Croatia, they were asked questions:

“1. Have you ever personally experienced discrimination in the hiring process by being told or informed in writing that you were too young?” and

“2. Have you ever personally experienced discrimination in the hiring process by being told or informed in writing that you were too old?”

The results of the survey showed that 12.97% of participants stated that they had personally experienced discrimination by being told or informed in writing that they were too young (Chart 1).

Graph 1. Proportion of respondents who were told/informed in writing in the hiring process that they were too young



*Source: Author's processing according to the results of empirical research*

When it comes to differences between respondents with regard to gender, no statistically significant difference was found.

Thus, the share of those who were told/informed in writing in the hiring process

that they were too young is very similar for both men and women, i.e. it is 13.16% and 13.13%.

Table 1. Respondents who were told/informed in writing in the hiring process that they were too young - gender differences

	Yes	No	Total
<b>Male</b>	25 13,16%	165 86,84%	190 100,00%
<b>Female</b>	44 13,13%	291 86,87%	335 100,00%
<b>Total</b>	69 13,14%	456 86,86%	525 100,00%

$\chi^2=0,00$ ;  $p=0,99$

*Source: Author's processing according to the results of empirical research*

No statistically significant difference was found between teaching, administrative, technical and support staff (Table 2).

10

Table 2. Respondents who were told/informed in writing in the hiring process that they were too young - teaching, administrative and technical and support staff

	Yes	No	Total
<b>Teaching staff</b>	50 12,85%	339 87,15%	389 100,00%
<b>Administrative and technical staff</b>	14 12,50%	98 87,50%	112 100,00%
<b>Support staff</b>	5 21,74%	18 78,26%	13 100,00
<b>Total</b>	69 13,17%	455 86,83%	524 100,00%

$\chi^2=1,56$ ;  $p=0,46$

*Source: Author's processing according to the results of empirical research*

No statistically significant difference was found among the respondents with regard to the level of education (Table 3).

Table 3. Respondents who were told/informed in writing in the hiring process that they were too young - educational differences

	Yes	No	Total
Graduate study and higher	60 12,71%	412 87,29%	472 100,00%
Undergraduate study	3 17,65%	14 82,35%	17 100,00%
Secondary school	6 16,22%	31 83,78%	37 100,00%
Total	69 13,12%	457 86,88%	526 100,00%

$\chi^2=0,69$ ;  $p=0,71$ , Source: Author's processing according to the results of empirical research

Likewise, there is no statistically significant difference, in this respect, either between fixed-term and part-time employees (both full-time groups) and part-time employees.

Table 4. Respondents who were told/informed in writing in the hiring process that they were too young - according to the type of employment contract

	Yes	No	Total
Permanent full-time	52 15,03%	294 84,97%	346 100,00%
Fixed-term full-time	15 9,15%	149 90,85%	164 100,00%
Part-time	2 13,33%	13 86,67%	15 100,00%
Total	67 13,14%	443 86,86%	510 100,00%

$\chi^2=3,58$ ;  $p=0,19$ , Source: Author's processing according to the results of empirical research

The employees of the two universities covered by the research do not differ in this respect.

Table 5. Respondents who were told/informed in writing in the hiring process that they were too young - the difference between the University of Osijek and the University of Rijeka

	Yes	No	Total
University of Osijek	38 13,38%	246 86,62%	284 100,00%
University of Rijeka	31 12,81%	211 87,19%	242 100,00%
Total	69 13,12%	457 86,88%	526 100,00%

$\chi^2=0,04$ ;  $p=0,85$  Source: Author's processing according to the results of empirical research

When it comes to age, it is interesting that there is no statistically significant difference in terms of age among those who are told/informed in writing that they were too young.



Table 6. Respondents who were told/ informed in writing in the hiring process that they were too young - age differences

	N	$\bar{X}$	S	t	p
Yes	69	40,49	9,19	-1,56	0,15
No	446	42,43	10,47		

Source: Author's processing according to the results of empirical research

The same result is obtained when comparing the shares of those respondents who were told/informed in writing in the hiring process that they were too young and between three age categories - younger respondents, middle-aged respondents and older respondents. From this result, it can be concluded that age discrimination in this respect is probably at a similar level as before, given that middle-aged and older employees at some point in their lives experienced such discrimination to a similar extent as younger respondents.

Table 7. Respondents who were told/informed in writing in the hiring process that they were too young - age groups

	Yes	No	Total
Young age	6 10,71%	50 89,29%	56 100,00%
Middle age	56 15,01%	317 84,99%	373 100,00%
Older age	7 8,14%	79 91,86%	86 100,00%
Total	69 13,40%	446 86,60%	515 100,00%

$\chi^2=3,24$ ;  $p=0,20$ , Source: Author's processing according to the results of empirical research

When it comes to length of service, no statistically significant difference was found between those who were told in the hiring process that they were too young and those who were not.

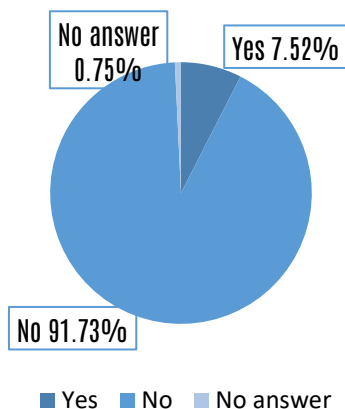
Table 8. Respondents who were told/informed in writing in the hiring process that they were too young - differences in work experience

	N	$\bar{X}$	S	t	p
Yes	64	15,13	9,20	-0,68	0,50
No	424	16,06	10,33		

Source: Author's processing according to the results of empirical research

An even smaller share is 7.52% of those who were told/informed in writing in the hiring process that they were too old (Graph 2).

Graph 2. Share of respondents who were told/informed in writing in the hiring process that they were too old



Source: Author's processing according to the results of empirical research

Furthermore, in this respect, there are no differences by gender, i.e. both men and women who have ever been told/informed in writing in equal proportions that they were too old.

Table 9. Respondents who were told/informed in writing in the hiring process that they were too old - gender differences

	Yes	No	Total
<b>Male</b>	11 5,73%	181 94,27%	192 100,00%
<b>Female</b>	29 8,66%	306 91,34%	335 100,00%
<b>Total</b>	40 7,59%	487 92,41%	527 100,00%

$\chi^2=1,78; p=0,18$ , Source: Author's processing according to the results of empirical research

No statistically significant difference was found between teaching, administrative, technical and support staff

(Table 10). Table 10. Respondents who were told/ informed in writing in the hiring process that they were too old - teaching, administrative and technical and support staff

	Yes	No	Total
<b>Teaching staff</b>	25 6,39%	366 93,61%	391 100,00%
<b>Administrative and technical staff</b>	12 11,11%	100 88,89%	112 100,00%
<b>Support staff</b>	3 13,04%	20 86,96%	23 100,00%
<b>Total</b>	40 7,60%	486 92,40%	526 100,00%

$\chi^2=3,33; p=0,19$  Source: Author's processing according to the results of empirical research

The differences between the respondents according to the level of education were not statistically significant either (Table 11).

Table 11. Respondents who were told/ informed in writing in the hiring process that they were too old - educational differences

	Yes	No	Total
Graduate study and higher	35 7,38%	439 92,62%	474 100,00%
Undergraduate study	2 11,76%	15 88,24%	17 100,00%
Secondary school	3 8,11%	34 91,89%	37 100,00%
Total	40 7,58%	488 92,42%	528 100,00%

$\chi^2=0,47$ ;  $p=0,79$ , Source: Author's processing according to the results of empirical research

Also, no statistically significant difference was found when it comes to groups of employees divided on the basis of employment status into (1) those who work on permanent basis full-time, (2) those who work part-time full-time and (3) ) those who work part-time.

Table 12. Respondents who were told/ informed in writing in the hiring process that they were too old - due to the type of employment contract

	Yes	No	Total
Permanent full-time	32 9,25%	314 90,75%	346 100,00%
Fixed-term full-time	7 4,22%	159 95,78%	166 100,00%
Part-time	1 6,67%	14 93,33%	15 100,00%
Total	40 7,59%	487 92,41%	527 100,00%

$\chi^2=4,07$ ;  $p=0,13$

Source: Author's processing according to the results of empirical research

The employees of the University of Osijek and the University of Rijeka do not differ in this respect either.

Table 13. Respondents who were told/ informed in writing in the hiring process that they were too old - the difference between the University of Osijek and the University of Rijeka

	Yes	No	Total
University of Osijek	21 7,37%	264 92,63%	285 100,00%
University of Rijeka	19 7,82%	224 92,18%	243 100,00%
Total	40 7,58%	488 92,42%	528 100,00%

$\chi^2=0,04$ ;  $p=0,85$  Source: Author's processing according to the results of empirical research

The following table shows that there is a relationship between age and whether the respondent was ever told/ informed in writing in the hiring process that he/she was too old. This connection is completely understandable if we take into account that younger respondents could hardly have been in a situation where they were told or informed in writing in the hiring process that they were too old precisely because of their younger age.

Table 14. Respondents who were told/ informed in writing in the hiring process that they were too old - age differences

	N	$\bar{X}$	S	t	p
Yes	40	47,55	8,98	3,48	0,00
No	476	41,71	10,31		

Source: Author's processing according to the results of empirical research

The same result is obtained when comparing three age groups - this situation happened more often to older respondents, followed by middle-aged and finally younger respondents.

Table 15. Respondents who were told/ informed in writing in the hiring process that they were too old - age groups

	Yes	No	Total
Young age	0 0,00%	56 100,00%	56 100,00%
Middle age	27 7,22%	347 92,78%	374 100,00%
Older age	13 15,12%	73 84,88%	86 100,00%
Total	40 7,75%	476 92,25%	516 100,00%

$\chi^2=11,38$ ;  $p=0,00$ , Cramer's  $V=0,15$

Source: Author's processing according to the results of empirical research

In terms of length of service, a statistically significant difference was found (Table 16). Namely, as expected, the respondents who were told that they were too old in the hiring process have, on the average, more completed years of work experience than those who were not told such a thing (21.05 vs. 15.47).

Table 16. Respondents who were told/ informed in writing in the hiring process that they were too old - years of work experience

	N	$\bar{X}$	S	t	p
Yes	37	21,05	9,43	3,24	0,00
No	453	15,47	10,14		

Source: Author's processing according to the results of empirical research

## Discussion - application of the results of empirical research in order to answer the questions presented in the paper

The first question "Have you ever personally experienced discrimination in the hiring process by being told or informed in writing that you were too young?" aimed to check whether and to what extent the respondents had ever experienced direct age discrimination in the hiring process by being told or informed in writing that they were too young. The results of the survey showed that 12.97% of respondents had experienced such direct age discrimination, 85.90% had not experienced such discrimination, while 1.13% of respondents had not answered the question (Chart 1). Regarding the demographic differences among respondents, it was found that there is no statistically significant difference ( $p = 0.99$ ) between men and women, more precisely the share of men who were told or informed in writing in the hiring process that they were too young is 13.16% and is very similar to the share of women who experienced such type of discrimination which is 13.13%. It is interesting to note that the results of the research showed that there is no statistically significant difference between teaching, administrative, technical and support staff (12.85%; 12.50%; 21.74%;  $p = 0.46$ ), between respondents with completed graduate studies, undergraduate studies and secondary school (12.71%; 17.65%; 16.22%;  $p = 0.71$ ), employees under a permanent employment contract full - time, employees under fixed-term full - time and part - time employees

(15.03%; 9.15%; 13.33%;  $p = 0.19$ ), as well as between employees of the University of Osijek and the University of Rijeka (13.38%; 12.81%;  $p = 0.85$ ). Thus, it can be concluded that these groups of respondents similarly experienced direct age discrimination in the hiring process by being told or informed in writing that they were too young. Of particular interest are the results of research that have shown that there is no statistically significant difference in this regard ( $p = 0.15$ ) when it comes to the age of the respondents. Namely, the average age of those who experienced this type of discrimination is 40.49 years, and those who did not experience it 42.43 years. (Table 6). By the division of respondents into three age groups (young, middle and older age) the same result was obtained. Specifically, young, middle-aged, and older respondents similarly experienced direct age discrimination by being told or informed in writing that they were too young (10.71%; 15.01%; 8.14%;  $p = 0.20$ ). From the above indications, it can be concluded that this situation is probably due to the fact that older and middle-aged respondents experienced this type of discrimination at some point in their lives and that therefore the ratio of discrimination experienced is similar to the ratio of age discrimination experienced by young respondents. Since the first question aimed to check whether and to what extent the respondents had ever experienced direct age discrimination in the hiring process by being told or informed in writing that they were too young, the second question was "Have you ever personally experienced discrimination in the hiring process by being told or informed in writing that you were too old?" on the other hand, aimed to check whether and to what

extent the respondents had ever experienced direct age discrimination in the hiring process by being told or informed in writing that they were too old. An empirical study in this regard found that 7.52% of respondents had experienced this type of discrimination in the hiring process, 91.73% had not experienced this type of discrimination, while 0.75% of respondents had not answered the question (Graph 2). If the demographic differences among the respondents are analyzed, it should be noted that it was found that there is no statistically significant difference between men and women ( $p = 0.18$ ), which indicates that both men and women have a similar ratio (M 5.73%, F 8.66%) who in the hiring process were told or informed in writing that they were too old. Furthermore, there is no statistically significant difference ( $p = 0.62$ ) between teaching, administrative, technical and support staff (6.39%; 11.11%; 13.04%), between respondents with completed graduate studies, undergraduate studies and secondary school (7.38%; 11.76%; 8.11%;  $p = 0.79$ ), as well as between employees of the University of Osijek and the University of Rijeka (7.37%; 7.82%;  $p = 0.85$ ), which indicates that these groups had experienced this type of discrimination to a similar extent. There is no statistically significant difference ( $p = 0.13$ ) between the respondents employed under permanent full-time employment contract, full-time employees and part-time employees. Such results may indicate the legal regulation of the employment process in the system of science and higher education. It should be noted that, unlike the previous question, which referred to the "youth" of the respondents, the connection between age and the experience of age

discrimination ever in the hiring process was found here in a way that the respondents were told or informed in writing that they were too old ( $p = 0.00$ ). Namely, the average age of respondents who experienced such discrimination is 47.55 years, and those who did not experience it is 41.71 years. (Table 14). An identical result was obtained by dividing the respondents into three age groups. Thus, younger respondents did not experience this type of age discrimination at all, which is understandable since these are people under the age of 30, so it is difficult to expect that someone could tell them that they were too old in the hiring process. On the other hand, the respondents who mostly (15.12%) experienced this form of age discrimination are older respondents (Table 15).

## Conclusion

The results of the research speak in favor of the existence of direct age discrimination of older and young workers in the hiring process in the system of science and higher education of the Republic of Croatia. Furthermore, the research showed that older respondents were more likely to experience direct age discrimination by being told/informed in writing that they were too old and that respondents who were told/ informed in writing in the hiring process that they were too old on the average had had more years of service than those who were not so told/informed in writing. Age discrimination of older workers is reflected in the labor market in their poorer treatment by young workers compared to young workers, lower demand for their labor force or the reluctance of employers to hire older workers due to

prejudices against them. Taking into account the fact that discrimination in general and age discrimination can have its basis in stereotypes and prejudices, it is necessary to sensitize the public to combat stereotypes and prejudices, in which the media and civil society organizations should play a significant role since combating prejudice and stereotypes is also in part combating discrimination. Furthermore, it is necessary to work on promotional activities with the aim of raising the level of awareness of citizens, but also institutions about discrimination as an inadmissible difference in treatment. The most common problems that young people face due to their age are reduced training opportunities, lower salaries, longer probationary periods and performing jobs that often involve having more skills and poor career potential. However, a particular problem for young people is their exposure to indirect age discrimination, especially in the context of their getting employed under atypical contractual arrangements, which do not provide certainty for the future and significantly affect workers' rights. In order to protect young workers as much as possible from such indirect discrimination, the purpose of such non-standard forms of employment should be clearly indicated in laws or collective agreements. Precise and unambiguous regulation would reduce the possibility of abuse, primarily bearing in mind the possibility of such arrangements to replace a permanent employment contract. There is no doubt that the best solution would be for such provisions to be implemented in collective agreements, where possible and where they exist.

## References

- [1] Bacalja, D. et.al. [2015]: Employers' Survey 2015, Croatian Employment Service, Zagreb
- [2] Bilić, A. [2012]: Flexibility and deregulation in labor relations, Doctoral dissertation, Split
- [3] Bilić, A. [2009]: Flexible forms of work and labor law, ZPF University of Rijeka (1991), v.30, no.2., P.920.- 942
- [4] Bjelić, D. [2018]: Age discrimination in labor relations, Polytechnic of Požega, Požega, ISBN 978-953-7744-37-3
- [5] Crnković Pozaić, S., Meštrović, B. [2010]: Youth Unemployment: Voices of the Protagonists: Summary of Research Results, Gopa Consultans
- [6] Lahey, J.N. [2005]: Do older workers face discrimination? Center for Retirement Research at Boston College, Boston
- [7] Loretto, W., Duncan, C., White, P.J. [2000]: Ageism and employment: controversies, ambiguities and younger people's perceptions, *Ageing and Society*, 20, Cambridge University Press, p.279.-302
- [8] Macnicol, J. [2006]: Age Discrimination, An Historical and Contemporary Analysis, Cambridge University Press, New York
- [9] O'Higgins, N. [2001]: Youth Unemployment and Employment Policy, A Global Perspective, International Labour Office, Geneva
- [10] Pearson, M. [1996] : Experience, skill and competitiveness: The impication of an ageing population for the workplace, European Foundation for the Improvement of Living and Working Conditions, Dublin
- [11] Posthuma, R.A., Wagstaff , M.F.,Campion, M.A. [2012]: Age Stereotypes and Workplace Age Discrimination in: Hedge, J.W., Borman, W.C.

(eds.): The Oxford Handbook Of Work and Aging, Oxford University Press

[12] Sargeant, M. [2011]: Age Discrimination, Ageism in Employment and Service Provision, Middlesex University, UK

[13] Sargeant, M.: Age Discrimination In Employment, Gower, Hampshire, 2006

[14] Schaice, K.W., Willis, S.L. [2007]: Psihologija odrasle dobi i starenja, Naklada Slap

[15] Stern, D. et. al.: Quality of student's work experience and orientation toward work, Youth & Society, 22, p.263.-282

[16] van den Heuvel, Wim, J.A., van Santvoort Marc, M. [2011]: "Experienced discrimination amongst European old citizens", European Journal of Ageing, sv.8., no.4., p.291.-299.

[17] Vodopivec, M., Dolenc, P. [2008]: Living longer, working longer: how to achieve this goal in the labor market? Financial Theory and Practice 32 (1), p. 68-82

[18] Warr, P. [1994]: Age and Job Performance in: Snel, Jan and Cremer, Roel (eds.), Work and Aging: A European Perspective, Taylor and Francis, London, p.309.-322

[19] Labour Law, Official Gazette 93/14, 127/17, 98/19

[20] Ageism-Attitudes and Experiences of Young People, dostupno na: [www.agepositive.gov.uk](http://www.agepositive.gov.uk) (datum pristupa: 15.07.2021.).

[21] CIA: Croatia is ninth in the world in terms of youth unemployment, available at: [m.srednja.hr.news](http://m.srednja.hr/news) (access date: 20.08.2021.).