

## **Is It Possible to Overcome the Effects of Bias in the Recruitment Process? An Experimental Study on Halo and Contrast Effect**

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### **Abstract**

This study aims to determine whether or not candidates' curriculum vitae generate halo and contrast effects on recruiters' decisions for a particular professional position. The true experimental design of the study was conducted with the randomized pretest-posttest control group design. A total of 900 university students in tourism participated in the study. A fictional scenario based on recruitment was set up and evaluations were tested with research questions regarding said scenarios. Respondents in control and experiment groups evaluated with fifteen-day intervals the curriculum vitae of different candidates, who applied for a front office department manager position, concerning their professional adequacy, perceived performance, and employability. Findings revealed that respondents base their candidate evaluations on comparisons rather than the requirements of the position. Moreover, respondents are observed to make inferences regarding candidates' personality traits based on the information they provide in their curriculum vitae. The study empirically reveals that candidate evaluations based on only the content of their curriculum vitae are open to halo and contrast effects. The findings of the study contribute to understanding potential rater bias in recruitment processes.

**Key words:** Halo effect, Contrast effect, Recruitment, Selection

**JEL Code:** M12, O15

### **1. Introduction**

Human capital is the key source of a company's success and competitive edge. That being the case, gaining employees with the right competencies is quite important for a company's competitive advantage (Wright et al. 1994; Barney & Wright, 1998; Barlett & Ghoshal, 2002). Recruitment is among the most important functions of human resources management. The quality of companies' human resources has to do with the correct management of selecting personnel. Thus,

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recruitment becomes a significant human resources function that must be carefully emphasized (DeCenzo, Robbins &Verhulst, 2017). The process of selecting personnel is a costly, lengthy, and challenging process. Yet, it is always less costly than hiring an employee, who is not compatible with the organization (Yelboğa, 2008). Therefore, the most important and critical stage of the recruitment process is to decide on whom to hire (Aydıntan, 2015: 554). There are many benefits of selecting the right employee for the right job. Some of them can be listed as reducing costs, improving productivity, fulfilling goals on time, cutting training costs, enhancing customer satisfaction, and ensuring low rates of employee turnover. Failure to select the right employee may give way to difficult consequences for both the organization and the employee. Such failure may lead to the use of organizational resources in unproductive ways, increased costs, low customer satisfaction, besides economic and psychological challenges for the employee.

Feelings, values, needs, and attitudes of raters may be included in the process of candidates' screening and evaluations. During this process, some evaluations can be faulty due to raters' abovementioned characteristics. Stemming from raters' unconscious bias, errors can cause biased consequences (Ünsal & Türetgen, 2013: 87). Unconscious bias is often encountered in human relationships. Occurring in ways that we do not notice and beyond our power, such bias is involuntary, triggered by our instincts (Oberai & Anand, 2018: 14). Unconscious bias is also referred to as implicit bias and occurs "when we make judgments or decisions based on our prior experience, or own deep-seated thought patterns, assumptions or interpretations, and we are not aware we are doing it." (Royal Society, 2015:2). Unconscious bias negatively impacts recruitment and retention attempts, in addition to distorting skill and performance evaluations and preventing fair evaluations of whom to recruit or whom to promote (McCormick, 2015).

Many errors, arising often from raters' bias during recruitment and performance evaluation processes are mentioned in the literature. Such errors can be listed as stereotyping, halo error, leniency error, severity error, roundabout evaluation, contrast effect, similar to me effect, and first impression error (Akduman, 2020; Prestia, 2019; Prowse & Prowse, 2009). One of the most common ones among them is halo error. Halo error is an evaluation error, stemming from the overgeneralization of a particular feature of a person or object. It usually occurs, when concrete information about the perceived target is lacking or there is inadequate motivation to research it (Almaçık, 2016). Halo error affects decisions in two ways. While the positive perception of a holistic assessment, based on one positive quality of a person, is described as halo error, the negative holistic assessment, based on one negative quality is called horn error. Another common rater error is the contrast effect. The contrast effect occurs, when the person is evaluated by being compared with another. The contrast effect also causes the person to be perceived more positively or negatively.

Many candidates apply to jobs today with their curriculum vitae or through social media (Chang & Madera, 2012; Gibbs et al., 2015; Melanthiou et al., 2015; Ladkin & Buhalis, 2016; Becton et al., 2019; Alarcon et al., 2019). Raters make their decisions under the influence of halo and contrast effects, as they assess a large number of candidates. Such erroneous decisions may severely damage the organization and the candidate. Studies on this topic are heavily conducted in the context of social psychology, for example in interpersonal judgment (Murphy and Jako, 1989; Nisbett and Wilson, 1977), in the marketing field (Wirtz & Bateson, 1995; Wirtz, 2001; Wirtz, 2003) and in human resource management such as evaluative judgment in performance appraisals (Erbasi et. al., 2012; Gurbuz & Dikmenli, 2007; Bellé, Cantarelli, Belardinelli, 2017). There are not many studies regarding recruitment itself (Junaid et al., 2018; Fatfouta & Ghoniem, 2021). This study focuses on the potential contrast and halo effects during the recruitment process. In this context, the study has two fundamental purposes. First, the study tests whether or not different CV content generates a contrast effect on raters' hiring decisions. The second aim of the study is to test whether or not raters assess candidates by what they see on candidates' CVs only. Accordingly, an experimental method was adopted, since cause and effect links can be best observed with such a method. A true experimental design was set up. There is a limited number of studies that investigate these two rater errors within the context of recruitment (Russo, 2016; Junaid et al. 2018). The findings of this study offer theoretical contributions in revealing potential rater errors in recruitment processes and practical contributions in raising awareness regarding rater errors.

## **2. Literature Review and Hypothesis Development**

The contrast effect is the tendency to evaluate a person's performance or other qualities about another person's performance or qualities (Becker & Miller, 2002: 668). In other words, the contrast effect reflects the evaluation of a person, conducted under the influence of another interviewed candidate's qualities (Wexley et al., 1972; Wexley et al., 1973; Dipboye et al., 1984). Previous studies have revealed that physical qualities and perceived attractiveness impact how individuals are evaluated. Kernis and Wheeler (1981) carried out an experimental study to test how physical attractiveness is perceived by people. The study revealed that persons, who are perceived to be more attractive, are evaluated more positively than those, who are not perceived as such. Cash et al. (1983) also found that the contrast effect largely influences how individuals assess their physical qualities. Cash et al. (1983) concluded that individuals, who compare themselves to an attractive model, have lower self-assessments.

Contrast effect was tested for recruitment interviews and employees' performance evaluations in literature (Wexley, Yukl, Kovacs & Sanders, 1972; Kopelman, 1975; Schuh, 1978; Ivancevich, 1983; Becker & Villanova, 1995; Palmer & Feldman, 2005; Palmer and Gore, 2014; Lubbe and Nitsche, 2019). Similarly, Mills (2004) carried out a study on airline companies to test the contrast effect in recruitment processes. The analyses showed that the previous candidate's performance can significantly affect the decision regarding the next candidate.

Avolio and Barrett (1987), on the other hand, studied the effects of both, positive and negative age stereotyping on subjects' ratings. The study found that the participating interviewers gave higher ratings to younger candidates as compared to an older one with the same qualifications.

A person's average job performance can be evaluated differently according to the context. For example, Murphy et al. (1985) found in a study that an average performance, evaluated after a poor one, is perceived to be well, while an average performance, evaluated after a good one, is perceived to be poor. Similarly, Sumer & Knight (1996) carried out an experimental study in this area and found that the context generates a contrast effect by revealing the differentiation among assessment scores of average performance, following good and poor ones. Yeates et al. (2013) concluded that the assessment of medical performance is even influenced by recent experiences and underlined that the contrast effect is an important notion that must be taken into consideration in personal evaluations. As can be observed in other studies in the literature, the contrast effect can lead to erroneous decisions throughout the evaluation process. Based on these results, we propose the following hypothesis.

*H<sub>1</sub>: The CV content of a candidate, whose qualities exceed those that are required by a position, generates a contrast effect on the raters' evaluation of the CV of another candidate, who has the required qualities for the position.*

The Halo effect was first used by Wells (1907) and Webb (1915) but coined by Thorndike in 1920 (as cited in Jacobs & Kozlowski, 1985). Halo error is defined as the tendency to make positive evaluations about a person's unknown qualities, based on said person's positive qualities, which are already known (Murphy, Jako & Anhalt, 1993). Taking into consideration one positive quality of the person, all other qualities of theirs are assessed from this same perspective. The exact opposite of halo error, on the other hand, is called horn error. It refers to the overall negative evaluation of a person due to one negative quality of theirs in any topic. In other words, halo error is a type of cognitive bias, referring to the overshadowing of one quality over others; while horn error is a type of bias, where one negative quality overshadows the excellence of all others (Nicolau et al., 2020). Halo and horn errors are rather common and inevitable notions (Kozlowski et al., 1986; Feldman, 1986).

Research on the halo effect is conducted in various research fields, particularly in performance evaluation, recruitment, selection, consumer evaluations of products or services. Dion, Berscheid, and Walster (1972) found in a study they conducted with university graduates that individuals, who are perceived to be more attractive, have a higher chance to be hired than those with average looks. Fatfouta & Ghoniem (2021), on the other hand, conducted a study, investigating the impact of age on personnel selections. Consequent to the two experiments with laypersons and experienced human resources specialists, the study found that age is associated with perceived experience in a significantly negative manner. Similarly, Gabrielli et al. (2021) posited in a study they conducted

with respondents of different nationalities that the halo effect (Aesthetic × trustworthiness) was influenced by the age of presented faces.

Radeke & Stahelki (2020) conducted a study to investigate the effect of various facial expressions on social perception and personality traits. Respondents were shown photographs of men and women of different ages with different facial expressions – smiling, scowling, and neutral. The study concluded that respondents evaluate individuals under the influence of halo and horn effects. Yustina and Gudono (2017) revealed in an experimental study they conducted that objective sales performance of sales personnel significantly affects subjective performance. The study also found that subjective performance evaluations positively improve, as managers' knowledge of sales personnels' objective performance increases. Similarly; Bellé, Cantarelli, and Bellardinelli (2017) revealed in a study they conducted with public officers and managers that anchoring and halo effects systematically bias performance ratings (Bellé et al., 2017).

Lenoir & Stocks (2019) experimentally studied the behavior of persons with high and low perceived attractiveness towards social norms. Consequently, respondents found individuals with lower levels of perceived attractiveness to be more prone to violate social norms. Junaid et al. (2018) also conducted a study to analyze the prevalence of rater error throughout recruitment and selection processes. As a result, rater errors were revealed in recruitment processes in the examined organizations. The study also found that stereotyping, halo error, contrast error, similar to me error and first impression error are common in organizations, where candidates are not objectively evaluated. As can be observed in these studies, halo error is quite a common rater error, significantly impacting decisions. In light of these studies, we propose the following hypothesis:

*H<sub>2</sub>: Information regarding the candidate's professional competencies in their CVs affect raters' inferences concerning the candidate's personality traits.*

### **3. Methodology**

#### **3.1. Procedure and Sample**

The study adopts an experimental method from amongst qualitative research methods. To that end, a true experimental design was selected with the randomized pretest-posttest control group design (RPPD). Subjects in RPPD are separated randomly into experiment and control groups. Similarly, the study assigned respondents randomly into control and experiment groups. The sample of the study consists of third and fourth-year students from seven different universities and various departments such as tourism administration, tour guiding and gastronomy, and culinary arts. The study was carried out between October 12<sup>th</sup>, 2021, and November 5<sup>th</sup>, 2021. Convenience and snowball sampling methods were used to collect data for the research due to the prevailing circumstances of COVID-19. The research comprises a fictional scenario and relevant questions. The fictional scenario asks respondents to imagine themselves as the human resources manager of a five-star hotel. Features of the hotel were both disclosed verbally and provided

in writing. Then, respondents were given job listings for the position of front desk manager. They were asked to assume that they prepared the listing themselves. It was observed that there were no unclear parts concerning the job listing. Later, respondents in both control and experiment groups were handed the CV of Candidate A, who applied for the job in question. Candidate A represents a candidate with standard competence as required by the position. After the respondents evaluate Candidate A's curriculum vitae, they were given an assessment form to evaluate the candidate. The assessment form includes a competence evaluation scale, perceived performance, and recommendation to hire questions. Further explanations regarding the scales are provided in Materials and Measures. The first six statements in the competence evaluation form can be answered by studying the candidate's CV. Information concerning the rest is not found in the CV. These statements can only be answered after the respondents form a general opinion about the candidate. In this context, respondents were expected to evaluate the candidate's qualities, which cannot be found in the CV, by looking at what is provided therein, to observe whether or not halo error exists. Respondents were also asked to provide their credentials in the assessment form to be able to compare candidate scores in the first and last tests. Respondents in the control group were given Candidate A's CV once again, after fifteen days, before being asked to reevaluate the candidate. Respondents in the experiment group, on the other hand, were given Candidate B's CV, which includes better qualifications, alongside Candidate A's CV after fifteen days to be reevaluated. For the respondents to evaluate these two CVs, they were given the assessment form in the first part of the study; only this time, the same form was rearranged in a way to allow two assessments. Respondents in the experiment group were given CVs with different qualities to test whether or not a contrast effect arises. A total of 1100 questionnaires were distributed within the context of the study with 550 questionnaires for the control and 550 for the experiment group. However, some questionnaires did not include credentials (experiment group=439, control group=461), which is why 900 questionnaires were evaluated after being matched with credentials.

### **3.2. Materials and Measures**

To identify required competencies for a front desk manager position in accommodation companies, Front Office Manager (Level: 5) national occupational standards, accepted by Vocational Qualifications Authority (VQA) was taken as the basis. Based on the relevant standards, ten propositions were developed to evaluate competence. Accepted by VQA, national occupational standards are minimum norms, indicating the necessary knowledge, skills, attitudes, and behaviors for a vocation to be successfully performed. Evaluation of the statements in the scale is carried out with a 10-point Likert scale (1 = Not competent at all; 10 = Very Competent). The perceived performance of candidates was measured with the question, adapted from Becton et al.'s (2019) study and a 10-point Likert scale was used. To evaluate candidates' employability, a proposition, adapted from the study of Higgins and Judge (2004) was used. The evaluation of the statement is carried

out with a 7-point Likert scale, ranging from 1 (Hiring is not recommended) to 7 (Hiring is strongly recommended).

#### 4. Findings

Demographics of respondents in control and experiment groups are provided in Table 1. The study was carried out with a total of 900 respondents. Respondent numbers from the control group (n=439) and experiment group (n=461) were almost equal. The number of female (48%) and male (52%) respondents was also quite close. Data in Table 1 shows a similar distribution in both control and experiment groups by students' departments. Respondents in both control and experiment groups heavily consist of students from Tourism Administration. In total, 48% of the students, who participated in the study, were third year, and 52% were fourth-year students. Students are distributed somewhat differently in control and experiment groups. A total of 53% of the students in the control group were third-year students, while 56% of the students in the experiment group were fourth year. Additionally, 77% of the respondents noted prior work experience. Student numbers in control and experiment groups reveal equal distribution by work experience.

**Table 1.** Sample characteristics

		Control Group (n = 439)		Experimental Group (n = 461)		Total (n = 900)	
		n	%	n	%	n	%
<b>Sex</b>	Female	178	41	222	48	400	44
	Male	261	59	239	52	500	56
<b>Department</b>	Tourism Administration	273	62	256	55	529	59
	Tour guiding	72	17	90	20	162	18
	Gastronomy and Culinary Arts	94	21	115	25	209	23
	<b>Year</b>	Junior (3 <sup>rd</sup> year)	234	53	202	43,8	436
	Senior (4 <sup>th</sup> year)	205	47	259	56,2	464	52
<b>Professional Experience</b>	Yes	336	77	356	77	692	77
	No	103	23	105	23	208	23

**Source:** Authors' calculations

An exploratory factor analysis (EFA) was conducted for the data, acquired from both the control and experiment groups, to determine the structural validity of the scale, which was used to evaluate the candidate's competence. Principal components analysis and varimax orthogonal rotation technique were adopted to identify the scale's structural validity. According to EFA results, which can be found in Table 2, factor load values of scale items, used to evaluate both candidates,



are over 0.50. Both groups' (Control Group = 0.87, Experiment Group = 0.88) Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) values were greater than 0.60, which indicates that samples are sufficient for the factor analysis. Significant results from Bartlett's Test of Sphericity [Control Group:  $\chi^2_{(431)} = 1871.867$ ,  $p < 0.001$ , Experiment Group:  $\chi^2_{(461)} = 1262.985$ ,  $p < 0.001$ ] shows that correlations between items are suitable for the factor analysis. Propositions in both groups were below the same factor and three factors with eigenvalues greater than 1 ( $\lambda \leq 1$ ) were identified. Total variance explained for the 3 factors, acquired after the factor analyses, were found to be 58% in the control group and 62% in the experiment group. Propositions were investigated to name the factors. The first factor is named *Personality Traits* since it has to do with the candidate's characteristics. The second factor is named *Training and Core Competencies* because it reveals the required competencies from a candidate to be able to perform the job for which they are applying. The last factor is named *Experience*, for it includes sectoral and managerial experiences. Factors in control and experiment groups revealed a Cronbach's Alpha value of  $\alpha > 0.70$ , indicating reliability (Hair et al., 2010).

**Table 2.** Results of the Factor Analysis

	Control Group				Experiment Group			
	FL	EV	REV (%)	$\alpha$	FL	EV	REV (%)	$\alpha$
<b>Personality Traits</b>								
Vision	0.81	2.97	29.72	.81	0.82	3.25	28.38	.88
Personal growth	0.81				0.88			
Personality traits	0.78				0.83			
Teamwork skills	0.76				0.78			
<b>Training and Core Competencies</b>								
Field of training	0.71	1.77	17.69	.76		1.83	19.43	.76
Foreign language skills	0.65				0.65			
Hotel automation knowledge	0.63				0.66			
Level of education	0.56				0.66			
<b>Experience</b>								
Sectoral experience	0.83	1.03	10.37	.74		1.15	14.56	.75
Managerial experience	0.83				0.82			
Total Variance = 58 %					Total Variance = 62 %			
KMO = 0.87, BTS = 1871.867					KMO = 0.88, BTS = 1262.985			

**FL:** Factor Loading **EV:** Eigenvalue **REV:** Rate of Explaining the Variance,  **$\alpha$ :** KMO: Kaiser-Meyer-Olkin Measure of Sampling Adequacy, **BTS:** Bartlett's Test of Sphericity

**Source:** Authors' calculations

In order to determine whether or not candidate evaluation scores of respondents in control and experiment groups statistically differ than the first and last test evaluation scores, paired-sample t-tests were conducted. According to the paired-sample t-tests results in Table 3, preliminary test and last scores of respondents in the control group for Candidate A [Experience:  $t_{(438)} = -0.220$ ,  $p > 0.05$ ,  $d = -0.02$ , Training and Core Competencies:  $t_{(438)} = 1.04$ ,  $p > 0.05$ ,  $d = 0.00$ , Personality Traits:  $t_{(438)} = -0.593$ ,  $p > 0.05$ ,  $d = 0.00$ , Perceived



Performance:  $t_{(438)} = 1.472$ ,  $p > 0.05$ ,  $d = 0.07$ , Employability:  $t_{(438)} = 1.376$ ,  $p > 0.05$ ,  $d = 0.07$ ] does not display any statistically significant differences. However, the paired-sample t-tests results indicate that candidate evaluation scores of respondents in the experiment group concerning Candidate A, significantly differ [Experience:  $t_{(460)} = 30.70$ ,  $p < 0.01$ ,  $d = 1.57$ , Training and Core Competencies:  $t_{(460)} = 48.88$ ,  $p < 0.01$ ,  $d = 2.01$ , Personality Traits:  $t_{(460)} = -42.71$ ,  $p < 0.01$ ,  $d = 1.99$ , Perceived Performance:  $t_{(460)} = 33.07$ ,  $p < 0.01$ ,  $d = 2.11$ , Employability:  $t_{(460)} = 31.79$ ,  $p < 0.01$ ,  $d = 2.13$ ] and such difference is determined to be statistically significant. Cohen's d coefficients of the first and last test evaluations of the respondents in the experiment group is  $> 0.80$ , which shows how strong the effect is.

**Table 3.** Comparison of First-Last Tests of Respondents in Control and Experiment Groups

Control Group	First Test (a)		Last Test (b)		a-b	t	p	d
	M <sup>(a)</sup>	SD	M <sup>(b)</sup>	SD				
Experience	8,37	0,74	8,38	0,69	-0,01	-,220	,826	-0,02
Training and Core Competencies	8,50	0,53	8,49	0,48	0,01	1,04	,296	0,00
Personality Traits	7,68	0,65	7,69	0,68	-0,01	-,593	,554	0,00
Perceived Performance	8,29	0,67	8,24	0,74	0,05	1,472	,142	0,07
Employability	8,18	0,63	8,13	0,75	0,05	1,376	,169	0,07
Experiment Group	First Test (c)		Last Test (d)		c-d	t	p	d
	M <sup>(c)</sup>	SD	M <sup>(d)</sup>	SD				
Experience	8,46	0,82	6,88	1,16	1,12	30.70	0.000	1,57
Training and Core Competencies	8,45	0,50	7,33	0,61	1,58	48.88	0.000	2,01
Personality Traits	7,60	0,92	5,95	0,73	1,65	42.71	0.000	1,99
Perceived Performance	8,35	0,89	6,34	1,01	2,01	33.07	0.000	2,11
Employability	8,12	0,87	5,98	1,12	2,13	31.79	0.000	2,13

**Source:** Authors' calculations

Table 4 shows t-test results as to whether or not evaluations on Candidate A differ in control and experiment groups. Test scores of respondents in control and experiment groups about Candidate A [Experience:  $t_{(898)} = -1,759$ ,  $p > 0.05$ ,  $d = 0.11$ , Training and Core Competencies:  $t_{(898)} = 1,614$ ,  $p > 0.05$ ,  $d = 0.12$ , Personality Traits:  $t_{(898)} = 1,490$ ,  $p > 0.05$ ,  $d = 0.10$ , Perceived Performance:  $t_{(898)} = -1,128$ ,  $p > 0.05$ ,  $d = -0.08$ , Employability:  $t_{(898)} = 1,239$ ,  $p > 0.05$ ,  $d = 0.08$ ] does not represent a statistically significant difference. Initially, respondents in both control and experiment groups had positive evaluations about Candidate A; they found that the candidate's relevant work experience and core competencies were sufficient with a high level of perceived job performance, notifying positive intentions of recruitment. Last test scores of respondents in control and experiment groups substantially differ [Experience:  $t_{(898)} = 23,684$ ,  $p < 0.01$ ,  $d = 1.56$ , Training and Core Competencies:  $t_{(898)} = 31,958$ ,  $p < 0.01$ ,  $d = 2.11$ , Personality Traits:  $t_{(898)} = 36,790$ ,  $p < 0.01$ ,  $d = 2.45$ , Perceived Performance:  $t_{(898)} = 32,449$ ,  $p < 0.01$ ,  $d = 2.14$ , Employability:  $t_{(898)} = 33,965$ ,  $p < 0.01$ ,  $d = 2.24$ ] and this difference is statistically significant. Respondents in the control group also gave Candidate A positive evaluations in the last test scores, much like the case with their first test scores. Still, respondents in the experiment group gave lower scores to Candidate

A in the last test. An examination of the findings in Table 3 and Table 4 shows that first and last test scores for Candidate A do not statistically differ by respondents in the control group but are statistically different amongst respondents in the experiment group. The first test scores of respondents in control and experiment groups concerning Candidate A were not statistically different, but the last test scores were significantly so. According to these results, a high-caliber CV, as given to the experiment groups, caused respondents to give lower score evaluations to the ordinary CV. These findings support hypothesis H1.

**Table 4.** Results of t-tests regarding the comparison of control and experiment groups

First test results	Control Group		Experiment Group		a-b	t	p	d
	First Test		First Test					
	M <sup>(a)</sup>	SD	M <sup>(b)</sup>	SD				
Experience	8,37	0,75	8,46	0,82	-0,09	-1,759	0,079	-0,11
Training and Core Competencies	8,51	0,53	8,45	0,50	0,06	1,614	0,107	0,12
Personality Traits	7,68	0,65	7,60	0,92	0,08	1,490	0,137	0,10
Perceived Performance	8,29	0,67	8,35	0,89	-0,06	-1,128	0,260	-0,08
Employability	8,18	0,63	8,12	0,87	0,06	1,239	0,216	0,08

  

Last test results	Control Group		Experiment Group		a-b	t	p	d
	Last Test		Last Test					
	M <sup>(a)</sup>	SD	M <sup>(b)</sup>	SD				
Experience	8,38	0,69	6,88	1,16	1,50	23,684	0,000	1,56
Training and Core Competencies	8,49	0,48	7,33	0,61	1,16	31,958	0,000	2,11
Personality Traits	7,69	0,69	5,95	0,73	1,74	36,790	0,000	2,45
Perceived Performance	8,24	0,74	6,34	1,01	1,90	32,449	0,000	2,14
Employability	8,13	0,75	5,98	1,12	2,15	33,965	0,000	2,24

**Source:** Authors' calculations

**Table 5.** Correlations of study variables

	1	2	3	4	5
1. Experience	1				
2. Training and Core Competencies	0.57**	1			
3. Personality Traits	0.64**	0.60**	1		
4. Perceived Performance	0.57**	0.53**	0.73**	1	
5. Employability	0.58**	0.51**	0.69**	0.64**	1

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

**Source:** Authors' calculations

Results of the correlation analysis among variables are provided in Table 5. Information concerning the candidate's competence was given in candidates' CVs,

but no such information was provided concerning their personality traits. Respondents had to make inferences about the candidate's personality traits by the information provided in their CVs. Results of the correlation analysis in Table 5 display positive and significant relations among variables. Accordingly, candidates' personality traits correlated strongly with experience ( $r = 0.64, p < 0.01$ ) and core competencies ( $r = 0.60, p < 0.01$ ). As respondents' candidate evaluations regarding experience and core vocational competence increase positively, their inferences on the candidate's personality traits also improve positively. Perceived job performance and recruitment intention are, in addition, positively linked to candidates' experience, core vocational competence, and personality traits. These results support hypothesis H2.

## **5. Discussion and Conclusions**

This study aims to determine whether or not evaluators experience the influence of rater error throughout the recruitment process, as they examine candidates' CVs. In this vein, halo error and contrast error, which are the most frequently encountered rater errors, are approached. The study used the randomized pretest-posttest control group design from amongst true experimental designs and was carried out with the participation of university students, studying in tourism departments. Respondents were randomly assigned to two groups – control and experiment. Each group went through pretest and posttests. Respondents in the control group evaluated Candidate A's CV, which included standard qualities for the applied position, twice with a fifteen-day interval (first test and last test). The analyses showed that the first and last test scores of respondents in the control group do not display any statistically significant differences. Overall, respondents in the control group evaluated Candidate A positively, handing in high scores, showing their recruitment intentions. Respondents in the experiment group, on the other hand, evaluated Candidate A's CV for the first test. Their first test evaluation scores concerning Candidate A were also positive, as was the case in the control group. For the last test, respondents in the experiment group evaluated Candidate B's CV, alongside Candidate A's CV. According to analyses, the prime CV, given to the experiment group, caused respondents to hand in lower evaluation scores to the standard CV. Respondents in the experiment group gave Candidate A high scores in the first test, finding them sufficient for the applied position; but later, when Candidate A was compared with Candidate B, who had better qualifications in their CV, they gave the former lower adequacy scores. It is also observed that respondents in the experiment group base their decisions on the content of candidates' CVs, rather than the requirement of the position for which candidates applied. This finding reveals that respondents are under the influence of the contrast effect, as they evaluate candidate CVs. Similar findings were acquired in other studies, approaching contrast effect in the literature concerning recruitment and performance evaluations (Palmer & Feldman, 2005; Palmer & Gore, 2014; Lubbe and Nitsche, 2019; Mills, 2004). Individuals, who are involved in the candidate evaluation process, might give a candidate with good qualifications negative assessment scores, after comparing them with the other candidate. Evaluation of

candidates as per the job description and characteristics, instead of comparing candidates in recruitment, would yield better outcomes (Junaid et al., 2018).

Another common error, caused by raters' bias throughout recruitment and performance evaluation processes, is the halo effect (Palmer & Loveland, 2008; Bellé et al., 2017; Yustina & Gudono, 2017; Fatfouta & Ghoniem, 2020). This study also revealed that respondents experience a halo effect, as they evaluate candidates' CVs. Within the scope of this study, respondents made inferences concerning candidates' personality traits, based on their experience and competence. In this sense, inferences regarding personality traits are observed to have a positive impact on the perceived performance of the candidate, which positively impacts recruitment intentions. The greatest illusion halo error yields in recruitment are that the candidate's distinct and prominent positive qualities are conceived to be better than their other qualities. This might lead to the elimination of potentially right candidates. Studies in this field also support that physical characteristics and social media content impact raters' decisions. The social media content of a candidate, applying for a particular position, might affect how that person is seen by the recruiter. Alarcon et al. (2019) revealed that the candidate's social media content is associated with important recruitment outcomes such as harmony, perceived interpersonal skills, and recruitment recommendations. In a study conducted by Caers and Castelyns (2011), it was found that employers consider personal information on websites such as Facebook and LinkedIn for screening purposes, which gives way to selection bias risks, even before the first round of interviews. Elias et al. (2016) also acquired findings, verifying that evaluators, who conduct job interviews, hire or reject candidate applications, based on their social media content.

Consequent to the fictional CV evaluation in the study, there is a recruitment process in question, where decisions regarding the personnel are made. During such a process, where decisions are only made by studying CVs, rater errors such as halo and contrast errors are quite likely. Therefore, recruitment upon other various stages such as interviews, panel interviews, competency-based interviews, skill tests, and reference checks are very important besides resume evaluations. Earning the right employees with the right skills is critical for the organization's competitive advantage. Human resources are the most important fundamental factor that makes a difference for organizations today. Hiring a suitable candidate for vacancies impacts the whole organization, starting with the relevant department. Thus, recruitment is a significant human resources function for companies (DeCenzo et al., 2017). Training specialists and managers, who are responsible for recruitment, in matters such as rater errors, would decrease the probability of making erroneous decisions. Relevant literature shows that studies generally concerning rater errors and specifically, halo error and contrast errors, are outdated (Jacobs & Kozlowski, 1985; Murphy, Jako & Anhalt, 1993; Nispett & Wilson, 1977; Balzer & Sulsky, 1992; Solomonson & Lance, 1997), while there have not been many studies on such matters in recent years. In addition, this study is hoped to contribute to the gap in

the literature, since there are relatively fewer studies on approaching rater errors in recruitment via true experimental methods.

There are certain limitations to this study. First of all, the study was conducted during the prevailing circumstances of the pandemic, which was why the snowball sampling method was preferred. Secondly, students comprise the sample for this research study. Such limitations must be taken into consideration, as findings are interpreted. Repeating this study with managers in the industry may help to understand how factors such as experience and organizational culture lead to differentiation on the impact of halo and contrast errors on decisions. This study reveals that even students, who are potential future managers in their fields, make such errors, as they make hiring decisions. Halo or contrast effects are notions, which are difficult to avoid in our everyday lives as well. Decisions might often be made without even noticing, as a person, a product or a service is evaluated. However, when the value of human resources is considered concerning organizations, it becomes clearer that rater errors significantly affect both candidates and organizations. The findings of this study thus contribute to understanding the impact of rater errors in recruitment processes.

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