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ANALYSIS OF RECRUITMENT E-FORMS IN TERMS OF COMPLIANCE OF THE SCOPE OF DATA OBTAINED ABOUT JOB CANDIDATES WITH THE PROVISIONS OF POLISH LABOR LAW

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Abstract

Each organization is faced with the problem of recruiting staff to meet the needs of the tasks carried out in the organization. This process is becoming more and more complicated every year, among others, due to the greater mobility of employees, and thus the increase in the number of applications for open positions in recruitment processes. One of the key stages of the recruitment process is to obtain relevant information concerning job applicants. The purpose of this article is to present the results of the survey on a group of 76 organizations that conduct online recruitment in Krakow (Poland) in terms of obtaining data on employees by these organizations within the framework of the applicable legal framework in this area. In the case of more than half of the organizations analyzed (52.63%), they collected redundant data on job applicants, thus exceeding the scope of data collection permitted by the provisions of Polish labor law.

Key words

Artificial Intelligence, discrimination, e-recruitment,

1. Recruitment and Selection

One of the key processes in an organization in the area of human resource management is the hiring process that consists of two elements: recruitment and selection. Recruitment can be defined as the process of collecting a database of candidates who meet the requirements for vacant positions in the corporation, while the selection process is the selection of the right candidate for a given position from among the pool of applications obtained in the recruitment process [37]. Some researchers consider the recruitment process to be the principal HR process because recruitment defines the group of people around whom other processes will take place [20]. However, it should be borne in mind that employing the most competent employees will become more and more difficult over time, due to the increasing competition among employers for such employees [39].

Currently, in the area of recruitment and selection, employers are increasingly using artificial intelligence tools, including estimating staffing needs, creating job descriptions, building targeted advertising campaigns (employer branding), evaluating incoming applications in terms of compliance with requirements, carrying out psychometric candidate tests, background check of candidates, technical support of candidates via chat bots, or automatic appointment of candidates [40]. Artificial intelligence (AI) is defined as a set of technologies that can collect, process, and take actions using data in a way that simulates human intelligence [5]. One of the key elements of artificial intelligence is machine learning (ML), i.e. creating and developing algorithms that enable self-learning and self-improvement [18].

The AI tools used in recruitment and selection processes allow collecting and analyzing large amounts of data in a short time, significantly reducing the costs of conducting these processes [27] and allows to carry out some stages of recruitment and selection to a highly automated level, including: screening of the application [43], interviews with candidates [23] including automatic video interviews [3], ending with employment decisions [18]. Furthermore, in some cases, AI turns out to make better choices in the recruitment process than human choices, allowing a broad-spectrum analysis of the candidate and his possible interactions in the work environment [11].

Artificial intelligence enables the use of data from various sources, both applications submitted by candidates and publicly available sources (including official registers, on-line forums or social media), their analysis and synthesis and reporting to the recruiter according to the required criteria [30]. Furthermore, the use of natural language processing (NLP) technology

enables the analysis of the data obtained, both the applications submitted by the candidates, the interviews they conducted with them, and the analysis of their activity on social media to assess their usefulness in the organization [17]. Additionally, AI enables a more flexible approach to data analysis, as it enables its multispectral analysis, which enables the identification of more complex, non-linear relationships, which allows drawing a wider spectrum of conclusions [32]. Thus, artificial intelligence algorithms enable a significant increase in efficiency (saving time, effort, or resources) in the implementation of recruitment and selection processes and increase the chance of selecting the right candidates [18].

People have a natural tendency to distrust novelty, especially when they do not fully understand the mechanisms of new solutions [24]. The rapid development of modern AI technologies means that they interact with people faster than humans are able to fully understand these mechanisms, which creates distrust towards AI, especially since AI is perceived as a mechanism devoid of emotions [3]. Distrust towards AI can translate into distrust towards the recruitment process and the organization. The lack of trust or its insufficient level, in turn, affects the results of the recruitment process [22]. In the European Union, legal regulations have been introduced to obtain the consent of job candidates for the use of their personal data in systems that automatically process such data, thereby favoring the transparency of HR processes [33].

Taking into account the theories of organizational justice, the recruitment process should be viewed primarily from the perspective of procedural justice, which can be defined as the participant's belief that the methods used in the process in which he participates are fair, satisfactory, and impartial in themselves [44]. Job applicants perceive the fairness of the recruitment process from different, individual perspectives, guided by their own set of criteria, which, however, are based on certain dimensions common to employees: the relationship of the selection process with work; the opportunity to demonstrate skills; the way the candidate is treated; relevance of the questions asked [36].

The relationship of the selection process with work is presented through the prism of the candidate's perception of tests or other tools used in the process in the context of the job they are applying for. Therefore, the candidate for a job evaluates to what extent the recruitment process checks his knowledge and skills that can be used effectively in the position for which he is applying [16]. Job candidates want to be able to actively demonstrate their skills and present their experiences - recruitment procedures that allowed process participants to participate in them are considered fair [19]. Research conducted in this area indicated that job candidates deprived of the possibility of freely presenting their own competences and asking

questions during the recruitment process perceived the process as less fair than the candidates who had such an opportunity [1]. Organizational justice theories emphasize the importance of how the participants in processes in the organization are treated, including recruitment processes, where not only the process itself is evaluated, but also the manner in which the process and its results are communicated [7]. Of particular importance in evaluating the fairness of recruitment processes is honesty in the process of communication with job candidates and the need to ensure uninterrupted and open two-way communication between the candidate and the employer [16]. Importantly, the perception of the recruitment process as fair is also determined by the speed of receiving feedback - candidates expect that they will receive it as soon as possible, otherwise the perception of the organization's justice decreases [14]. Research on recruitment process participants showed that when applicants received rapid feedback, their perception of fairness of the recruitment process was higher, also in a situation where the final result of the recruitment process was not favorable to them [12]. The appropriateness of the questions asked applies both to asking questions that enter the private sphere and to expressing views characterized by prejudices [16]. All procedures should treat job applicants in the same way, without bias, and decision makers should strive to prevent personal interests and avoid prejudices at every stage of the process [8]. Applied recruitment procedures will be perceived by job applicants as more acceptable when they feel that they are widely used. They will assume that the fact that a given recruitment procedure is widely used shows that it is good, appropriate, and does not result from prejudices [36]. Recruitment participants may perceive it as violating the sense of procedural fairness taking into account numerous criteria. Unknowing enough about how AI mechanisms work can make them feel that the outcome of the process is inadequate [21]. They will similarly assess the recruitment process when they do not know the scale of AI use in recruitment or when this information will be provided to them in the process in an incomprehensible way [45].

2. Protection of Personal Data in the Recruitment Process

Recruitment and selection processes are based on the employer's data about the candidate for a job. In light of the law in force in Poland, the processing of personal data of job applicants takes place on the basis of the provisions of the Act of June 26, 1974, the Labor Code (as amended) and Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with respect to the processing of personal data (hereinafter referred to as the GDPR) [35].

The processing of personal data on the basis of the GDPR is lawful only in the cases specified in the regulation, and it is a closed catalog. However, for the processing of personal data to be lawful, it is sufficient that at least one of the six conditions occurs:

- the data subject has given consent to the processing of his or her personal data for one or more specific purposes;
- processing is necessary for the performance of a contract to which the data subject is party or in order to take steps at the request of the data subject prior to entering into a contract;
- processing is necessary for compliance with a legal obligation to which the controller is subject;
- processing is necessary to protect the vital interests of the data subject or of another natural person;
- processing is necessary for the performance of a task carried out in the public interest or in the exercise of official authority vested in the controller;
- processing is necessary for the purposes of legitimate interests pursued by the controller or a third party, except where such interests are overridden by the interests or fundamental rights and freedoms of the data subject which require protection of personal data, in particular where the data subject is a child [34].

According to the Polish Labor Code, Article 22¹ § 1 indicates a closed catalog of data that the employer may request from a job candidate, that is,

- first name (names) and surname;
- date of birth;
- contact details indicated by such a person;
- education;
- professional qualifications;
- the course of previous employment [42].

Although specific provisions allow an employer to request that a job applicant provide other data when applying for a job in selected professions, this applies to a narrow group of professions and, as a rule, the employer has limited possibilities of obtaining data on a job applicant only to the data specified in the Labor Code [9]. Importantly, the candidate for a job might give to the potential employer the data on education, professional qualifications, and the course of previous employment only if these data are relevant to perform work in a specific

position [35]. According to Article 22¹b § 1 of the Labor Code, the employer can also process other personal data of a job applicant based on the consent obtained from the candidate, but this may only apply to data that the job applicant provided on his own initiative [42]. One of the basic conditions determining the validity of the candidate's consent to the processing of data other than those arising directly from the provisions of the Labor Code is the candidate's voluntary consent to the processing of his data. This means that the candidate must have autonomy when making decisions about consent (as well as refusing such consent) to process a catalog of personal data other than that provided in the provisions [26].

As a rule, the GDPR prohibits the processing of personal data from certain categories, unless specific provisions require the processing of such data, in which case data from these categories are treated as particularly sensitive and are subject to greater legal protection. The data which, in principle, are not allowed includes:

- racial and ethnic origin,
- political views,
- religious or philosophical beliefs,
- membership of trade unions,
- genetic and biometric data,
- health data, sexuality, or sexual orientation [10].

Thus, both EU law and Polish law impose limited opportunities for the employer to obtain data about job applicants from a clearly defined data catalog, beyond which the employer may go only having the authorization to do so in the provisions of law [35].

3. Research

The purpose of the study was to find out to what extent employers in the process of collecting data in the job e-application process fulfill the requirements set out in Article 22¹ § 1 of the Labor Code. The research method used is content analysis, in this case, the content of recruitment forms available online, which individual employers use to collect data on employees. For the purposes of this analysis, a targeted group of offers was selected from among the offers posted on the pracuj.pl website in the period of 10-12.05.2022. The pracuj.pl portal is the largest job-seeking portal in Poland, with about 100,000 active job offers from all over Poland. The selected group consisted of offers for the position of "recruiter" in the location Krakow (Poland). Offers in which the recruiting function was not a dominant function were not taken into account in the further analysis.

In the period mentioned above, there were 123 job offers on the pracuj.pl portal for this inquiry. In the first stage, it was checked whether the searched offers meet the search criteria - out of 123 search results, 107 concerned job offers for the position of "recruiter" in the location "Krakow". The remaining results concerned other positions with the word "recruiter" and / or "recruitment" in the descriptions, but the job description clearly showed that the offered positions are not recruiter positions, and only one of the many duties in this position is participation in recruitment processes. Subsequently, the number of surveyed forms was limited to forms for a given employer - some employers had more than one recruitment process open for the position relevant to this analysis. The final analysis covered recruitment forms from 76 organizations (15 organizations had more than one recruitment process open, including two organizations with 6 different positions in the recruitment area; each organization with several parallel recruitment processes used the same form for these processes, which was confirmed during the analysis). The analysis focused primarily on checking whether the data collected as part of the recruitment process falls within the framework specified by the provisions of the labor law. At the same time, data that could be a source of discrimination were observed.

The analysis carried out concerned two types of data: data that the employer may legally request from a job applicant and data that the job applicant provides on his own initiative, fully autonomously. As mentioned above, the employer can request six types of information about himself from a job applicant [42].

Table 1. List of data requested by the employer according to Article 22¹ § 1 of the Labor Code

Data requested by the employer		
Type of data	Number of	%
	appearances	70
First name and last name	76	100,00%
Date of birth	3	3,95%
Contact data	76	100,00%
Education	13	17,11%
Qualifications	15	19,74%
Employment history	15	19,74%

Table 1 shows in how many cases of 76 analyzed forms employers requested particular types of data. It is obvious that the employer must be able to contact the job applicant. Nevertheless,

as shown above, the legislator gave the candidate for a job the right to decide what kind of contact details he will provide to the employer; thus, the employer cannot indicate what kind of contact details he wants to obtain from the candidate. Therefore, for the purposes of this analysis, the situations where the employer required the mandatory transfer of at least one form of contact were indicated as unlawful. Unfortunately, in the case of contact details, only in one form, these were not mandatory data, therefore, taking into account the above-mentioned formal conditions, in 75 cases (i.e., 98.68%), employers unlawfully demanded certain contact details from job applicants.

Regardless of the above data, in 40 cases (i.e. 52.63%), employers asked for other data than those they may require from job applicants, and in 31 cases (i.e. 40.79%), there were three or more types of such data which the employer cannot ask the job applicant (one organization asked for additional six types of information, beyond the legally permitted scope).

At first glance, it may seem surprising that less than 20% of employers ask about education or previous work experience, which seems to be the key information in the recruitment and selection process of job candidates. Many employers, although they have the statutory right to directly demand these data, decide not to use this right by obtaining data of interest to them in a different way, as described below.

A separate issue is the processing of data that the candidate has provided as part of the recruitment process autonomously of his own free will. For this purpose, employers use the option of uploading their own CV, and / or a resume, and / or a cover letter to the application form. From among the analyzed forms, all the forms required the candidate to submit a CV; in addition, in 34 cases (i.e., 44.74%), the candidates could also attach other documents at their discretion. This form of obtaining data about candidates is compliant with applicable law, as it gives the candidate full autonomy in choosing information about himself that he wants to share with his future employer. For the legality of processing the data obtained according to the GDPR, the candidate must only include his/her consent to the processing of personal data contained in the documents sent [26]. In this way, employers obtain the most important information for them regarding the candidate's education, qualifications, or professional experience, as well as other data that the candidate considers important in the recruitment process.

It is also worth taking a review look at the redundant and illegal data that employers obtained. The data expected by the employer included, among others:

- question about ethnicity (1 case)
- candidate's photo (2 cases)
- having a work permit at a given location (2 cases)
- nationality (2 cases)
- candidate's age (2 cases)
- preferred form of cooperation: Employment contract or B2B (4 cases)
- candidate's gender (4 cases)
- addresses of candidate's profiles on social media (7 cases)
- salary expectations (14 cases)
- site of residence (23 cases)

Employers probably see the need to collect the above-mentioned data; however, from the point of view of the provisions of the Labor Code, collecting these data is against the law. Particularly surprising is the scale of asking about the place of residence of a job candidate (30.26% of cases).

4. Employment Discrimination

Limiting the scope of the candidate's personal data that can be processed by the employer, introduced under the Labor Code, is intended to prevent discrimination in the recruitment and selection process of employees [13]. According to the provisions of Article 94 of the Labor Code, the employer is obliged, among others, to counteract discrimination in employment, in particular due to sex, age, disability, race, religion, nationality, political beliefs, membership of trade unions, ethnic origin, religion, sexual orientation, as well as due to employment for a fixed or indefinite period, or full-time or part-time [42]. Moreover, the provisions of Polish labor law support the employee as well as the job candidate in the fight against discrimination, because the employee/candidate does not have to prove that he has been a victim of discrimination - the employer is responsible for proving nondiscrimination. The employee/candidate should only indicate the facts supporting the allegation of unequal treatment, and the employer must provide evidence that the decision was guided by objective reasons in relation to the employee/candidate [4].

Taking into account the above analysis, more than half of the employers in the surveyed group obtained redundant data from job candidates, apart from those they are entitled to obtain, including data explicitly indicated in the provisions of the Labor Code as data that may be a potential source of discrimination. Therefore, candidates may have doubts about whether these

data are used for the substantive evaluation of their application or whether they may be a source of discrimination in the recruitment process.

Bearing in mind the above analysis, most of the redundant data are almost single cases from different categories, and although it is obvious that in the light of the law these data should not be collected, most of these categories can be treated as marginal due to the frequency of their occurrence. Therefore, particular attention should be paid to the frequency of obtaining information about the place of residence from a candidate for a job. In the author's opinion, it is difficult to find a substantive justification for obtaining this information, yet a significant part of the analyzed employers (about 30%) decide to obtain such data. This may give rise to a suspicion that this type of data may be used to select candidates for work not only because of their substantive skills, but also because of the distance between their place of residence and their place of work. Research shows that this kind of discrimination exists in both the case of distance to work [31] as well as residing in specific districts, socially considered "better" or "worse" [6].

The problem of discrimination in employment is even more important because the development of technology, especially the use of AI in recruitment, may raise doubts about to the integrity of the entire process. It may also affect the candidate's trust in the process and in the employer [22]. This is especially important because the AI technology used in the recruitment of employees has often turned out to be unreliable and discriminated against job candidates, such as in the case of the AI tool used in the recruitment by Amazon, which turned out to discriminate against candidates based on gender [29].

5. Conclusions

Regardless of whether the recruitment is carried out entirely by humans or by AI, the key element is the amount and quality of data obtained about the candidate for a job, thanks to which candidates can be selected. Hence, it becomes necessary not only to obtain comprehensive data about the candidate but also to ensure that these data are collected legally and relate to substantive key issues for a given position. The last issue is particularly important for job applicants who assess to what extent the recruitment process checks their knowledge and skills useful in the job for which they apply [36]. Already research conducted in the 1970s indicated that employees assess the fairness of decision-making processes in an organization through the prism of the quantity and quality of data collected and processed as part of the decision-making process [25]. The honesty of the applied procedures and the fairness of the recruitment results

obtained affect the reaction and behavior of the candidates for work during and after the recruitment process, both among the candidates accepted for work and rejected during the process [41]. This is important for candidates who join the organization as a result of the recruitment process - assessment of the fairness of the recruitment process may affect their intentions to stay in the organization or look for a new job [16]. This is even more important, as 60% of job applicants have bad recruitment experiences, and more than 2/3 of them share their feelings on the Internet [28]. Furthermore, 41% of candidates with negative recruitment experience expect to resign from the goods and services provided by employers that were the source of such experiences [38].

This study is only an attempt to present the problem of legally collecting data on job candidates in the Polish market. In the future, this topic should be a field for further analysis, both in the context of obtaining data in recruitment processes for specific positions, as was the case in this study, as well as in selected sectors of the economy or the geographical location of the workplace. As research conducted in Spain shows, the introduction of antidiscrimination provisions in recruitment improves the situation of candidates on the labor market, but the acquisition of data as part of e-recruitment may still raise doubts as to the discrimination of job candidates on the basis of such collected data [15]. Therefore, it seems important for researchers to increase their interest in this aspect of the recruitment process, and for organizations conducting recruitment processes to approach their implementation more carefully.

Bibliography

- 1. Bies, Robert J., i Debra L. Shapiro. "Voice and Justification: Their Influence on Procedural Fairness Judgments". *The Academy of Management Journal* 31, nr 3 (1988): 676–85.
- Bochniarz, Klaudia T., Stanisław K. Czerwiński, Artur Sawicki, i Paweł A. Stroszko. "Attitudes to AI among high school students: Understanding distrust towards humans will not help us understand distrust towards AI". *Personality and Individual Differences*, nr 185 (2022): 1–7. https://doi.org/10.1016/j.paid.2021.111299.
- 3. Booth, Brandon M., Louis Hickman, Shree Krishna Subburaj, Louis Tay, Sang Eun Woo, i Sindey K. D'Mello. "Bias and Fairness in Multimodal Machine Learning: A Case Study of Automated Video Interviews". *Proceedings of the 2021 International Conference on Multimodal Interaction*, 2021, 268–77. https://doi.org/10.1145/3462244.3479897.

- 4. Bury, Beata, i Marcin Dudzik. "Naruszenie zakazu dyskryminacji pracownikó jako czyn zabroniony". *Acta Universitatis Wratislaviensis Przegląd Prawa i Administracji* LXXXVI (2011): 303–11.
- 5. Canhoto, Ana Isabel, i Fintan Clear. "Artificial intelligence and machine learning as business tools A framework for diagnosing value destruction *Business Horizons* 63 (2020): 183–93. https://doi.org/10.1016/j.bushor.2019.11.003.
- 6. Carlsson, Magnus, Abdulaziz Abrar Reshid, and Dan-Olof Rooth. 'Neighborhood Signaling Effects, Commuting Time, and Employment: Evidence from a field experiment". *International Journal of Manpower*, 2018.
- 7. Colquitt, Jason A., Jerald Greenberg, and Cindy P. Zapata-Phelan. 'What is organizational justice? A historical overview.' W *Handbook of Organizational Justice*. New York, London: Lawrence Erlbaum Associate, 2005.
- 8. Cropanzano, Russell. 'History of organizational justice: The founder speaks.' W *Russel Cropanzano, Justice in the Workplace: From Theory to Practice*, 3–26. Lawrence Erlbaum Associates Inc, 2001.
- 9. Dylg, Wojciech. 'Problematyka ochrony danych osobowych w wietle procesu rekrutacji do pracy'. *Bezpieczestwo Pracy: Nauka i praktyka*, 2011, 26–28.
- 10. Dziuba, Damian, Justyna Przybylska i Magdalena Wolaska. *RODO w HR. Od rekrutacji do rozwizania umowy*. Warszawa: Difin, SA, 2019.
- 11. Erel, Isil, Lea H. Stern, Chenhao Tan, and Michael S. Weisbach. 'Research: Could Machine Learning Help Companies Select Better Board Directors?' *Harvard Business Review*, 9 kwiecie 2018.
- 12. Eskew, Don E. 'The Role of Organizational Justice in Organizational Citizenship Behavior'. *Employee Responsibilities and Rights Journal* 6, nr 3 (1993): 185–94.
- 13. Fleszer, Dorota. 'Przetwarzanie danych osobowych kandydata do pracy i pracownika'. *Roczniki Administracji i Prawa* XVIII, nr. 2 (2018): 259–70.
- 14. Folger, Robert, and Robert J. Bies. 'Management Responsibilities and Procedural Justice'. *Employee Responsibilities and Rights Journal* 2, nr 2 (1989): 79–90.

- 15. Garca-Izquierdo, Antonio L, Pedro J. Ramos-Villagrasa i Ana M. Casta no. 'e-Recruitment,,,e-Recruitment, gender discrimination, and organizational results of listed companies on the Spanish Stock Exchange". *Journal of Work and Organizational Psychology* 31 (2015): 155–64. https://doi.org/10.1016/j.rpto.2015.06.003.
- 16. Gilliland, Stephen W. "The Perceived Fairness of Selection Systems: An Organizational Justice Perspective". *Academy of Management Review* 18, nr 4 (1993): 694–734.
- Gonzalez, Manuel F., John F. Capman, Frederick L. Oswald, Evan R. Theys, i David L. Tomczak. ""Where's the I-O?" Artificial Intelligence and Machine Learning in Talent Management Systems Talent Management Systems". *Personnel Assessment and Decisions* 5, nr 3 (2019): 33–44. https://doi.org/10.25035/pad.2019.03.005.
- 18. Gonzalez, Manuel F., Weiwei Liu, Lei Shirase, David L. Tomczak, Cernan E. Lobbe, Richard Justenhoven, i Nicholas R. Martin. "Allying with AI? Reactions toward human-based, AI/ML-based, and augmented hiring processes". *Computers in Human Behavior* 130 (2022): 1–16. https://doi.org/10.1016/j.chb.2022.107179.
- 19. Greenberg, Jerald, i Robert Folger. "Procedural Justice, Participation, and the Fair Process Effect in Groups and Organizations". W *Basic Group Processes*, *edited by Paul B. Paulus*, 235–58. Springer Series in Social Psychology. New York: Springer-Verlag New York Inc., 1983.
- Griepentrog, Brian K., Crystal M. Harold, Brian C. Holtz, Rochard J. Klimoski, i Sean M. Marsh. "Integrating social identity and the theory of planned behavior: Predicting withdrawal from an organizational recruitment process". *Personnel Psychology* 65, nr 4 (2012): 723–53.
- 21. Johnson, Deborah G., i Mario Verdicchio. "Reframing AI Discourse". *Minds & Machines* 27, nr 4 (2017): 575–90. https://doi.org/10.1007/s11023-017-9417-6.
- 22. Klotz, Anthony C., Serge P. Da Motta Veiga, M. Ronald Buckley, i Mark B. Gavin. "The role of trustworthiness in recruitment and selection: A review and guide for future research". *Journal of Organizational Behavior* 34 (2013): 104–19. https://doi.org/10.1002/job.1891.
- 23. Langer, Markus, Cornelius J. König, i Maria Papathanasiou. "Highly automated job interviews: Acceptance under the influence of stakes". *International Journal of Selection and Assessment* 27, nr 3 (2019): 217–34. https://doi.org/10.1111/ijsa.12246.

- 24. Lee, John D., i Katrina A. See. "Trust in automation: Designing for appropriate reliance". *Human factors* 46, nr 1 (2004): 50–80.
- 25. Leventhal, Gerald S. "What should be done with equity theory?" W *Social exchange:* Advances in experimental and social psychology; Kenneth J. Gergen, Martin S. Greenberg, Richard H. Willis;, 27–55. Springer, 1980. https://doi.org/10.1007/978-1-4613-3087-5_2.
- 26. Lubasz, Dominik. "Warunki wyrażania zgody jako przesłanki legalizującej przetwarzanie danych osobowych". *Gdańskie Studia Prawnicze* 52, nr 4 (2021): 62–79. https://doi.org/10.26881/gsp.2021.4.04.
- 27. Mathew, Saju, Nidhi Oswal, i Karamath Ateeq. "Artificial Intelligence (AI): Bringing a New Revolution in Human Resource Management (HRM)". *Grenze International Journal of Engineering and Technology*, nr January (2021): 211–18.
- 28. Miles, Sandra Jeanquart, i Randy McCamey. "The candidate experience: Is it damaging your employer brand?" *Business Horizons* 61 (2018): 755–64. https://doi.org/10.1016/j.bushor.2018.05.007.
- 29. Miyashita, Hiroshi. "Human-centric data protection laws and policies: A lesson from Japan". *Computer Law & Security Review* 40 (2021): 1–9. https://doi.org/10.1016/j.clsr.2020.105487.
- 30. Oswald, Frederick L., Tara S. Behrend, Dan J. Putka, i Evan Sinar. "Big Data in Industrial-Organizational Psychology and Human Resource Management: Forward Progress for Organizational Research and Practice". *The Annual Review of Organizational Psychology and Organizational Behavior*, nr 7 (2020): 505–33. https://doi.org/10.1146/annurev-orgpsych-032117-104553.
- 31. Phillips, David C. "Do Low-Wage Employers Discriminate against Applicants with Long Commutes?" *The Journal of Human Resources* 55, nr 3 (2020): 864–901.
- 32. Putka, Dan J., Adam S. Beatty, i Matthew C. Reeder. "Modern Prediction Methods: New Perspectives on a Common Problem". *Organizational Research Methods* 21, nr 3 (2018): 689–732. https://doi.org/10.1177/1094428117697041.
- 33. "Regulation, EU General Data Protection. «Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with

- regard to the processing of personal data and on the free movement of such data, and repealing directive 95/46/EC (General Data Protection Regulation) 2016.» OJ L 119.1 (2016).", b.d.
- 34. "ROZPORZĄDZENIE PARLAMENTU EUROPEJSKIEGO I RADY (UE) 2016/679 z dnia 27 kwietnia 2016 r. w sprawie ochrony osób fizycznych w związku z przetwarzaniem danych osobowych i w sprawie swobodnego przepływu takich danych oraz uchylenia dyrektywy 95/46/WE (ogólne rozporządzenie o ochronie danych)", 27 kwiecień 2016.
- 35. Smolarska, Marzena. "Jakie dane osobowe może przetwarzać pracodawca i jak długo." *Systemy Wspomagania w Inżynierii Produkcji* 9, nr 2 (2020): 7–15.
- 36. Steiner, Dirk D., i Stephen W. Gilliland. "Fairness Reactions to Personnel Selection Techniques in France and the United States". *Journal of Applied Psychology* 81, nr 2 (1996): 134–41.
- 37. Stoilkovska, Aleksandra, Jana Ilieva, i Stefan Gajkovski. "Equal employment opportunities in the recruitment and selection process of human resources". *UTMS Journal of Economics* 6, nr 2 (2015): 281–92.
- 38. "Talent Board's 2016 North American Candidate Experience Research Report Is Now Available", 8 luty 2017. https://www.thetalentboard.org/article/talent-boards-2016-north-american-candidate-experience-research-report-now-available/.
- 39. Taylor, M. Susan, i Christopher J. Collins. "Organizational recruitment: Enhancing the intersection of research and practice". *In Cooper CL, Locke EA (Eds.), Industrial and organizational psychology: Linking theory with practice*, 2000.
- 40. Tristram, Albert Edward. "AI in talent acquisition: a review of AI-applications used in recruitment and selection". *Strategic HR Review* 18, nr 5 (2019): 215–21. https://doi.org/10.1108/SHR-04-2019-0024.
- 41. Truxillo, Donald M., Dirk D. Steiner, i Stephen W. Gilliland. "The Importance of Organizational Justice in Personnel Selection: Defining When Selection Fairness Really Matters". *International Journal of Selection and Assessment* 12, nr 1/2 (2004): 39–54.
- 42. "Ustawa z dnia 26 czerwca 1974 r. Kodeks pracy. D. U. 1974 Nr 24 poz. 141 (z późn. zm.)", 1974.

- 43. Vronits, Demetris, Michael Christofi, Vijay Pereira, Shlomo Tarba, Anna Makrides, i Eleni Trichina. "Artificial intelligence, robotics, advanced technologies and human resource management: a systematic review". *The International Journal of Human Resource Management*, 2021, 1–30. https://doi.org/10.1080/09585192.2020.1871398.
- 44. Walker, Laurens, E. Allan Lind, i John Thibaut. "The Relation between Procedural and Distributive Justice". *Virginia Law Review* 65, nr 8 (1979): 1401–20.
- 45. Xu, Wei. "Toward human-centered AI: A perspective from human-omputer interaction." *Interactions* 26, nr 4 (2019): 42–46. https://doi.org/10.1145/3328485.