

The Use of Psychological Tests in Polish Organizations: Empirical Evidence

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Abstract—In the last decades, psychological tests have been gaining in popularity as a method used for evaluating personnel, and they bring consulting companies solid profits rising by up to 10% each year. The market is offering a growing range of tools for the assessment of personality. Tests are used in organizations mainly in the recruitment and selection of staff. This paper is an attempt to initially diagnose the state of the use of psychological tests in Polish companies on the basis of empirical research.

Keywords—Psychological tests, personality, content analysis, NEO FFI, big five personality model.

I. INTRODUCTION

IN today's organizations tests, assessing employees are used at two stages, before hiring (if this is an assessment of the candidate for the position) and after employment during the appraisal of employees who pursue careers in the organization. Such assessments are also useful in the search for talent, creating teams of employees, organization's development based on social potential. In the practice of Western countries, the research suggests the growing importance of psychological tests [1]-[3] in a set of tools used for assessment. The effective recruitment of right person for the job is crucial for success of the organization what is very well described by words of Steven Fifield, president of Fifield Cos. Ltd.: "*We do \$100 million of business a year, but we have only 14 employees. One bad employee can make for a very bad day. Personality fit is very important* [4]."

Against the background of the growth trend in popularity of tests, the offer of Polish companies providing support services for employee assessment processes through the use of psychological tests seems to be interesting.

The literature is dominated by articles and books dealing with the importance and application of tests in the employee selection phase, most authors focus their discussion on the problem of using tests for recruitment and selection [5]. Publications on the tests used at the stage of cooperation with the employee are devoted mostly to the assessment of leadership [2], creation of balanced teams, improvement of the communication system between employees and increase in the efficiency and cooperation [1]. The purpose of this paper is to identify the offer of psychological tests in Poland and its evaluation on the background of global trends in the use of psychological tests as well as to present current trends in the selection of specific tests.

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In the first part of the paper, a brief overview of the use of psychological tests in organizations based on the literature studies is presented. The second part discusses the assumptions and results of author's own research. The next part deals with the assessment of the obtained results and identifies directions for the use of tests based on the results obtained.

II. ROLE OF PSYCHOLOGICAL TESTS IN ORGANIZATIONS

According to the literature of the subject, the cognitive ability tests and personality tests are mentioned in a range of basic selection techniques [6], and they are more often used than the assessment centre in Poland [7]. At the same time, researchers conclude that the usefulness of psychological tests results from the assessment criteria in the employee selection process, their evaluation, and the creation of task-oriented teams. The criteria for selection are divided into formal, easy to evaluate on the basis of official data (education, qualifications) and content. The content premises are divided into psychological and competence ones [6], both types are difficult to measure without the use of specialised tools objectifying the assessment which are psychological tests (of personality and cognitive competence). Specific selection criteria, by which employers are guided, include: having a general knowledge, knowledge of methods of work planning and organisation, emotional intelligence, agreeableness and leadership skills [7]. Tests and analysis of previous achievements are an objective tool in getting to know these traits. The domestic organisations often limit the way of assessing personality traits to a conversation, carried out by company's employees with an applicant [8]. This method of personality analysis may raise many objections, even if the interview is conducted by a psychologist. A thorough assessment of personality requires not only knowledge and psychological education, but also specialist preparation in the diagnosis. Errors in inference about the traits of an individual on the basis of a conversation are unavoidable and they are also made by psychologists specialised in the analysis of personality [9].

At the evaluation stage of the workers already employed tests are particularly useful in the process of creating teams, in the selection of individual members of the group on the grounds of a goal or effectiveness. To be effective, team members should complement each other by specialised skills, personality traits, interpersonal skills, etc. In teams with high performance, the employees are bound by highly emotional relationships, they are people with great commitment, enthusiastic about tasks [10]. The enthusiasm and commitment

can be easily pretended in a job interview, a psychological test gives a better chance for reliable information on the subject. Personality tests are also helpful in predicting which relationships between team members will be created, which roles will be adopted by employees. The organisational attention profile should also be among the competences surveyed through psychological tests used in the selection procedure. The organisational attention of employees, especially of the key management personnel, affects the efficiency of the organisation. The measurement of organisational attention in the employee selection, but also at the stage of selection of development methods of employees in managing their resources can be beneficial in building effective teams [11]. Psychological tests are a chance to capture the variables difficult to verify in other ways. Maintaining high standards in human resources management and offering employees a professional development program in the long term are among the criteria for maintaining a competitive advantage in the market. The value of the employee raised by improving their skills and competences, including psychological ones, should be coupled with an appraisal. A personal development plan, career paths, assessment/development centre, 360° method or psychological tests are elements of talent management and human resources management system [12].

Psychological tests have been gaining in popularity as a method of psychological evaluation in managing people and their recruitment in the last decades [13]. There is little in the literature about which tests are used by Polish organisations. The lack of research in this area has contributed to the attempt to fill this gap and build a list of psychological tests used in Polish business.

III. IDENTIFICATION OF THE POLISH MARKET OFFER IN THE USE OF PSYCHOLOGICAL TESTS: THE PROBLEM, OBJECTIVES AND SCOPE OF THE RESEARCH

In Poland, there is a large diversity due to the quality of tests one can encounter in professional situations [14]. The Polish Psychological Association adopts a division of the American Association of tests due to the required competence to use them [15]:

Level A: e.g. tests of professional achievements are tests that do not require knowledge beyond the instructions in the manual, they can be used by administrative staff who are not psychologists.

Level B: These tests require expertise in the field of psychometrics, statistics and research methodology, individual differences, organisational psychology. Tests within this category are mainly tests of general intelligence or interests, used in schools, state institutions and business.

Level C: This category requires a psychologist diploma. The tests belonging to this group are tests carried out individually, tests of intelligence, personality and projection methods.

The need to identify the situation of psychological tests in Polish enterprises leads to the research question: "What

psychological tests are used by Polish organisations in the processes of human resource management?"

The aim of the analysis is to build a catalogue of psychological tests used by Polish companies and to identify the most popular ones.

IV. DEFINING POPULATION AND SAMPLE

An increasing number of organisations outsource HR services. In the recruitment, it is up 61% for positions requiring specialised knowledge and 42% when a company wants to hire mid-level manager [6]. Psychological tests are more frequently used in companies benefiting from outsourcing of this area of activity than when companies carry out all the processes of human resource management within its own structure [7], which may be due to the fact that fewer companies directly use the services of a psychologist in relation to companies providing HR services. This situation applies in particular to highly specialised companies, small and medium-sized [16].

In the study, the population is a group of companies providing consultancy services in the field of human resource management as well as recruitment and selection processes. According to the Polish Classification of Business Activities (in Polish *PKD*) [17], such a profile of the company is classified under Section M 'consultancy in the scope of conducting business activity and management' and sub-class 70.2. In turn, companies involved in the recruitment of employees are eligible to the Section N 'activities related to seeking work places and gaining employees', sub-class 78.1. It should also be noted that the determination of the exact number of firms in the population is difficult for at least two reasons. Firstly, the number of companies registered under the PKD refers not only to companies which belong to the group interesting from the point of view of the sampling, but also companies providing other services—in section M there is a total of 15 business groups and in section N 19 sub-classes. Secondly, the actual number of active enterprises operating in the industry may be smaller than the number of active entities registered in the REGON register.

In view of the outlined problems in identifying the population, a simplified method of determining the surveyed organisations based on information posted on the Internet was used.

V. RESEARCH METHODOLOGY

The study was based on the procedure of obtaining data from the Internet [18], [19]. Its essential steps are to establish key words and a list of websites related to research questions, after prior selection of search results.

The websites were selected using the Google search engine in five searches. The key words that were entered are 'psychological test', 'personal counselling', 'psychological tests used in business', 'HR services' as well as 'hr counselling + psychological tests'. The results of searches of 20 July 2013 were saved and analysed. Websites of companies providing B2B HR services were selected from all the results,

after rejecting repeated pages, documents, blogs, social networks, etc. The described procedure allowed to select 110 companies. The subject of the research was the content of selected websites. The websites of all 110 companies were analysed for information on the use of psychological tests at stages before and after employment.

Due to the differences in the scope of information provided on the retrieved pages, according to the coding procedure described in the literature on methodology of scientific research [19], the sample was divided into four groups:

- Group A, consists of the websites of companies that specify which tests they use,
- Group B, consists of websites on which information is given, what characteristics and competencies are measured by tests without naming them,
- Group C, is the companies that mention psychological tests as a tool of their trade without specifying what areas they examine,
- Group D, is the companies from the population that do not mention tests on their website.

The general comparison of the proportion of companies depending on the information on tests presented on the website of selected companies is illustrated by the graph:

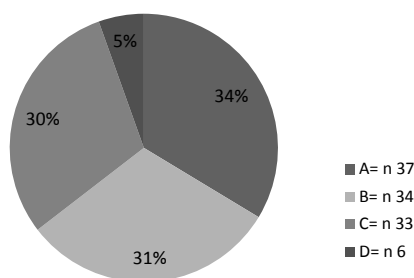


Fig. 1 The division of organisations due to information on the website on the use of psychological tests

The information obtained from websites of companies from group A was a subject to further analysis the psychological tests in the companies' offer were collected and counted.

VI. RESEARCH RESULTS

In total 57 different tests are listed by companies as a tool used as part of their services. Organisations in the population of companies dealing with consulting in the field of human resource management as well as recruitment and selection processes, which have websites, in at least 95% of the cases use psychological tests.

The tests used by the largest number of companies are: 27 tests are only used by one of the surveyed companies. Other tests had 2 or 3 indications. Tests with the highest number of indications are the DISC, Thomas and Hogan. Given the number of indications in the study of both primary and shortened versions, the NEO test has a total of 10 indications, most of all.

TABLE I
 TESTS USED BY POLISH COMPANIES

No. of indications	Tests
6 indications	— DISC
	— Thomas
	— Hogan
5 indications	— NEO FFI
	— NEO PI R
	— MBTI
4 indications	— CwP
	— XT
	— SHL
	— Insight
3 indications	— Raven

VII. INTERPRETATION OF RESULTS

The popularity of the NEO test may be due to several reasons. Firstly, as the study indicates, in their practice, diagnosticians use most of these tests, which they learn in the course of their studies [9]. Most degree courses in psychology in Poland include the NEO; the other tests most frequently mentioned in the survey are not present there. Secondly, the reputation of the test as well as its scientific basis – the Big Five model–have their strong position in psychology. Questionnaires are investigating five 'super factors' are one of the most commonly used tools for assessment in the world [20]. The NEO tests many times, in different cultures [21] showed a high psychometric performance on various samples [22]-[24]. There are many scientific publications describing research proving the high accuracy and reliability of the NEO tests, while it is difficult to find independent studies on the remaining four tests. The explanation for the popularity of other tools (DISC, Thomas, Hogan and MBTI) may be their descriptiveness and the fact that they do not require psychological education. The NEO tests, adapted and distributed by the Polish Psychological Association (PPA), are only available for psychologists, and not in every company using psychometric tools a psychologist is employed. Admittedly, a license purchase for tests such as DISC requires undergoing a short training, which, like the tests themselves, is relatively expensive, their cost is several times higher than the cost of tests sold by PPA; however, an employee of any education may be seconded to this assignment, which makes the tests more available. These tests include descriptions of traits based on the results; software generates a report on the profile of the examined person. They do not require a deep analysis of the results of the individual scales and their interpretation, as opposed to C level tests.

VIII. CONCLUSION

Companies through psychological tests look for similar information on the personality of employees. The most popular of tests (from the NEO group as well as DISC, MBTI and Hogan and Thomas tools) provide knowledge of employees in relation to such features as: communication skills, adaptability, ambition, sociability, interpersonal sensitivity, regularity, curiosity and openness to knowledge and experience, agreeableness and conscientiousness as well as on the potential of employees and their strengths and

limitations. The tools also allow the identification of styles of behaviour, characteristics that occur during social interactions and the measurement of the ability and speed of learning [25].

The path worth proceeding further research is the motivation to use psychological tests as well as barriers that accompany drawing on this source of knowledge about an employee. Because the studies presented here were carried out by analysis of Internet content it seems valuable to verify the results with more traditional research methods.

REFERENCES

- [1] D. Bartram (2004), Assessment in organizations. *Applied Psychology: An International Review* 53(2), 237-259.
- [2] S. A. Carless (2009), Psychological testing for selection purposes: a guide to evidence-based practice for human resource professionals. *The International Journal of Human Resource Management*, 20(12), 2517-2532.
- [3] E. Hoffman (2008), Psychological testing at work: how to use, interpret and get the most out of the newest tests in personality, learning style, aptitudes, interests and more! US, McGraw-Hill Inc.
- [4] J. Adler (2000), Personality test finds fans at smaller firms. *Chicago Business*.
<http://www.chicagobusiness.com/article/20000213/HOLD/100013616/personality-tests-find-fans-at-smaller-firms>. Retrieved 15.07.2014.
- [5] S. J. Stabile (2002), The use of personality tests as a hiring tool: is the benefit worth the cost? *U. PA. Journal of Labor and Employment Law*. 4(2), 279-313.
- [6] M. Suchar (2008), Rekrutacja i selekcja personelu. Warszawa, C. H. Beck.
- [7] J. M. Lichtarski (2007), Specyfika doboru pracowników do struktur zadaniowych w teorii i praktyce. *Zarządzanie Zasobami Ludzkimi*. 6, 25-40.
- [8] B. Rehlich, J. Pastel (2006), Rekrutacja i selekcja w Elektrobudowie, *Zarządzanie Zasobami Ludzkimi*. 2(47), 48-60.
- [9] J. M. Stedman, J. P. Hatch, L. S. Schoenfeld (2001), The current status of psychological assessment training in graduate and professional schools. *Journal of Personality Assessment*, 77(3), 398-407.
- [10] B. Kozusznik (2005), Kierowanie zespołem pracowniczym. Warszawa. Polskie Wydawnictwo Ekonomiczne S. A.
- [11] M. Bratnicki, P. Zbierowski (2006), Profil uwagi — nowe kryterium rekrutacji. *Zarządzanie Zasobami Ludzkimi*. 2(47), 23-31.
- [12] K. Szczepańska, J. Onyszczuk (2009), Audit personalny w przedsiębiorstwach posiadających system zarządzania jakością. *Zarządzania organizacjami w warunkach konkurencyjnej gospodarki pod red. Stefana Lachiewicza i Agnieszki Zakrzewskiej- Bielawskiej. Monografie Politechniki Łódzkiej*. 1836, 100-109.
- [13] D. W. Arnold, A. J. Thiemann (1992), To Test or Not To Test: The Status of Psychological Testing under the ADA.
- [14] E. Zalewska (2009), Testy psychologiczne - standardy dostępności i legalności w Polsce, Wielkiej Brytanii i USA. *Psychiatria i Psychoterapia*, vol. 5 (1).
- [15] <http://www.ptp.org.pl/modules.php?name=News&file=article&sid=463> (retrieved: 2 July 2014).
- [16] E. Szkie-Czech (2007), Przymierza outsourcingowe w kształtowaniu przedsiębiorstw sieciowych przez podmioty o tożsamej domenie. *Prace Naukowe Akademii Ekonomicznej we Wrocławiu*, 1183, 525—537.
- [17] From 1 January 2008 PKD classification in force (known as PKD 2007) was introduced the regulation of Council of Ministers of 24 December 2007. (Dz. U. of 2007. No. 251, item. 1885 dated 31 December 2007).
- [18] Blumberg B., Cooper D. R., Schindler P. S. (2011), *Business research methods*, UK McGraw-Hill Education.
- [19] A. Bryman, E. Bell (2003), *Business research methods*. Oxford. Oxford University Press.
- [20] Fazeli S. H. (2012), The exploring nature of the assessment instrument of Five Factors of personality traits in the current studies of personality. *Asian Social Science*. 8(2), 264-275.
- [21] De Fruyt F., De Bolle M., McCrae R. R., Terracciano A., Costa P. T. (2009), Assessing the universal structure of personality in early adolescence: The NEO-PI-R and NEO-PI-3 in 24 cultures, *Assessment*, 16(3), 301-311.

- [22] Chapman B. P. (2007), Bandwidth and fidelity on the NEO-Five Factor Inventory: replicability and reliability of Saucier's (1998) item cluster subcomponents. *Journal of Personality Assessment*, 88(2), 220-234.
- [23] Young M. S., Schinka J. A. (2001), Research validity scales for the NEO-PI-R: additional evidence for reliability and validity. *Journal of Personality Assessment*, 76(3), 412-420.
- [24] Murray G., Rawlings D., Allen N. B., Trinder J. (2003), NEO Five-Factor inventory scores: psychometric properties in a community sample. *Measurement and Evaluation in Counseling and Development*. 36, 140-149.
- [25] Hogan, R., Hogan, J., Roberts, B. W. (1996), Personality measurement and employment decisions: Questions and answers. *American Psychologist*, 51(5), 469-477.

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