

Basic recruitment practices for warehouse managerial positions in Bulgarian manufacturing and trading organizations

Miroslav Stefanov

University of National and World Economy, Economics of Infrastructure Faculty, Logistics and Supply Chains
Department, Student District, No.19 December 8th st., 1700 Sofia, Bulgaria, EU, m.stefanov@unwe.bg

Keywords: warehouse supervisors, warehouse managers, warehouse managerial recruitment, recruitment practices.

Abstract: The growing shortage of qualified warehouse managers over the last decade has adversely affected the ability of manufacturing and trading organizations to compete in logistics. Nevertheless, recruitment practices remain insufficiently studied across enterprises of different sizes and countries. This article aims to fill this gap by identifying the basic internal and external techniques for attracting candidates for management positions in the warehouses of small, medium and large Bulgarian manufacturing and trading organizations. The data were collected using the questionnaire survey method. To identify differences in internal and external recruitment practices across enterprises of different sizes, the Kruskal-Wallis non-parametric test was applied, and the extent of these distinctions was further evaluated using descriptive statistics, particularly average scores. The results indicate that manufacturing and trading organizations surveyed implement basic internal and external recruitment practices to attract candidates for warehouse management positions, with statistically significant differences in their application across enterprises of different sizes. The findings reveal distinctions in the extent to which internal recruitment practices are implemented by organizations surveyed regarding the use of intranet sites and e-mails, recommendations from employees, and databases provided by voluntary job applicants. The study also identified differences in the application of external recruitment techniques related to practices such as open lectures at universities, the use of social and professional profiles, the publication of adverts in online job platforms, and the organization's website. The research findings contribute to a deeper understanding of recruitment practices in logistics and have practical implications for both scholars and industry professionals.

1 Introduction

In the context of an increasingly persistent shortage of workforce needed to manage logistics activities [1] and systemic difficulties in recruiting highly qualified professionals in logistics [2], the practices for recruiting candidates for management positions in warehouses spark increased interest among policymakers and logistics managers. This interest is triggered by three main reasons. *First*, better knowledge of recruiting candidates with managerial competencies in warehouses contributes to improving labor market policies and supports the achievement of UN Sustainable Development Goal 8 by creating the conditions for stable economic growth, full employment and decent work. *Second*, warehouse managers make decisions about the allocation of scarce resources and make a vital contribution both to improving customer service and to maintaining and expanding the organization's competitive advantages. While the shortage of workers for non-management positions can be overcome by importing labor from abroad, this approach is not applicable for management positions, as it requires profound knowledge of the local language and linguistic skills for working with legal documents, being good at supporting arguments, upholding opinions, etc. This is a reason why the competition for candidates with managerial competencies is extremely intense. *Third*, warehouse managers contribute to attracting and developing talent and managing changes in customer service strategy in supply chains [3], which is why the management recruitment

practices are vital to achieving good organizational performance.

The topic of this article needs to be thoroughly researched. Although, in general, human resources receive significant scientific attention, previous research on various aspects of their management in logistics has been quite insufficient. An analysis of the available studies in this area before 2014 shows that 87% of them are focused on the acquisition of logistical competencies [4], while more recent studies look at the requirements for specific job positions as planners and supply chain analysts and outline the role of managers' personal preferences in the recruitment of workers with a broad or basic competence profile in the field [5]. As a result, little is known about the techniques of attracting candidates for management positions in warehouses and the specifics of the recruitment process. Therefore, there is a need for a quantitative description of the most significant recruitment techniques and their differences among different job levels [2], which stem from the specific requirements of the logistical skills needed to occupy positions at different organizational levels. In addition, it is also necessary to pay attention to management positions, as their shortages are sometimes comparable to those of non-management positions, and in some countries such as Vietnam are even higher and 84% of those participating in industry studies report recruitment difficulties in this segment [6]. The relationship between the recruitment practices applied and the size of the organizations represents another area that needs to be

Basic recruitment practices for warehouse managerial positions in Bulgarian manufacturing and trading organizations

Miroslav Stefanov

further explored. Current scientific evidence shows that there is an imbalance in the structure in the share of applied recruitment procedures in logistics between large and medium-sized enterprises compared to small ones [7], which is driven by differences in the availability of resources to implement recruitment practices. In addition, a previous study has found that attracting candidates with the right expertise to small and medium-sized enterprises is highly relevant for improving business performance [8].

The topic discussing the practices used to recruit candidates for management positions in warehouses is extremely relevant not only for the scientific community, but also for policymakers and logistics managers in Bulgaria. In the last few years, an increase in the income and consumption of business organizations and households has been registered in the country, which creates pressure to improve customer service in the manufacturing and trading sectors. This determines the tendency for increased construction of new warehouses and increased demand for managerial skills for warehouse processes. Hence, the sample of manufacturing and trading organizations is suitable for conducting this study. In addition, World Bank data show [9] that in the last few years unemployment in the country has been below the natural rate, creating labor shortage. In this context, the fight to attract candidates for management positions in warehouses is exacerbated and the need to seek solutions to improve existing recruitment practices is on the agenda. Therefore, choosing Bulgaria as the place to conduct this survey is appropriate and now is the right time to do so.

The purpose of this article is to identify basic recruitment practices applied for warehouse managerial positions through internal and external channels in different size Bulgarian manufacturing and trading organizations. This will be achieved by seeking answers to the following research questions.

1. *What are the applicable basic practices for recruiting candidates with competencies to manage warehouse processes in logistics?*

2. *Are there statistically significant differences in the practices applied for the recruitment of candidates with managerial competencies in the warehouses of different size Bulgarian manufacturing and trading organizations?*

3. *To what extent are there individual differences in attracting candidates for positions with managerial competencies through internal and external channels in the surveyed small, medium and large enterprises?*

This study contributes to the expansion of existing knowledge regarding the applied recruitment practices in three ways. *Firstly*, it is for the first time that the specifics of the internal and external channels for seeking candidates for management positions in the warehouses of the fast-growing sectors of manufacturing and trading in Bulgaria have been assessed, for which so far there is insufficient knowledge. *Secondly*, differences in the degree of implementation of recruitment practices across organizations of different sizes are outlined. *Thirdly*, an

initial basis is provided both to continue research in this field in the future and to support the efforts of policymakers and logistics managers to improve recruitment policies for candidates with managerial competencies in logistics and, in particular, in warehousing activities.

The findings in this article provide valuable interdisciplinary knowledge for a more comprehensive understanding of the applied practices for the recruitment of candidates for management positions in warehouses of manufacturing and trading organizations. This new knowledge is useful not only in the Bulgarian context, but also for other countries where no research has been conducted on the topic.

The rest of the article is structured as follows. Section 2 presents the theoretical framework for conducting the study. Methods of data collection and analysis are discussed in section 3. Section 4 is dedicated to presenting and discussing the results of the conducted questionnaire survey among managers and senior management of different-sized Bulgarian manufacturing and trading organizations regarding the practices used to recruit workforce with managerial competencies for warehouses. The conclusions of the study and some suggestions for further studies to be conducted in the future are presented in section 5.

2 Theoretical framework

Recruitment is a fundamental activity in any organization that aims to ensure the employment of candidates with the most suitable personal and professional qualities to hold the positions with non-managerial and managerial functions. Employees at four job title levels are usually involved in the execution of warehousing operations. These levels are operative; senior operative; supervisor or first line manager, and manager [10]. Jobs in the last two levels require managerial competencies related to planning, organizing, implementation and control, which narrows the range of potential candidates and makes the recruitment process a challenging task. Warehouse supervisors and managers are responsible for allocating scarce resources and achieving satisfactory results from the implementation of warehousing activities, consisting in providing a high level of customer service, ensuring the safety of the working environment and operations while respecting budgetary constraints.

The employment of workers with managerial competencies in the organizations' warehouses is achieved by tapping various sources of workforce. When developing recruitment policies in this area, logistics and human resources managers use the capacity of a variety of internal and external channels [8,11-16], which contribute to attracting the most suitable candidates. In the recruitment process, practices from both groups of sources are often used, thus combining their advantages and disadvantages. This increases the likelihood of attracting the right candidate [14].

The implementation of internal channels for hiring employees with managerial competencies in warehouses is

Basic recruitment practices for warehouse managerial positions in Bulgarian manufacturing and trading organizations

Miroslav Stefanov

justified in situations where some of the employees demonstrate high loyalty to the organization and have a high potential for development, as well as in cases where a new manager has to be appointed urgently. In these cases, the use of internal sources in the recruitment process saves time and money, as the employer knows the potential candidates, and they are familiar with the organizational culture and work procedures, which contributes to their rapid adaptation to the new responsibilities. Attracting candidates with managerial competencies in warehouses is carried out through various internal practices. A basic technique for advertising vacancies that allows internal candidates to grow to management positions is to use the potential of communication resources such as the organization's intranet site and e-mails [13-17] to post job ads. Another common practice is based on exploiting the possibilities of the workers' informal network of contacts, such as the interaction in 'old schoolboy' communities. Survey results show that when recruiting candidates for management positions, especially in small enterprises, senior management tends to prefer those with social relationships established during training in the same educational institutions [18], and the recommendations from friends and acquaintances are among the most common recruitment practices in small and medium-sized enterprises [13]. In addition, a survey on the use of personal contacts in Bulgaria found that 30% of respondents used such contacts in the last year, for finding a job included [19]. Therefore, the recommendations received through the personal contacts of workers [12,13,15] are interesting to research in this study. Other practices of great importance for attracting candidates for management positions are related to obtaining direct recommendations from co-workers [13-15,17,20], checking internal databases containing the results of regular job performance appraisals [14,20], as well as databases provided by voluntary job applicants [13,14].

The use of external channels to attract candidates with managerial competencies is appropriate in cases where there is urgent need to acquire specific know-how and new ideas for the reorganization of work processes and innovative renovation of the warehouse, as well as in all cases where expansion of the potential base of internal candidates in the recruitment is needed. In these situations, resorting to external sources of workforce allows the recruitment of established professionals with the necessary experience, professional connections and an objective perception of the organization and management of the warehouse activity, which strengthens the expertise of the team, limits the costs of training of employees and creates conditions for more intensive exchange of ideas and improves workers' motivation. Various practices are applied to attract candidates for managerial roles in warehouses, some of the most important among them can be classified into two groups. The first involves interaction with educational institutions and learners, which provides opportunities for early identification of candidates with potential for career excellence. It includes practices for

identifying suitable candidates by creating contacts at open lectures held at universities [1,11-14,17,20] contacts in secondary schools through dual training programs [12-14] contacts with students during the development of a thesis [1]. The second group involves the publication of advertisements through various traditional and alternative communication channels. It includes practices for ensuring that the job advertisements reach the maximum number of suitable potential candidates through: the profiles in the social and professional networks of the organization [1,8,17,20-23] adverts in online job platforms [1,11,12,14,16,17,20], job advertisements at job centers [14,16,17], recruitment agencies [12-14,16,17] and the organization's website [12-17].

3 Research methodology and methods

The answers to the posed research questions are obtained through the application of a methodology specially developed for conducting the present study. It is implemented in four stages and involves the use of several research methods for data collection and analysis.

During the first stage, the theoretical framework of the research is constructed. To this end, a literature review has been carried out to identify those internal and external channels recruitment practices that are most relevant for attracting candidates with managerial competencies to warehouses. The study of literary sources and research in the field were carried out by conducting content analysis. On the basis of the theoretical study, a total of thirteen basic practices have been identified, five through internal channels and eight through external channels to attract people for management positions, which are presented in Figure 1.

During the second stage, the survey questionnaire validation is carried out and the necessary empirical data are collected.

The identified practices were assessed for relevance and clarity of formulation. For this purpose, a test version of the questionnaire was developed. It was validated by an evaluation group consisting of seven warehouse managers with up to 5 years of experience in the field and one consultant who has more than 5 years of experience with the organization and the management of warehouse processes. The results of the validation show that the techniques developed in the theoretical framework for attracting candidates for management positions in warehouses through internal and external channels are often applied in the activity of logistics managers and are formulated in an understandable way and are therefore suitable for the purposes of the study.

The study of recruitment practices was carried out by asking the following question '*To what extent do you use these internal and external channels to attract candidates with managerial competencies to the warehouse?*'. The answers are recorded on a five-point numerical scale, in which the two extremes of the spectrum are: 1 – not at all and 5 – to a very high degree.

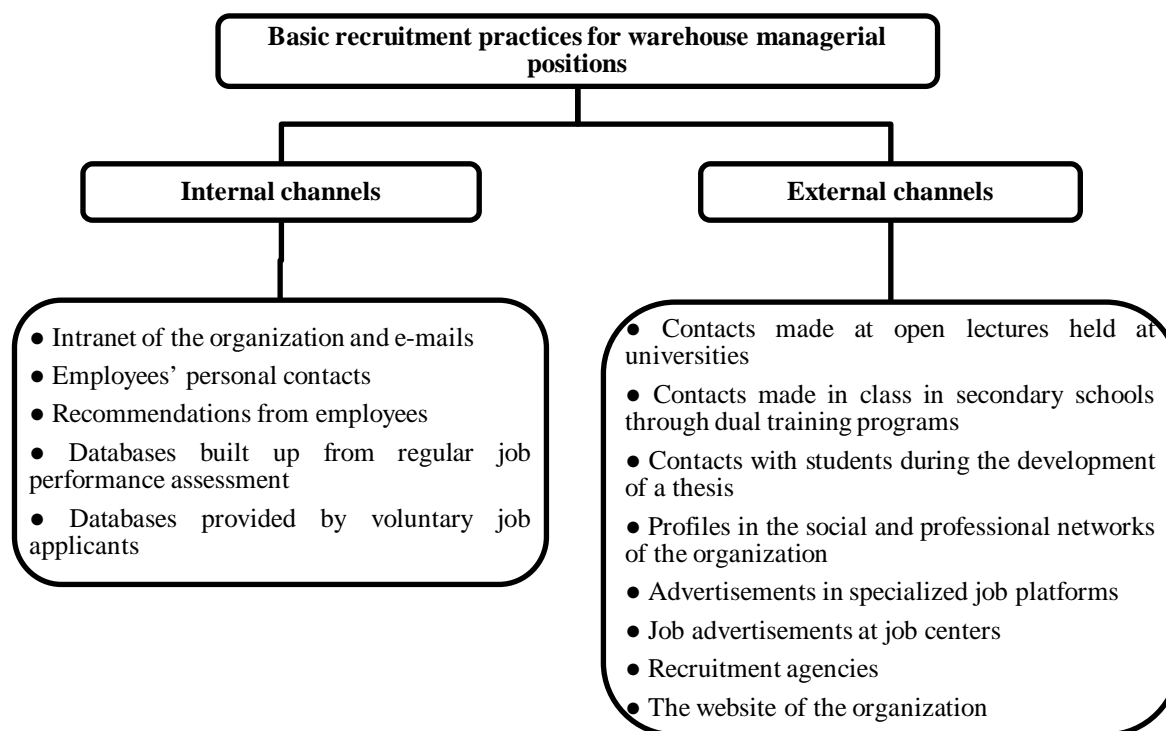


Figure 1 Conceptual framework of the basic recruitment practices for warehouse managerial positions through internal and external channels in the studied organizations

Source: author's systematization

The data were collected using the 'questionnaire survey method', which was conducted electronically via the LimeSurvey platform, between April and May 2020 in Bulgaria. The sample includes manufacturing and trading organizations with warehouses needed for performing their activities. The survey questionnaire includes a general questions section filled in by 134 enterprises and a dedicated human resources section, which registered responses from 91 organizations concerning the thirteen surveyed managerial competencies-related recruitment practices. The specialized section is filled in only by respondents who have excellent knowledge of human resources management practices and is accessed via a filter question. The ex-post evaluation of the quality of the data collected found that 11 respondents did not register responses on all practices surveyed, as the questions were defined as optional. In order to achieve a better homogeneity of the sample, incomplete records have been eliminated and 80 records with complete answers on all thirteen practices studied have been subjected to further study.

During the third stage, data processing was carried out. The toolkit for statistical testing of hypotheses and descriptive statistics was used for this purpose.

In order to justify a suitable method for testing hypotheses, a check for normality of the distribution of variables was performed. For this purpose, the tests of

Kolmogorov-Smirnov and Shapiro-Wilk were carried out. The results show that the variables used are not normally distributed. Therefore, the testing of hypotheses about the existence of statistically significant differences in the extent to which basic recruitment practices for warehouse managerial positions are applied in Bulgarian manufacturing and trading organizations of different sizes was carried out using nonparametric test. With the help of the Kruskal-Wallis test, such differences were found in the use of some techniques to attract candidates for management positions in small, medium and large enterprises, which are analyzed in more detail in the article.

During the fourth stage, some differences in the application of statistically significant techniques for attracting candidates with managerial competencies through internal and external channels of different-sized enterprises were identified.

The collected empirical data are processed using SPSS ver. 20 and MS Excel.

4 Results and discussion

4.1 General characteristic of the studied organizations

The structure of the surveyed enterprises by type and size, grouped under the criterion number of employees is presented in Figure 2.

Basic recruitment practices for warehouse managerial positions in Bulgarian manufacturing and trading organizations

Miroslav Stefanov

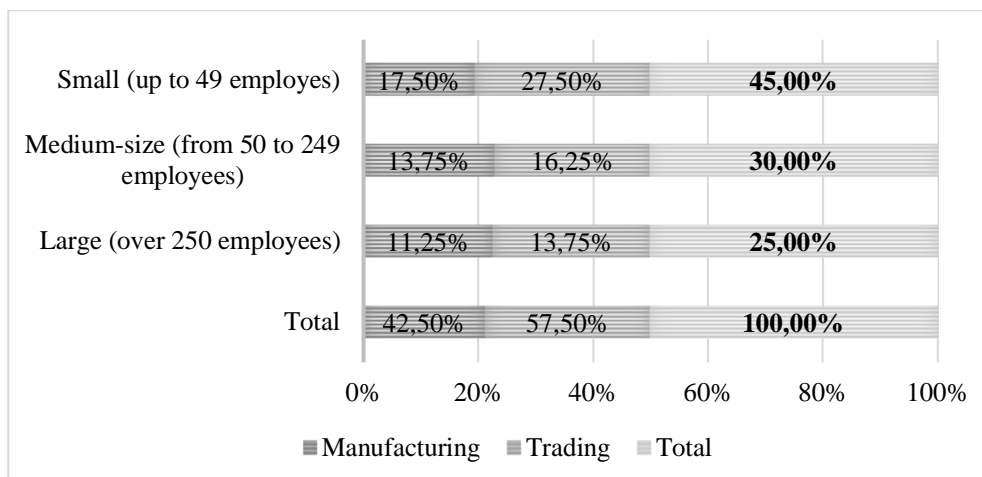


Figure 2 Distribution of the surveyed organizations by type and size according to the number of employees

Source: author's calculations

The structure of the enterprises by type shows that the share of manufacturing enterprises is 42.50% and the trading ones make up 57.50% of the surveyed population. The share of the small ones is predominant in the sample, followed by that of medium and large organizations.

The share of enterprises of different sizes surveyed differs from that in the national economy. According to data from the National Statistical Institute of Bulgaria, the share of small organizations by the number of employees in the country's manufacturing and trading sectors is over 90%. The analysis of the data from Figure 2 indicates that the current study involved a higher proportion of medium and large enterprises compared to those in the national economy. These enterprises have more resources to implement a broader range of recruitment practices, particularly for warehouse management positions. Expanding the number of medium and large organizations

in the present study will contribute to a better distinction of the specifics of the recruitment techniques applied in the manufacturing and trading sectors. This will improve the scientific basis for conducting subsequent studies.

4.2 General assessment of the basic recruitment practices for warehouse managerial positions through internal and external channels in the surveyed organizations

This section presents the results of applied statistical tools, which are the basis for the analyses and assessments conducted.

Table 1 shows relationships between basic recruitment practices for warehouse managerial positions applied through internal and external channels and organization size.

Table 1 Results of the Kruskal–Wallis test for the relationships between basic recruitment practices for warehouse managerial positions applied through internal and external channels and organization size

Basic recruitment practices for warehouse managerial positions through internal and external channels	Asymptotic significance values (2-sided test)
Internal channels	
1. Intranet site of the organization and e-mails	0.0040 *, **
2. Employees' personal contacts	0.0610
3. Recommendations by employees	0.0470 *
4. Databases built up from regular job performance assessment	0.3040
5. Databases provided by voluntary job applicants	0.0310 *
External channels	
1. Contacts made at open lectures held at universities	0.0290 *
2. Contacts made in class in secondary schools through dual training programs	0.0860
3. Contacts with students during the development of a thesis	0.1610
4. Profiles in the social and professional networks of the organization	0.0030 *, **
5. Advertisements on specialized job platforms	0.0180 *
6. Job advertisements at job centers	0.6700
7. Recruitment agencies	0.9660
8. The website of the organization	0.0040 *, **

Significance levels: * $p < 0.05$, ** $p < 0.01$

Source: author's calculation

Basic recruitment practices for warehouse managerial positions in Bulgarian manufacturing and trading organizations

Miroslav Stefanov

The data analysis reveals several statistically significant differences between the basic recruitment practices used for warehouse managerial positions through internal and external channels and the size of surveyed enterprises.

The average scores of the internal practices for recruitment of candidates for management positions in the organizations that participated in the survey are illustrated in Figure 3.

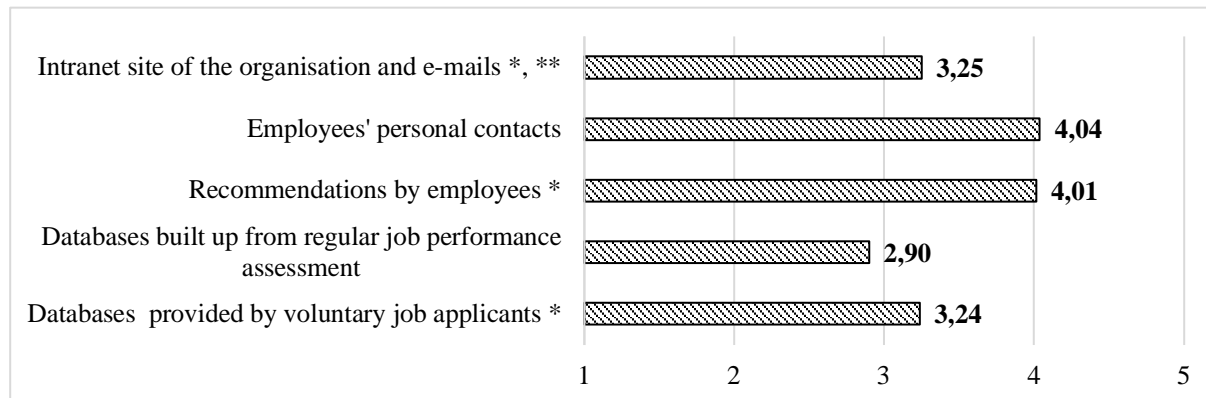


Figure 3 Basic recruitment practices for warehouse managerial positions through internal channels in the surveyed organizations (average scores: 1 – not used; 5 – actively used). Significance levels: * $p < 0.05$, ** $p < 0.01$

Source: author's calculations

The analysis of the data shows that the degree to which personal contacts and recommendations from workers are used in attracting candidates is high. Next, with moderate degree of application, come the organization's intranet site and e-mails, databases built up from regular job performance assessment and those provided by voluntary job applicants.

There are statistically significant differences in the use of internal sources to attract applicants to enterprises of

different sizes. They are observed in terms of the degree of implementation of practices such as the organization's intranet site and e-mails, recommendations from workers and databases provided by voluntary job applicants.

The average scores of external recruitment practices for management positions in the surveyed enterprises are presented in Figure 4.

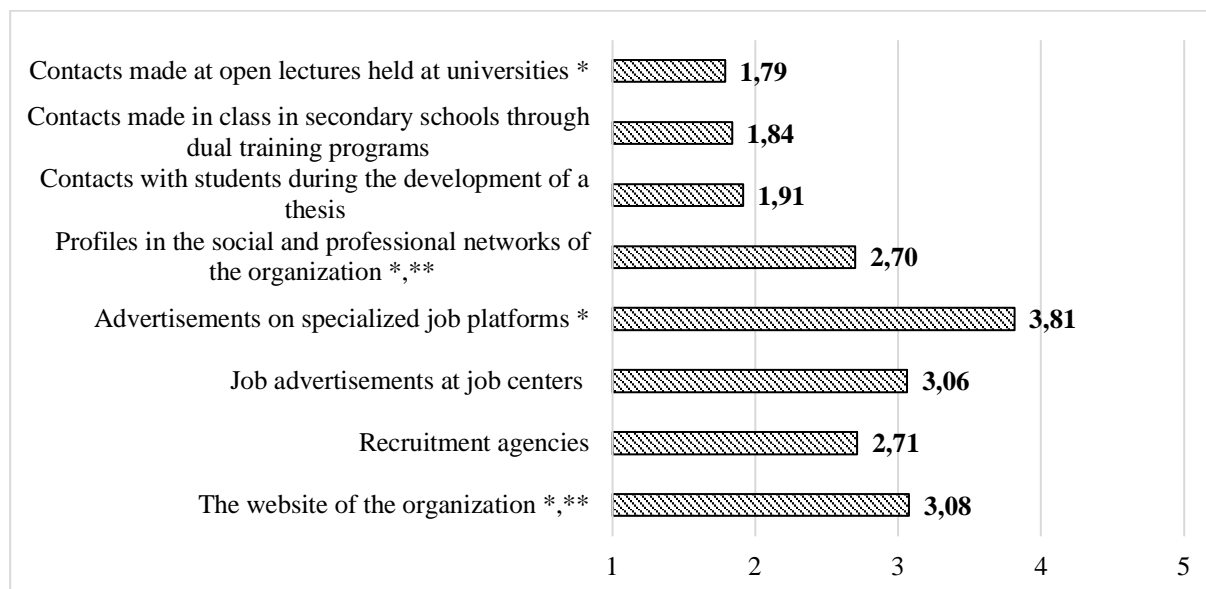


Figure 4 Basic recruitment practices for warehouse managerial positions through external channels in the surveyed organizations (average scores: 1 – not used; 5 – actively used). Significance levels: * $p < 0.05$, ** $p < 0.01$

Source: author's calculations

The analysis of the data shows that the use of channels for attracting applicants through contacts with universities,

schools and providing opportunities for the development of thesis papers is relatively low – the average scores tend

Basic recruitment practices for warehouse managerial positions in Bulgarian manufacturing and trading organizations

Miroslav Stefanov

to be 2. The use of the organization's social and professional networking profiles and agency services has been relatively satisfactory, and the practice of reaching out to potential candidates for management positions through job postings and websites has been moderately implemented. There is a relatively high level of job vacancies advertised through online job platforms.

There are statistically significant differences in the extent to which some external sources are applied to attract applicants to enterprises of different sizes. They are monitored in terms of implementing contact practices through open lectures at universities, the use of social and professional network profiles, the publication of ads on specialized job platforms and the organization's website.

4.3 Assessment of the statistically significant differences in basic recruitment practices for warehouse managerial positions through internal and external channels in the surveyed organizations of different sizes

The statistically significant differences in recruitment practices for warehouse management positions through internal and external channels in the surveyed small, medium and large enterprises are presented in Figure 5.

A previous study found distinctions of applied recruitment procedures in logistics across enterprises of different sizes without examining specific practices in this field [7]. The present research provides valuable insights that fill some existing research gaps. The results reveal both the basic recruitment practices and their application in recruiting candidates for management positions in the warehouses of small, medium and large organizations. The findings of a previous research claim that adapted recruitment procedures in small and medium enterprises improve the recruitment process and reduce employee turnover [24]. The present study broadens the interdisciplinary understanding of candidate recruitment for warehouse management roles and provides insights for small, medium and large organizations. In addition, it is conducted for manufacturing and trading enterprises in supply chains, providing new and specific knowledge in this field.

The analysis of the data reveals that, in general, the surveyed enterprises make high use of recommendations from workers as an internal channel to attract candidates for management positions. This is particularly evident in small and large organizations, with average scores above 4. Medium-sized enterprises apply this practice to a relatively high extent, with an average score of 3.67.

These findings align with earlier research conducted in the U. S., which identified co-worker recommendations as one of the most significant internal recruitment channels for logistics managers [17]. The present study provides additional empirical evidence that this practice is also prevalent among manufacturing and trading organizations in Bulgaria. Its widespread use in enterprises operating

warehouses underscores its vital role in attracting warehouse managers.

A recent study further supports this insight, demonstrating that recommendations remain the primary recruitment channel, preferred even over digital algorithms in the digital age [25]. Moreover, employee recommendations are used not only for management positions but also for non-management roles. Supporting this argument, research from small and medium-sized manufacturing organizations in Lagos, Nigeria, indicates that employee recommendations are commonly used to recruit workers for factory operations [26].

The current research also confirmed the traditional view [27] that co-worker recommendations are effective in recruiting candidates with managerial competencies. The findings provide additional scientific evidence that this channel is widely used when recruiting warehouse managers in small and large manufacturing and trading organizations. This contributes to a deeper understanding of employee recommendations-based recruitment, for which a previous study found a research gap in the literature [28].

The intranet site and e-mails, as well as the databases with job applicants, are generally used to a satisfactory extent. Small and medium-sized organizations apply these practices moderately, with an average score of around 3. Large enterprises with more resources to maintain such channels used them to a high extent, with an average score of around and above 4. The findings from this research align with earlier studies in the U.S. third-party firms sector, indicating that internal job postings shared through intranet sites and e-mails are some of the most commonly utilized practices for attracting internal candidates [17]. Moreover, the present study results reveal that this inference remains valid when recruiting candidates for management positions in warehouses of manufacturing and trading organizations, even a quarter of a century after the Gibson and Cook research. The inference about using databases provided by voluntary job applicants cannot be directly interpreted in the context of the conclusions of previous studies, as those studies are limited in number. The findings of this research, however, show that this fundamental recruitment channel is applicable when attracting candidates with managerial competencies in warehouses of manufacturing and trading enterprises of different sizes. In addition, this aspect requires further studies to understand the motivations of organizations to apply this practice when recruiting candidates for management positions in logistics.

Job vacancies advertised in online portals are generally used relatively frequently and represent the most significant external channel for attracting candidates for management positions. They are applied to a moderate degree by small enterprises and to a high degree by medium and large organizations, with average scores above 4. Given the finding of insufficient research on the impact of online job platforms on attracting suitable candidates [29], the present study offers valuable insights

Basic recruitment practices for warehouse managerial positions in Bulgarian manufacturing and trading organizations

Miroslav Stefanov

into using these platforms to recruit a workforce with management competencies in warehouses of different-sized manufacturing and trading enterprises.

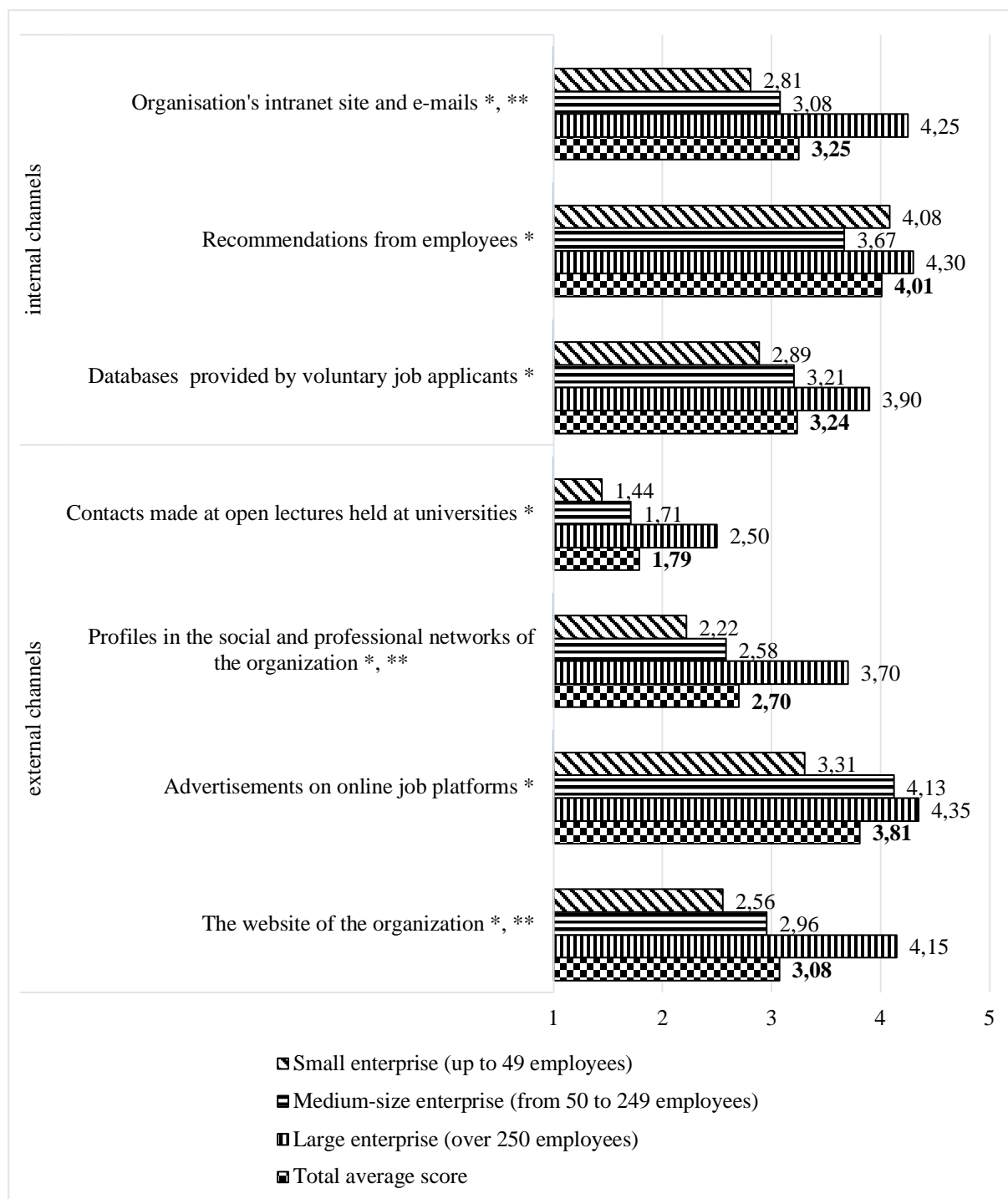


Figure 5 Statistically significant differences in basic recruitment practices for warehouse managerial positions through internal and external channels in the surveyed organizations (average scores: 1 –not used; 5 – frequently used).

Significance levels: * $p < 0.05$, ** $p < 0.01$

Source: author's calculations

Posting advertisements on corporate websites is high degree of application in large, moderate in medium generally used to a moderate extent. This channel has a and relatively satisfactory in small-sized enterprises.

Basic recruitment practices for warehouse managerial positions in Bulgarian manufacturing and trading organizations

Miroslav Stefanov

A previous study conducted in the U.S. indicated that third-party providers use websites as an external channel for recruiting managers [17]. The present research results confirm that this conclusion is also valid when recruiting a workforce with management competencies in the warehouses of manufacturing and trading organizations. A recent study identified the need to compare jobseekers' perceptions via LinkedIn ads and corporate websites [30]. The present study enables a comparison of these two channels from the perspective of organizations recruiting workforce with managerial competencies, where there is also a lack of scientific knowledge. The findings indicate that when recruiting candidates for managerial positions in their warehouses, the surveyed enterprises use company profiles in social and professional networks to a relatively moderate extent and company websites to a moderate extent.

Profiles in social and professional networks are used relatively frequently in large enterprises, comparatively moderately in medium-sized and rarely in small organizations. These findings provide valuable insights into using social and professional networks to recruit candidates for management positions in several ways. First, they complement the conclusions from an earlier study regarding the use of this channel by showing that it is applicable both to acquire talent for global supply chain managers [21] and for a workforce with managerial competencies in warehouses. Second, organizations' social and professional network profiles in recruiting are an emerging theme with significant research potential [31]. The results of this study fill some of the scientific gaps in this field and provide new insights into utilizing this channel to attract candidates with management competencies in warehouses of manufacturing and trading enterprises. Third, improving recruitment policies through social and professional networks necessitates conducting analyses across different countries. The recent research highlighted the need for more data to carry out comparative studies [32]. The current research findings enhance the scientific basis for conducting direct comparisons in utilizing social and professional networks to recruit candidates with management competencies in different countries. Fourth, a previous study shows that organizations can improve their recruitment processes by using profiles in social and professional networks to promote employer branding and increase organizational attractiveness [33]. The results of this research indicate that this conclusion is valid when attracting candidates for management positions in warehouses of large enterprises that have the necessary resources to maintain digital recruitment channels. Fifth, considering the limited knowledge of human resource practices and recruitment in small and medium-sized organizations [34], the present study provided valuable insights for these enterprises. The research results show that small and medium-sized organizations use social and professional network profiles to a limited extent when recruiting candidates with managerial competencies in warehouses.

Recruitment of candidates with managerial competencies in the surveyed organizations is implemented to a relatively low extent through networking at open lectures in universities. Large enterprises have the necessary resources for comprehensive talent search policies, which allow them to apply this channel relatively moderately. A comparatively low implementation of this practice in medium-sized organizations is observed, with an average score of 1.71, while small-sized enterprises virtually do not use it. These findings from the present research confirm the World Bank sector survey findings that open lectures at universities are used as an external channel to attract a workforce with management competencies [1] in large and medium-sized enterprises.

5 Conclusions

The results of this study present new knowledge on the applied policies for recruitment of candidates for management positions in the warehouses of small, medium and large Bulgarian manufacturing and trading organizations. The methodology developed for the purpose of the study made it possible to answer the research questions posed, and the conclusions are summarized in several groups.

First, the applicable basic practices for the recruitment of candidates with competencies to manage warehouse processes were identified. The techniques used when applying internal channels are: the organization's intranet and e-mails; personal contacts of workers; recommendations from the team members; databases of regular job performance assessments and databases of voluntary job applicants. The recruitment of candidates for management positions through external channels is carried out through practices such as: networking during open lectures at universities; making contacts in secondary schools through dual training programs; contacts with students during the development of thesis; profiles in the social and professional networks of the organization; advertisements in online job platforms; job advertisements at job centers; use of services of recruitment agencies and publication of adverts on the website of the organization.

Second, statistically significant differences were found in the use of internal and external channels for the recruitment of candidates in enterprises of different sizes. These differences can be observed in terms of the use of three internal practices – the organization's intranet and e-mails, recommendations from workers and databases of those who have volunteered to work, as well as four external ones – networking during open lectures at universities, the use of social and professional networking profiles, the publication of advertisements on online job platforms and the organization's website.

Third, large enterprises apply the three statistically significant internal practices to a high degree, as they are better equipped to allocate resources to these activities. Intranet sites and e-mails, as well as databases for those who volunteer for the job are used moderately by medium and relatively satisfactorily by small organizations.

Basic recruitment practices for warehouse managerial positions in Bulgarian manufacturing and trading organizations

Miroslav Stefanov

The application of direct recommendations is very frequently applied in enterprises of small size and relatively frequently in the medium-size ones.

The scores for the four statistically significant external recruitment techniques were highest for large organizations, followed by medium and small size enterprises. The classic technique for posting ads in specialized job platforms finds high use in large and medium organizations and moderate application in small size ones. The use of social and professional networking profiles and the organization's website to promote job vacancies is higher for large and medium-sized enterprises and more limited for small ones whose resources available for implementing employer branding policies are more limited. Contacts with students with the potential to develop managerial job positions made by conducting open lectures in universities are relevant for the search for candidates to a relatively moderate extent only in large organizations that can invest part of the man hours of their managerial staff in attracting new talent.

The study presents some new interdisciplinary scientific knowledge that can be used by the scientific community as a starting point for further research in this field in the future. In addition, it also provides some contributions of a practical nature. They can be used by policymakers – to implement policies to improve services in job centres by recruitment agencies – to expand the portfolio of services provided, by logistics and human resources managers in manufacturing and trading organizations – to diversify the channels used to attract workforce with managerial competencies to warehouses and gain some key advantages over competitors by securing the best candidates for management positions.

This study is the first of its kind in Bulgaria and some limitations have been adopted. They stem from the relatively small number of sampled enterprises, the selection of a narrow range of actors in the supply chains, the geographical scope and the methods used. Conducting future studies without these limitations will increase the scientific and practical value of the results. To this end, it is necessary to enlarge the sample size and explore other actors in the supply chains such as raw material suppliers and/or logistics service providers. In addition, conducting the study in other countries in Europe and the world will allow not only to improve knowledge in this field, but also to conduct comparative analyses with data from different countries. The addition of qualitative methods such as case studies will provide a better understanding of the motives for applying the individual practices studied in enterprises of different sizes. Other areas of research are related to assessing the impact of recruitment practices in manufacturing and trading organizations with warehouses on the organizational performance and the efficiency of supply chains.

Acknowledgments

The results presented in this article are based on data collected within a project NID NI-3/2019 "Warehouse

systems in logistics – management practices and trends". This work was financially supported by the University of National and World Economy Research Programme.

References

- [1] McKINNON, A., FLOETHMANN, C., HOBERG, K., BUSCH, C.: *Logistics Competencies, Skills, and Training: A Global Overview*, [Online], Available: <https://openknowledge.worldbank.org/handle/10986/27723> [9 Jul 2024], 2017.
- [2] KELLER, S.B., OZMENT, J.: Research on personnel issues published in leading logistics journals: What we know and don't know, *The International Journal of Logistics Management*, Vol. 20, No. 3, pp. 378-407, 2009. <https://doi.org/10.1108/09574090911002832>
- [3] BIROU, L., HOEK, R.V.: Supply chain management talent: the role of executives in engagement, recruitment, development and retention, *Supply Chain Management: An International Journal*, Vol. 27, No. 6, pp. 712-727, 2022. <https://doi.org/10.1108/SCM-08-2020-0418>
- [4] McKINNON, A., FLÖTHMANN, C., HOBERG, K.: *Skill shortages in logistics: An empirical analysis and review of options*, [Online], Available: <https://www.europeanfreightleaders.eu/wp-content/uploads/2018/02/314.-Reading-Logistics-Skills-Study.pdf> [17 Aug 2024], 2016.
- [5] FLÖTHMANN, C., HOBERG, K., WIELAND, A.: Competency requirements of supply chain planners & analysts and personal preferences of hiring managers, *Supply Chain Management: An International Journal*, Vol. 23, No. 6, pp. 480-499, 2018. <https://doi.org/10.1108/SCM-03-2018-0101>
- [6] NGUYEN, H.P.: Human resource management of logistics in Vietnam: Status and policy solutions, *International Journal of Innovation, Creativity and Change*, Vol. 11, No. 3, pp. 569-583, 2020.
- [7] GOŁEMBSKA, E., GOŁEMBSKI, M.: A new model of the personnel function delivery in the logistics of polish firms, *Logistics*, Vol. 4, No. 3, 15, pp. 1-14, 2020. <https://doi.org/10.3390/logistics4030015>
- [8] AZMY, A.: Recruitment strategy to hire the best people for organization, *Journal of management and leadership*, Vol. 1, No. 2, pp. 1-16, 2018.
- [9] Work Bank Group, <https://www.worldbank.org/Bulgaria/EconomicIndicator>, [Online], Available: <https://data.worldbank.org/country/bulgaria> [08 Aug 2024], 2024.
- [10] EMMETT, S.: *Excellence in warehouse management: How to minimise costs and maximise value*, Chichester, John Wiley & Sons Ltd., 2005.
- [11] ALWI, S.K.K., UL HASAN, S.W., ZAMAN, S.U.: Internal vs. external recruitment: the impact of operational and financial factors, *KASBIT Business Journal*, Vol. 15, No. 2, pp. 115-129, 2022.
- [12] ARMSTRONG, M.: *A handbook of human resource management practice*, 10th ed., London, Kogan Page, 2006.

- [13] KLEPIĆ, I.: Correlation of recruitment and selection of human resources and the performance of small and medium enterprises, *Naše gospodarstvo / Our economy*, Vol. 65, No. 4, pp. 14-26, 2019. <https://doi.org/10.2478/ngoe-2019-0016>
- [14] MUSCALU, E.: Sources of human resources recruitment organization, *Land Forces Academy Review*, Vol. 20, No. 3, pp. 351-359, 2015.
- [15] SCHWEYER, A.: *Talent management systems: best practices in technology solutions for recruitment, retention and workforce planning*, John Wiley & Sons, 2004.
- [16] STEWART, G.L., BROWN, K.G.: *Human resource management: Linking strategy to practice*, 4th ed., Hoboken NJ, John Wiley & Sons Inc., 2019.
- [17] GIBSON, B.J., COOK, R.L.: Hiring practices in US third-party logistics firms, *International Journal of Physical Distribution & Logistics Management*, Vol. 31, No. 10, pp. 714-732, 2001. <https://doi.org/10.1108/09600030110411400>
- [18] AHN, D., KIM, W., LEE, E.J., PARK, K.S.: Congruence within the Top Management: How 'Old Boy Network' Affects Executive Appointment and Performance, *Seoul Journal of Business*, Vol. 23, No. 1, pp. 59-90, 2017. <https://doi.org/10.35152/snusjb.2017.23.1.003>
- [19] WILLIAMS, C.C., YANG, J.: Evaluating the Use of Personal Networks to Circumvent Formal Processes: A Case Study of Vruzki in Bulgaria, *South east European journal of economics and business*, Vol. 12, No. 1, pp. 57-67, 2017. <https://doi.org/10.1515/jeb-2017-0006>
- [20] SUNDRAM, V.P.K., GHAPAR, F., LI LIAN, C., MUHAMMAD, A.: Engaging lean six sigma approach using DMAIC methodology for supply chain logistics recruitment improvement, *Information Management and Business Review*, Vol. 15, No. 1, pp. 46-53, 2023. [https://doi.org/10.22610/imbr.v15i1\(i\)si.3401](https://doi.org/10.22610/imbr.v15i1(i)si.3401)
- [21] FISHER, R., McPHAIL, R., YOU, E., ASH, M.: Using social media to recruit global supply chain managers, *International Journal of Physical Distribution & Logistics Management*, Vol. 44, No. 8/9, pp. 635-645, 2014. <https://doi.org/10.1108/ijpdlm-07-2013-0179>
- [22] KLUEMPER, D.H., DAVISON, H.K., CAO, X., WU, B.: *Social networking websites and personnel selection: A call for academic research*, In: NIKOLAOU, I., OOSTROM, J.K. (ed.) *Employee recruitment, selection, and assessment: Contemporary issues for theory and practice*, London, Psychology Press, Taylor & Francis Group, 2015.
- [23] MARIN, G.D., NILÁ, C.: Branding in social media. Using LinkedIn in personal brand communication: A study on communications/marketing and recruitment/human resources specialists perception, *Social Sciences & Humanities Open*, Vol. 4, No. 1, 100174, pp. 1-11, 2021. <https://doi.org/10.1016/j.ssaho.2021.100174>
- [24] BIEA, E.A., DINU, E., BUNICA, A., JERDEA, L.: Recruitment in SMEs: the role of managerial practices, technology and innovation, *European Business Review*, Vol. 36, No. 3, pp. 361-391, 2024. <https://doi.org/10.1108/eb-05-2023-0162>
- [25] OBERST, U., DE QUINTANA, M., DEL CERRO, S., CHAMARRO, A.: Recruiters prefer expert recommendations over digital hiring algorithm: a choice-based conjoint study in a pre-employment screening scenario, *Management Research Review*, Vol. 44, No. 4, pp. 625-641, 2021. <https://doi.org/10.1108/mrr-06-2020-0356>
- [26] OGinni, B.O., AYANTUNJI, I.O., OLANIYAN, T.S., AJIBOLA, K.S., AJAKAYE, T.B.: The nexus between recruitment and selection practices and business performance of Nigerian small and medium-sized manufacturing enterprises, *International Journal of Management Studies*, Vol. 30, No. 2, pp. 469-500, 2023. <https://doi.org/10.32890/ijms2023.30.2.10>
- [27] POTOČNIK, K., ANDERSON, N.R., BORN, M., KLEINMANN, M., NIKOLAOU, I.: Paving the way for research in recruitment and selection: recent developments, challenges and future opportunities, *European Journal of Work and Organizational Psychology*, Vol. 30, No. 2, pp. 159-174, 2021. <https://doi.org/10.1080/1359432X.2021.1904898>
- [28] SCHLACHTER, S.D., PIEPER, J.R.: Employee referral hiring in organizations: An integrative conceptual review, model, and agenda for future research, *Journal of Applied Psychology*, Vol. 104, No. 11, pp. 1325-1346, 2019. <https://doi.org/10.1037/apl0000412>
- [29] NIKOLAOU, I.: What is the role of technology in recruitment and selection?, *The Spanish Journal of Psychology*, Vol. 24, No. 2, pp. 1-6, 2021. <https://doi.org/10.1017/SJP.2021.6>
- [30] TONG, D.Y.K., TONG, X.F., LUO, S.: Corporate website job recruitment platform: a moderated mediation model of organisational image, *Asian Academy of Management Journal*, Vol. 27, No. 1, pp. 105-127, 2022. <https://doi.org/10.21315/aamj2022.27.1.5>
- [31] RUPAREL, N., DHIR, A., TANDON, A., KAUR, P., ISLAM, J.U.: The influence of online professional social media in human resource management: A systematic literature review, *Technology in Society*, Vol. 63, No. August, 101335, pp. 1-11, 2020. <https://doi.org/10.1016/j.techsoc.2020.101335>
- [32] DRAGUSHA, B., PRENAJ, V.: The role of social networks as a tool for an effective recruitment process in the enterprises in Kosovo, *Journal of Eastern European and Central Asian Research (JEECAR)*, Vol. 8, No. 3, pp. 384-388, 2021. <https://doi.org/10.15549/jeecar.v8i3.696>
- [33] CARPENTIER, M., VAN HOYE, G., WEIJTERS,

Basic recruitment practices for warehouse managerial positions in Bulgarian manufacturing and trading organizations

Miroslav Stefanov

B.: Attracting applicants through the organization's social media page: Signaling employer brand personality, *Journal of Vocational Behavior*, Vol. 115, No. July, 103326, pp. 1-14, 2019.

<https://doi.org/10.1016/j.jvb.2019.103326>

- [34] HARNEY, B., ALKHALAF, H.: A quarter-century review of HRM in small and medium-sized enterprises: Capturing what we know, exploring

where we need to go, *Human Resource Management*, Vol. 60, No. 1, pp. 5-29, 2020.

<https://doi.org/10.1002/hrm.22010>

Review process

Single-blind peer review process.