

SIGNALING AND SCREENING IN EMPLOYEE SELECTION: SKILL, EDUCATION, OR EXPERIENCE? ¹

SZŰRÉS ÉS JELZÉS AZ EMBERI ERŐFORRÁS KIVÁLASZTÁSBAN: KÉSZSÉGEK, ISKOLÁZOTTSÁG VAGY TAPASZTALAT?

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ÖSSZEFOGLALÁS

A szervezetek sikerességének egyik kritikus eleme a kiválasztás. Jelen tanulmány a kiválasztásban vizsgálja három, jelzős, illetve szűrő szereppel bíró tényező, a képességek, a munkatapasztalat, és az iskolázottság fontosságát. Arra kíváncsi, hogy a jelenleg munkaerőpiacra lépő hallgatók szerint e három tényező mennyire fontos a munkaadók szemszögéből. A vizsgálathoz 110 hallgatótól származó kérdőíves adatgyűjtést használ. Legfontosabb megállapítsa, hogy a válaszadók szerint leginkább a készségek, majd a tapasztalat számít, az oktatás csupán ezek után bír szereppel.

Kulcsszavak: emberi erőforrás gazdálkodás, kiválasztás, készségek, iskolázottság, munkatapasztalat

ABSTRACT

One of the critical elements of organizational success is selection. This study examines the importance of three factors—abilities, work experience, and education—that serve as indicators and filters in the selection process. It aims to determine how current job market entrants perceive the importance of these three factors from the perspective of employers. The study employs survey data collected from 110 students. The key finding is that respondents consider skills to be the most important, followed by experience, with education playing a secondary role.

Keywords: Human Resource Management, Selection, Skills, Education, Work Experience

INTRODUCTION

The signaling hypothesis (Spence, 1973; Riley, 2001), with a hint of the screening insight, is explored in the literature on education and labor market dynamics. This theory challenges conventional ideas about education by arguing that education serves as a primary indicator of an individual's intrinsic productivity and dedication to potential employers rather than just a way to acquire skills. Education becomes an important but expensive signal in the context of information asymmetry (Akerlof, 1970), because employers lack firsthand knowledge of an applicant's talents. This theory is supported by empirical evidence (see a summary by Kun, 2013), which shows that people with higher education levels frequently earn higher pay. The wage premium is explained by both the enhanced productivity of those with higher education levels (human capital theory) as well as the signaling value of education (the sheepskin-effect: see Kun, 2014). These findings underscore the complex role of education in reducing information asymmetry and influencing hiring decisions, with substantial implications for educational policy and labor market dynamics. The signaling vs. human capital debate produced many types of tests, some of them directly examining human resource management practices (see a summary by Kun, 2010).

¹ The study is based on the author's thesis of similar title (Signaling and Screening in Human Resource Management, 2023, University of Debrecen, Faculty of Economics and Business, for the Bachelor of Science in Business Administration and Management program).

However, nowadays, merely demonstrating one's expertise is not enough, because a corporation needs a person's commitment, not simply their capability. Additionally, soft skills are crucial and even encompass non-cognitive abilities like communication and adaptability, in education and employment, companies want to make sure that the hired person also has these abilities (Heckman & Kautz, 2012). These qualities, which are frequently ignored in conventional educational frameworks, have a big impact on a person's chances for financial success, their capacity to keep a job, and their general well-being.

Apart from this, the work experience of an applicant might also influence the signaling of employees. This would assist the company in cutting the training costs and the new employee would be subject to less change. However, research shows that the effect of work experience on wages depends on several factors and not supported on the long run (Weiss et al., 2014; Baert et al., 2016).

My research is carried out to analyze how students think about the labor market importance of the three factors (skills set, experience, and education). I conducted an examination when students were asked to rate the three factors from the viewpoint of a recruiter (as they think it is) when selecting a candidate for the job. The research hypotheses are described as follows and they have been investigated in the next chapter.

I form the H1 hypothesis based on Humburg and van der Velden (2015). They suggested in their article that the skill set is an important factor during the recruitment processes.

H1: Skill set is preferred over experience during the recruitment process.

I have formed the following hypothesis (H2), based on Saar et al.'s (2014) article where it is mentioned that after changes in labor market in mid 1990s, education was given less importance and people without any educational background but having skills and experiences were chosen.

H2: Skill set is preferred over education during the recruitment process.

MATERIAL AND METHODS

The research used a questionnaire survey to collect data with the direct goal of looking into the most important signaling factor from a recruiter's point of view. The three factors considered were skills related to the position, job experience, and education. The data collection was closed after 110 submissions. The participants of this study were a blend of female (47) and male (53) individuals ranging from the ages of 15-29. These individuals were not limited to a region, country or even a continent but chosen from all over the world. This survey was done following ethical standards and without any ethnic origin or bias. The respondents were from regions all over the world and included Asia, Europe, Africa, Middle East and North America. The sample was focused primarily on students and the major was not taken into account. Members were allowed to skip questions, should they be uncomfortable answering, but the incomplete questionnaire were not included into the 110. There was no compensation offered to the members of this survey and was done entirely on voluntary basis.

The questionnaire's link (Google Docs Form) was posted via social media where individuals were asked to aid in the task in English. Members were asked for consent prior to participating in the study with their information and data protected and only used for research purposes. The members were informed that it would take a maximum of around 2 minutes and could answer it to the best of their knowledge, based on the questions, without any pressure. They were assured that their responses were anonymous and all data was secure. Once a significant amount of data was collected it was compiled into a Microsoft Excel file, and transferred to IBM's SPSS to be analyzed further.

The type of questionnaire used in the survey was a combination that included multiple choice, ratings, yes/no and open ending questions. The questions included in the survey are represented in Table 1.

Table 1. Questions asked during the empirical survey

Questions	Offered choices
1. Gender	Male or Female
2. Age	15-17, 18-20, 21-23, 24-26,27-29
3. Which region do you reside in?	Asia, Europe, Africa, Middle East, North America, South America
4. Are you currently looking for a job?	Yes or No
5. Have you ever been involved in a recruitment process?	Yes or No
6. According to your knowledge of a recruiter, which factor would stand out the most when applying for a job?	Skills related to the position. Job Experience Education
7. According to your knowledge what would a recruiter, what is the second most important factor when applying for a job?	Skills related to the position. Job Experience Education
8. According to your knowledge what would a recruiter choose the most in 5 years' time?	Skills related to the position. Job Experience Education
9. On a scale of 1-10 with 1 being the least preferred and 10 being the most preferred, would you prefer someone for an entry level job if they have a better skill set than a year of job experience in the field?	1-10
10. On a scale of 1-10 with 1 being the least preferred and 10 being the most preferred, would you prefer someone who has the required skills but has not completed their education?	1-10
11. Are industry-specific certifications or training programs a significant factor in hiring decisions?	Yes or No or 'It depends on the role'
12. According to your knowledge would a recruiter prefer candidates who attended prestigious universities or institutions?	Yes or No or Maybe
13. According to your knowledge would a recruiter prioritize candidates whose previous experience is directly related to the job they are applying for an entry level position?	Yes or No or Maybe
14. What are other factors you would consider as a recruiter from their resume? Kindly mention at least 3 other factors.	Open Ended Question

Source: From the author's own questionnaire

RESULTS AND DISCUSSIONS

This sections shows the results and explanation for the tests and calculations performed using IBM SPSS to display, analyse and formulate conclusions for our research.

Testing Hypothesis 1: Skill set is preferred over experience during the recruitment process.

Table 2 shows the results of the respondents' choices when ranking the preference of skill set over experience over a 1-10 range where 1 was 'not preferred' and 10 was 'most preferred'. Most of the applicants here chose an answer 6 and above indicating that skill set is preferred over experience. The highest frequency was over the value of 7 which was chosen by 26 applicants which was very closely followed by the value of 8 chosen by 25 applicants.

Table 2. Preference of skill set over experience to a recruiter when recruiting for a job

	N	%
1	1	0.9%
2	2	1.8%
3	3	2.7%
4	6	5.5%
5	8	7.3%
6	10	9.1%
7	26	23.6%
8	25	22.7%
9	12	10.9%
10	17	15.5%

Source: Own calculations.

Figure 1 shows the scores (1-10) of applicants who chose skill set over job experience. Most of the applicants gave a score 7+ to an applicant who had better skill set than a prior job experience.

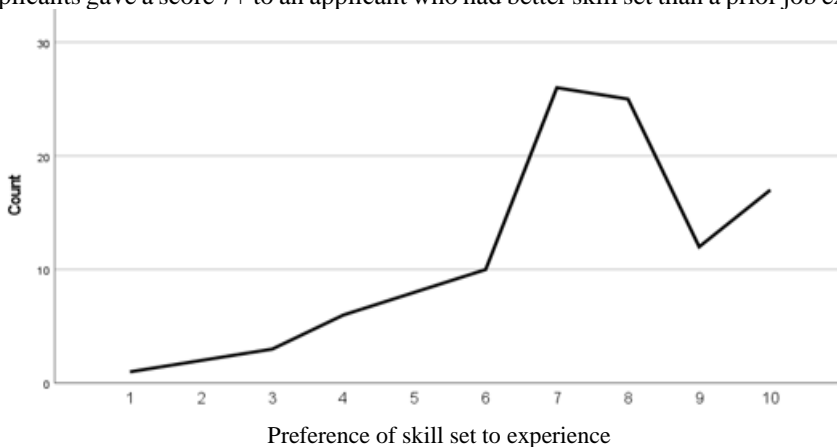


Figure 1. Line graph showing the preference of skill set to job experience

Source: Own calculations.

This sub-section shows the results of the t-test performed to view the correlation and significance of skill set to experience to see how many people prefer skill set more over experience during the recruitment process.

Table 3. Results of the T-test performed on SPSS showing the correlation and significance of skill set to experience

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Skill set preference to experience	110	7.25	2.029	.193

One-Sample Test						
Test Value = 5.5						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Skill set preference to experience	9.068	109	.000	1.755	1.37	2.14

Note: *** = significant at 1%; ** = significant at 5%

Source: Own calculations.

Table 3 shows the one-sample T-test results. I have supposed the mean to be 5.5 in the data, and with a significance of 95%, we have assumed the alpha value (α) to be 0.05 and predicted value (p) to be 0.01. Here, the p value is less than the alpha value and shows that the skill to experience ratio during the recruitment process from the view point of a recruiter denotes a preference.

Testing Hypothesis 2: Skill set is preferred over education during the recruitment process.

Table 4 shows the results of the respondents' choices when ranking the preference of skill set over education over a 1-10 range where 1 was 'not preferred' and 10 was 'most preferred'. Most of the applicants here chose an answer 6 and above indicating that skill set is preferred over education. The highest frequency was over the value of 8 which was chosen by 28 applicants which was very closely followed by the value of 7 chosen by 22 applicants.

Table 4. Preference of skill set over education to a recruiter when recruiting for a job.

	N	%
1	1	0.9%
2	1	0.9%
3	4	3.6%
4	6	5.5%
5	14	12.7%
6	10	9.1%
7	22	20.0%
8	28	25.5%
9	7	6.4%
10	17	15.5%

Source: Own calculations.

The line graph below (Figure 2) shows the scores from 1-10 of applicants who chose skill set to education. Most of the applicants gave a score of more than almost an 8 to an applicant who had better skill set than a completed education.

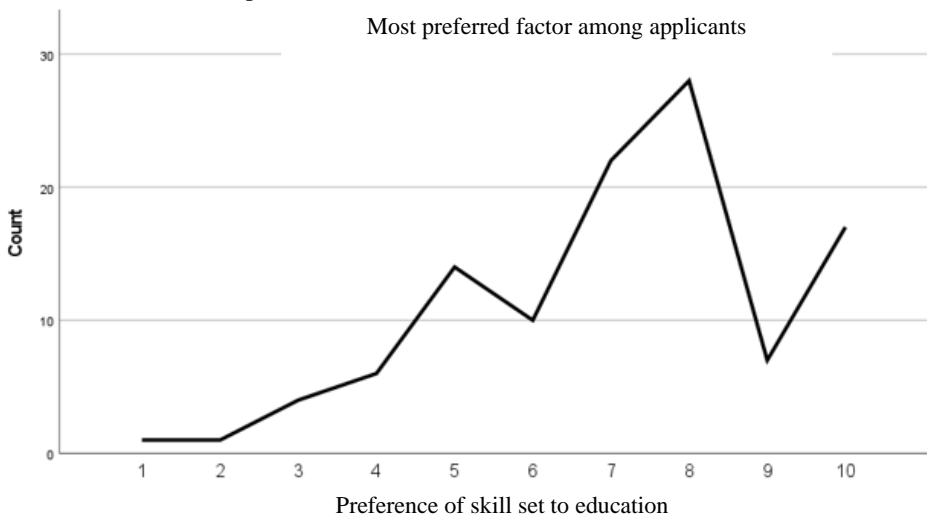


Figure 2. Line graph showing the preference of skill set to education

Source: Own calculations.

This sub-sections shows the results of the T-Test performed to view the correlation and significance of skill set to education to see how many people prefer skill set more over education during the recruitment process.

Table 5. Results of the t-test performed on SPSS showing the correlation and significance of skill set to education

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Skill set preference to education	110	7.09	2.039	.194

One-Sample Test						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Skill set preference to education	8.184	109	.000	1.591	1.21	1.98

Note: *** = significant at 1%; ** = significant at 5%

Source: Own personal calculations from SPSS based on respondents' answers when conducting the empirical survey.

Table 5 shows the one-sample t-test results as well. I have supposed the mean to be 5.5 in the data, and with a significance of 95%, we have assumed the alpha value (α) to be 0.05 and predicted value (p) to be 0.01. Here, the p value is less than the alpha value and shows that the skill to education ratio during the recruitment process from the view point of a recruiter denotes a preference.

Testing both Hypothesis 1 and 2 together

Table 6 shows a comparison of preferred factor that the applicants chose from the view point of a recruiter when applying to a job. Most of the people chose skill set as the most important factor (58.2) followed by job experience (31.8%) and the least important factor was education which was chosen by only 10% of the people.

Table 6. **Most important factor comparative to ones under discussion (skill set, experience, education) when recruiter is recruiting for a job**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Education	11	10.0	10.0	10.0
	Job Experience	35	31.8	31.8	41.8
	Skills related to the position	64	58.2	58.2	100.0
	Total	110	100.0	100.0	

Source: Own calculations.

Table 7 shows what the applicants thought will be the most important factor in 5 years' time. Skill set was ranked the most important factor here followed by experience and lastly education. Most respondents highly preferred skills and experience 5 years from now and both the values were very close but skill set was ranked comparatively higher.

Table 7. **Most important factor in 5 years' time for recruitment**

	N	%
Education	7	6.4%
Experience	48	43.6%
Skills	55	50.0%

Source: Own calculations.

Table 8. **Second most important factor comparative to ones under discussion (skill set, experience, education) when recruiter is recruiting for a job**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Education	20	18.2	18.2	18.2
	Job Experience	54	49.1	49.1	67.3
	Skills related to the position	36	32.7	32.7	100.0
	Total	110	100.0	100.0	

Source: Own calculations.

Table 6 shows the second most factor chosen by the applicants. Most of the people chose job experience as the most second important factor (54) followed by skill set (36) and the least important factor was education again which was chosen by only 20 of the people.

CONCLUSIONS AND RECOMMENDATIONS

The results driven in the previous section and the discussion done prove the essence of this thesis and states that skill set is given a preference over experience and education when applying for the job as was researched in H1 using t-test in the IBM SPSS. This is because a good and reliable skill set brings in an innovative and fresh approach to the existing and current tasks that need to be resolved. Skills that are in demand ensure and secure the future of applicants and the firm so it benefits both parties. Employees who have a valuable skill set are harder to replace and are an invaluable asset to the organization.

Experience is the second most important factor as it gives an insight of how things are done in the work place as was researched in our H2 using t-test in the IBM SPSS. It makes it easier for the employees to get an understanding of the job responsibilities and is easier for them to grasp it due to the prior experiences they have had. In the long run, it can reduce the recruitment costs and increase the efficiency and productivity of the tasks carried out by the individual which will be beneficial for the whole firm.

There were a few limitations as well within the study. The most laminating one was that the respondents were students and answered the questions to the best of their knowledge from the view point of the recruiters. This might alter real world results and actual recruiters might have a different take on this. The data was collected from multiple regions as well and recruiters from different regions might have a different view. To add, the questionnaire used for the research was largely multiple choice and not based on a Likert scale which could've been more efficient. However, the research has good generalizability and can be used as a base for further research on the screening part of Human Resource Management or may be used to check other factors as well.

The study analyses three factors which are skill set, experience and education that are looked into by a recruiter when there is a new job opening in an organization. It brings into light of what students think is important from a recruiter's perspective.

A substantial quantity of data was utilized when collecting, researching, analyzing and concluding the study. Among these was a survey of 110 applicants was done through social media platforms and responses were collected globally. This survey was done at random and was filed by members from the age of 15 to 29 years old and the information of all applicants was confidential. It was not shared with anyone and used for the sole purpose of this research. These findings assist in positioning the factors with accordance to the importance given to them and on what basis an applicant is chosen from the pool.

In conclusion, through the thorough research that has been carried out, we can denote that skill set is more preferred by the applicants who identified these results from the view point of recruiters. The second most important factor that was preferred was experience and lastly education was the least preferred factor during the recruitment process.

REFERENCES

- Akerlof, G. A. (1970). The Market for "Lemons": Quality Uncertainty and the Market Mechanism. *The Quarterly Journal of Economics*, 84(3), 488–500. <https://doi.org/10.2307/1879431>
- Baert, S., Rotsaert, O., Verhaest, D., & Omeij, E. (2016). Student Employment and Later Labour Market Success: No Evidence for Higher Employment Chances. *Kyklos*, 69(3), 401–425. <https://doi.org/10.1111/KYKL.12115>
- Barbulescu, R., & Bidwell, M. (2012). Do Women Choose Different Jobs from Men? Mechanisms of Application Segregation in the Market for Managerial Workers. *Organization Science*, 24(3), 737–756. <https://doi.org/10.1287/ORSC.1120.0757>
- Heckman, J. J., & Kautz, T. (2012). Hard evidence on soft skills. *Labour Economics*, 19(4), 451–464. <https://doi.org/10.1016/J.LABECO.2012.05.014>

- Humburg, M., & van der Velden, R. (2015). Skills and the graduate recruitment process: Evidence from two discrete choice experiments. *Economics of Education Review*, 49, 24–41. <https://doi.org/10.1016/J.ECONEDUREV.2015.07.001>
- Kun, A. I. (2010). A toborzás és a kiválasztás információs szerepéről és a szűrő elmélet egy empirikus tesztjének megalapozottságáról [On the informational role of recruitment and selection and the foundation of an empirical test of the screening theory]. *Humánpolitikai Szemle*, 21(12), 31–41.
- Kun, A. I. (2013). Oktatási jelzés és szűrés a munkaerőpiacon – az empirikus vizsgálatok tanulságai [Educational signaling and screening in the labor market – lessons from empirical studies]. *Competitio*, 12(2), 39–60.
- Kun, A. I. (2014). The sheepskin effect in the Hungarian labour market 2010–2012: analysis of data from the Hungarian graduate tracking system. *The Annals of the University of Oradea. Economic Sciences*, 23(1), 492–499.
- Saar, E., Unt, M., Helemäe, J., Oras, K., & Täht, K. (2014). What is the role of education in the recruitment process? Employers' practices and experiences of graduates from tertiary educational institutions in Estonia. *Journal of Education and Work*, 27(5), 475–495. <https://doi.org/10.1080/13639080.2013.781268>
- Spence, M. (1973). Job market signaling. *Quarterly Journal of Economics*, 87(3), 355–374. <https://doi.org/10.2307/1882010>
- Riley, J. G. (2001). Silver Signals: Twenty-Five Years of Screening and Signaling. *Journal of Economic Literature*, 39(2), 432–478. <https://doi.org/10.1257/JEL.39.2.432>
- Weiss, F., Klein, M., & Grauenhorst, T. (2014). The effects of work experience during higher education on labour market entry: learning by doing or an entry ticket? *Work, Employment and Society*, 28(5), 788–807. <https://doi.org/10.1177/0950017013506772>