

NEW ECONOMY Section

SHAPING INNOVATION-ORIENTED EMPLOYABILITY – EXPERIENCE OF PUBLIC HOSPITALS¹

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Abstract. *The aim of this study is an attempt to define and identify innovation -oriented employability in public hospitals. First, an analysis of the literature was performed and a preliminary standard employability pattern conducive to innovation was formulated. The basis of study was empirical research conducted in 2014 in 8 Polish hospitals, attended by 467 respondents. The analysis used the Kruskal-Wallis test (ANOVA rank Kruskal-Wallis) and the calculation was performed using STATISTICA 10. The results clearly indicate the problem of public hospitals with the use of incentive systems that rewards the achievements of innovative employees, as well as difficulties in encouraging staff to take risks and experiment on the job.*

Keywords: *employability, innovation – oriented employability, personnel practices, innovation, public hospitals.*

1. Introduction

In the context of the new economy, as an essential condition for the survival and development of the organization innovation is considered. At the same time, due to the fact that human resources (people) are generators of new or creatively transformed solutions the proper use of these resources is necessary (Borkowska, 2010). This view is of decisive importance in the context of employability, which in turn is an important element for rapidly adapting organizations and their staff to change operating conditions. In connection with the above the conscious development practices that identify and modify competence or motivation towards innovation are necessary. However, it is difficult to find empirical studies on the relationship between employability of innovation, particularly in public hospitals. This problem seems all the more

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¹ This article is based on research funded by the National Science Center awarded on the basis of Decision No DEC -2011/03/B/HS4/04544.

interesting, that the independent public health care institutions apply different solutions from the private sector of management resulting from the peculiarities of health services and the specific characteristics of the environment, organizational structures and processes (Frączkiewicz-Wronka, 2009) that take place in these entities. Therefore, the aim of this study is to attempt to define and identify (favorable) employability-oriented innovation practices in public hospitals. First, an analysis of the literature was performed and a preliminary standard employability conducive to innovation was formulated. Then the methodology of the research was described and results of own empirical research conducted in 2014 in 8 hospitals operating in Poland were presented. The study involved 467 respondents, of which the largest group consisted of nurses and midwives. The analysis used the Kruskal-Wallis (ANOVA rank Kruskal-Wallis) and the calculation was performed using STATISTICA 10. In summary of the publication proposals were described, but stressed were the limitations of the study and attempt to determine the prospects for further scientific inquiry concerning the organization and favorable employability-oriented innovation practices.

2. The framework of the study (innovation and employability)

In the new economy the concept of innovation has a fixed interest from both practitioners and researchers – theorists. It can be considered that innovation is the most current requirement for the development of modern organization, which means the ability to create, deploy and absorb innovation involving the possession of resources and the ability to use them. At the same time it should be emphasized that the concept of innovation is multidimensional and its interpretation depends on context in which it applies. Therefore, in the literature there have been many attempts to define the concept. One of the first undertook Hurt defining innovativeness as readiness to change (Hurt, Joseph and Cook, 1977). Goldsmith and Hofacker recognize innovation as both attitude and behavior (Goldsmith and Hofacker, 1991). Still other authors associate innovation with a set of features such staff openness, entrepreneurship, willingness to change and the ability to innovate and be creative (Berthon, Hulbert and Pitt, 1999; Blake, Neuendorf and Valdiserri, 2003; Hult,

Hurley, Knight 2004 , Cowart et al. 2007; Menguc and Auh, 2006). It is interesting that in the few studies of innovation in hospitals, there are two distinct perspectives. The first limits the roles of hospitals to the main consumers of innovation in the health sector (Kimberly & Evanisco, 1981, p. 691). In turn, the second treats these entities more precisely in the context of their staff (doctors, nurses, managers) as the main generators of innovation (Arndt & Bigelow, 2000, pp. 497-498). However, regardless of the perspective and from a management perspective it can be assumed that innovation in hospital depends on connections, predispositions and behaviors of employees and organizational factors, based on which hospitals can influence and create internal innovation potential. The synergy of these factors is reflected, inter alia, by human resource management practices, including employability. Although the concept of employability raises many controversies (Pocztowski, 2007), but generally can mean the ability to work and maintain employment. One of the reasons for the inclusion of this concept to the contemporary discourse of management is the phenomenon of employment slowing (downsizing) combined with the fast pace of obsolescence of skills of human resources due to changing technology (Clark and Patrickson, 2008). At the same time, there are different approaches to employability. Van der Heijde and Van der Heijden (2006) indicate conceptualization of employability based on broad competencies. Hence the term chances on the labor market (including domestic) of persons as "continuous satisfactory acquisition or creation of jobs through optimum utilization of competence" (Van der Heijde and Van der Heijden, 2006). In other words, the possession of certain competencies should enable employees obtaining and keeping a job. From the point of view to develop i.e. to identify employability-oriented innovation in public hospitals conceptual categories play an important role, such as: innovative competence and motivation to be innovative. Innovative competence can be defined as properties, the entity's ability to affect its posture in the innovation in including the ability to create and implement innovations (propensity and ease to undergo innovation processes and the ability to learn). In turn, the innovative motivation mechanism is aimed to accept the news, generating the individual's attitude towards innovation (the desire to implement or rejection of the innovation). Innovative competence, innovation and motivation are all associated with a sense of reasonableness and pro-innovation action by an

employee and are of advantage to the objectives of the organization. Hence, it is important to consciously shape the competence and motivation of staff leading to the development of adaptability (Fugate et al., 2004), mobility (Van Dam, 2005), professional experience (Van der Heijde and Van der Heijden, 2006), or for personal development and learning training (Bezuijen, 2005). Therefore, the formation of innovative organizations, including hospitals should foster the use of certain practices that stimulate innovation of workers. In this context, it was found that employability-oriented, innovation is mainly developed due to the ability of organizations to obtain and maintain employment through the optimal use of innovative competence and motivation. By analyzing a number of compounds of practices of personnel innovation (Searle & Ball, 2012; Tan and Nasuridin 2010; Chen and Huang 2009; Shipton, Fay, West Patterson, and Birdi, 2005; Darroch and McNaughton, 2002; Jackson and Schuler, 1995; Nonaka and Takeuchi, 1995; Hedlund, 1994; Sparrow, Schuler and Jackson, 1994; Galbraith, 1984; Katz and Kahn, 1978) we recognized that employability-oriented innovation should focus on recruitment of employees characterized by creativity and openness to change, employees aimed at development, staff assessment taking into account criteria such as innovation, creativity, as well as motivating employees to be innovative and rewarding activity and its results. It is worth noting that the development of innovation-oriented employability of workers in public hospitals also needs to accept the specificity of these organizations. This specificity is due to both the peculiarities of the health care market, as well as the so-called the audience-distinctive features of public hospitals that differ from private organizations (Kozuch 2004, Frączkiewicz-Wronka, 2009). It should be emphasized that the objectives of public hospitals are numerous, multidimensional and often difficult to reconcile, for example equality, justice and efficiency. Managers in these organizations manage the number of a variety of purposes, more than business organizations and they need to reconcile the expectations of a larger number of stakeholders. In public hospitals the organizational structure is characterized by a high formalization, are inflexible and decision-making procedures are often too strict (Sulkowski, Seliga 2012). In the context of managing people, high cultural diversity is worth emphasizing, resulting, inter alia, from the operation of various professional groups (subcultures) (Trice, Beyer, 1993). The differences in the mentality of individual professional groups

subcultures are so important that they often complicate the personnel management (Palthe, Kossek, 2003), and this in turn may hamper the development of practices regarding the employability of innovation-oriented hospitals.

3. Research Methodology

In the context of the aim implementation, the surveys, which were conducted in 2014 in 8 public hospitals operating in two regions in Poland were used (choice of hospitals was intentional, resulting from the fact that only these organizations have expressed their willingness to participate in the study). The employment in selected hospitals ranged from 70 to 100 employees (doctors, nurses and managers) in each, generally covering 640 employees in both provinces. The largest employment group consisted of nurses and midwives (about 70% of the workforce). Doctors accounted for approximately 20%, managers approx. 10% of workforce. A total of 467 questionnaires were analyzed, of which the largest part, because more than half of the survey was complemented by nurses and midwives (in total 285 questionnaires). Other survey comprised mainly of doctors (100 surveys) and managers (including: directors and their deputies, managers, heads of the wards, departmental nurses – 82 questionnaires). To achieve the objective of the work analysis of variance (ANOVA) was carried out comparing whether respondents' opinions regarding various practices regarding the employability of innovation-oriented hospitals differed significantly among themselves. The answers given by respondents were coded on a five-point ordinal scale (1 to 5) where 1 means "definitely not" – 2 "rather not", 3 "no opinion" – 4 "rather yes" and 5 "strongly yes". In the context of the definition of employability-oriented innovation (organization's ability to obtain and maintain employment through the optimum use of the competence and motivation of innovative) the respondents' attitudes to the following statements were studied: "In the process of recruiting the staff we take into account the characteristics of the candidates associated with openness to change and creativity" "Employees are encouraged to experiment and take risks", "Employees are encouraged to develop and share knowledge", "The staff appraisal system takes into account criteria related to creativity and innovation" and "In the hospital there is a system of incentives that rewards the innovative employees".

However, because of ordinal nature of the variables and being aware of non-compliance with the assumptions of classical analysis of variance (no normality in subgroups due to the sequential nature of the data, the presence of heterogeneity of variance) Kruskal-Wallis test was performed (Kruskal-Wallis ANOVA rank). The calculations in the study were performed using STATISTICA 10. The Cronbach Alpha index value reliability of the scale for the analyzed variables was quite high, as was 0.79. The answers of the respondents were analyzed in relation to key staff representing three professional groups (doctors, nurses/midwives and managers). The adoption of such an assumption was associated with the subculture dominated by the medical profession characterized by public hospitals.

4. The results of research

The first of the tested practices within the concept of innovation-oriented employability related to personnel selection takes into account such candidate features as openness to change and creativity (Figure 1).

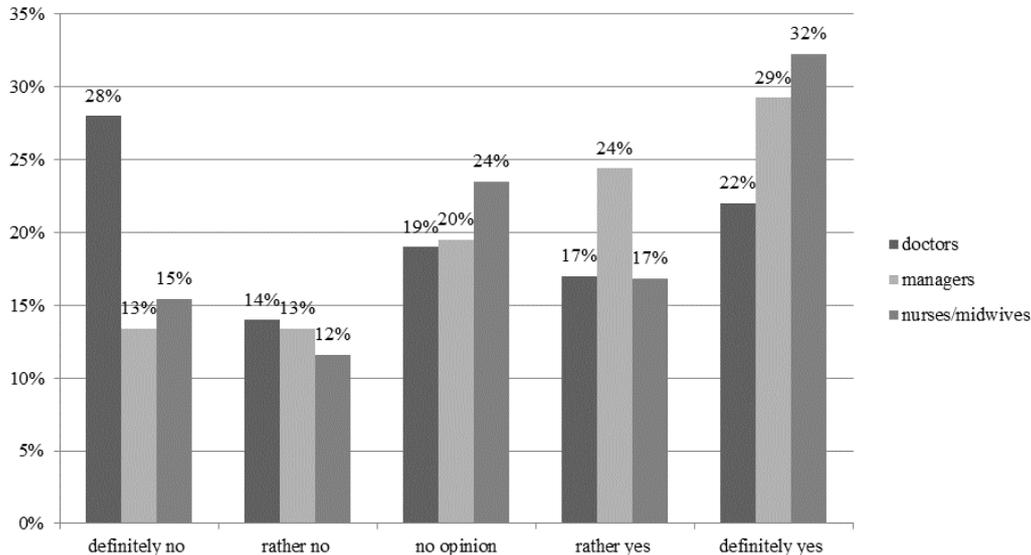


Figure 1. Results of analysis of variance for variable personnel selection of candidates taking into account characteristics such as: openness to change and creativity (divided into professional groups).

Source: own research.

As it is clear from the data distribution, opinions of respondents concerning the application of hospital personnel selection of candidates taking into account characteristics such as openness to change and creativity are different in different occupational groups. And so a positive response (a combination of answers "rather yes" and "definitely yes") granted by 53% of managers and 49% of nurses / midwives and 39% of physicians. At the same time many negative responses (42%) gave a group of doctors, which may indicate a weak interest of doctors in management people practices while an enhanced focus on their own tasks, primarily related to clinical decision making. In the case of nurses and managers negative opinions were much lower, which in turn may result from greater interest than in the case of doctors, in management personnel practices.

Next investigated practice applies to encouraging staff to experiment and taking risk. Data distribution is presented in Figure 2.

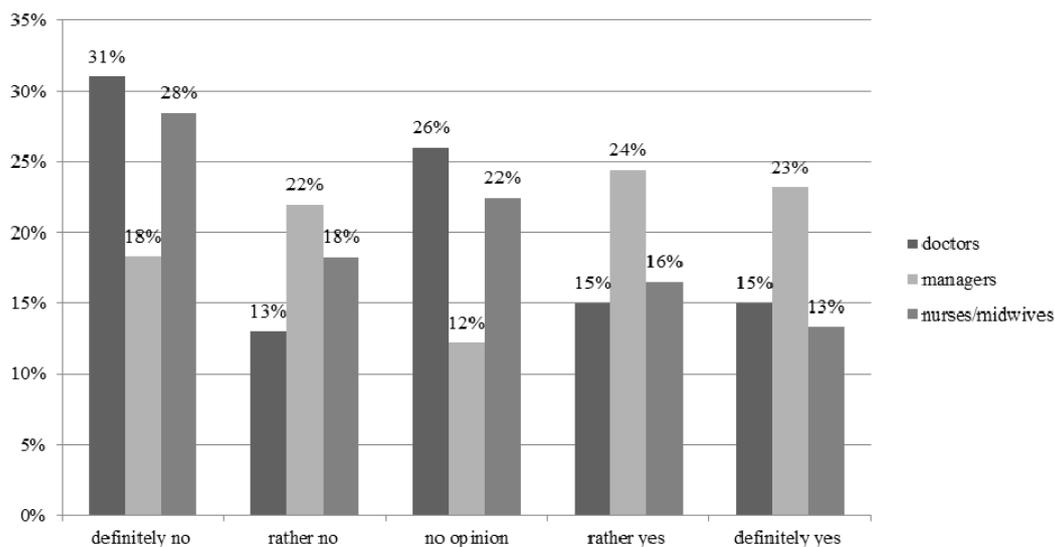


Figure 2. The results of analysis of variance for the variable practice of encouraging staff to experiment and take risks divided into professional groups.

Source: own research.

In this case, the assessment of practices to encourage staff to experiment and risk taking were largely negative and many respondents did not express any opinion at all. Most negative assessments (a combination of answers "rather not" or "definitely not") expressed both

medical professional groups (doctors – 44% and nurses – 46%). At the same time 47% of managers positively (combination of answers "rather yes" and "definitely yes") rated the issue of encouraging staff to experiment and take risks. Such opinions of respondents may arise from different mentality and approaches to the problem of risk taking by medical personnel and managers. As Freidson pointed out, these groups have different levels of tolerance for uncertainty at work (Freidson, 1972). For managers, unlike in the case of doctors and nurses / midwives, tolerance for uncertainty at work is greater.

Another were analyzed feature was to encourage staff to develop and share knowledge (Figure 3).

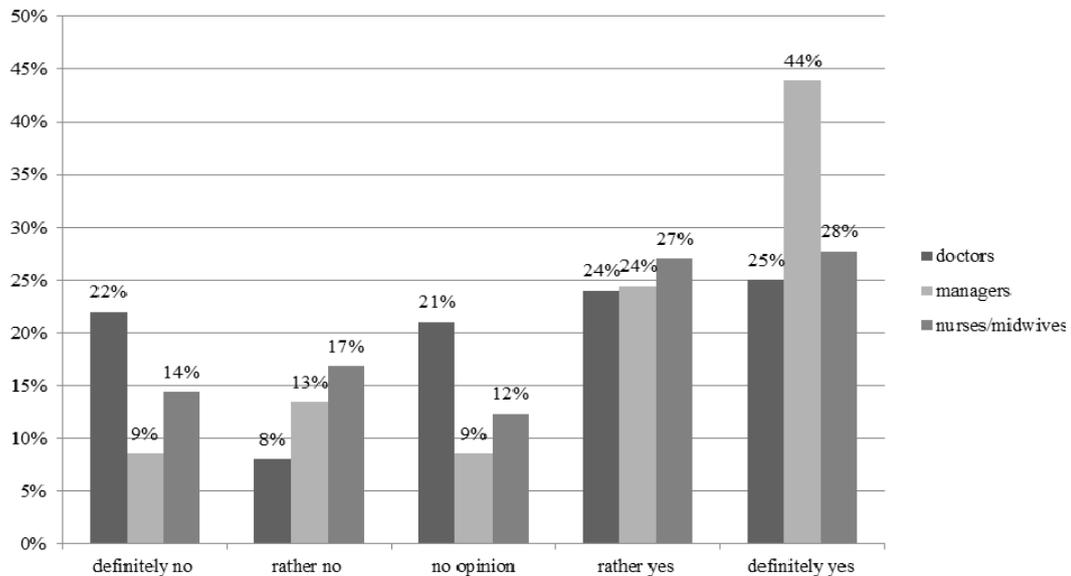


Figure 3. Results of analysis of variance for the variable “practice of encouraging staff to develop and share knowledge” (divided into professional groups).

Source: own research.

As can be seen from the distribution of data for this practice, it is dominated by positive responses (a combination of answers "rather yes" and "definitely yes") of 55% of nurses and midwives and 68% of managers. In case of physicians, 49% expressed a positive assessment. It is worth noting that a large group of doctors (30%) expressed a negative

opinion on this issue. This may be due to the fact the formation of new expectations among medical personnel on the continuing support of organization especially in the range of knowledge and development, particularly against so rapid changes in medicine.

Another practice for innovation-oriented employability was the use of appraisal system that takes into account creativity and innovation in hospitals (Figure 4).

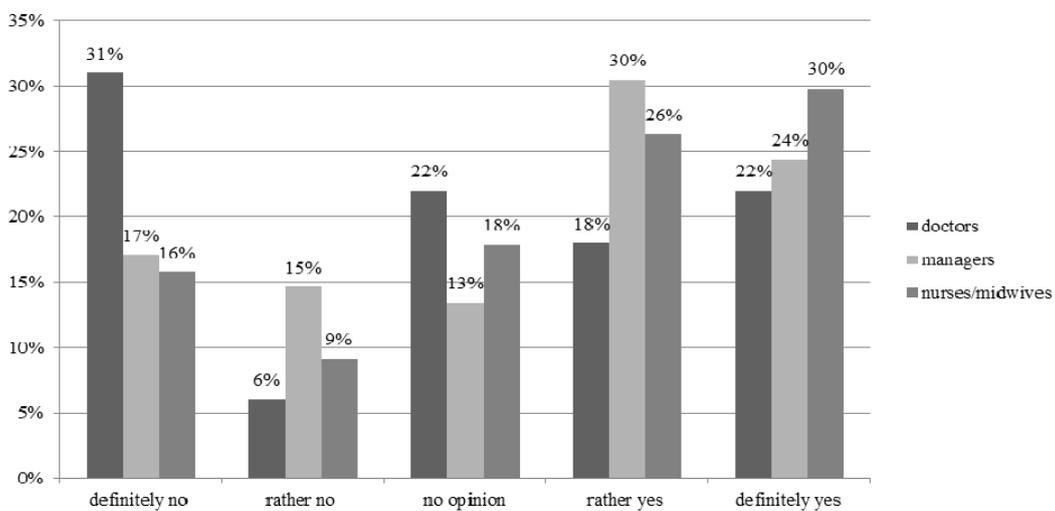


Figure 4. The results of analysis of variance for the variable appraisal system takes into account criteria related to creativity and innovation with a breakdown by business.

Source: own research.

By analyzing these results, it should be noted that in the opinion of the majority of respondents rating of this practice were positive. Positive ratings (combination of answers "rather yes" and "definitely yes") granted 54% of managers, and 56% of nurses and midwives. And again positive feedback from doctors was the lowest among the occupational groups surveyed (40%). This situation may indicate a weak interest in this professional group of assessment processes. Such opinions of doctors may also be linked to an overall reluctance to judge and at the same time high self-evaluation of the medical community and therefore difficulty in accepting criticism from others.

The last tested practice subjected to analysis and evaluation was the application of the incentive system rewarding innovative actions of workers. Results of Kruskal-Wallis test with respect to this practice are shown in Figure 5.

As it is clear from the data distribution, most of the ratings on the occurrence of an incentive system rewarding workers were negative. So negative assessment (combination of answers "rather not" or "definitely not") covered 58% of doctors, and 53% nurses and midwives. And among managers 49% of respondents expressed a negative opinion. At the same time 40% of managers positively (combination of answers "rather yes" and "definitely yes") rated the practice of motivation.

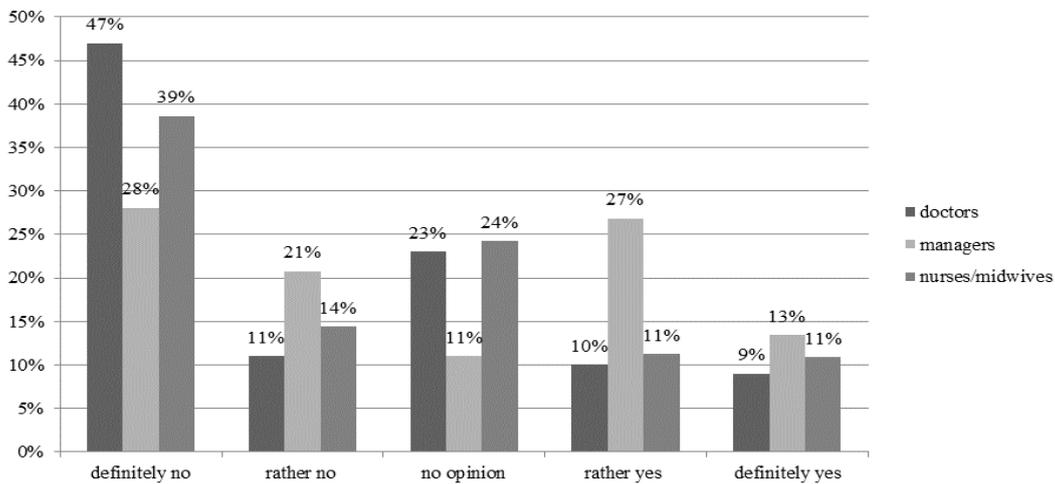


Figure 5. The results of analysis of variance for the variable “incentive system rewarding innovative workers” (divided into professional groups).

Source: own research.

This situation may result from the specifics of managerial work, because on the one hand, managers manage subordinate staff, and on the other hand, are subordinates. It is difficult in these conditions to motivate staff; especially the objectives and needs of the organization do not always coincide with the goals and needs of employees. In turn, the negative opinions of doctors and nurses may be due to the fact of discontent caused by the amount of wages, especially among nurses and midwives. At the same time the negative assessment of this practice may be related to the

inconsistency between motivation solutions used in the surveyed hospitals and the specificity of work of individual professional groups.

5. Conclusions and limitations of the study

The study shows that the growth of innovation imperative in public hospitals implies the need to shape the employability conducive to innovation. Here it is important that hospitals have obtained the ability to obtain and maintain employment through the optimum use of the innovative competence and motivation. However, in this regard opinions of respondents are divided. As presented in the results, statistically significant differences apply to all occupational groups investigated. And so, in the opinion of most managers they received a positive assessment of practice “selection staff taking into account such characteristics of candidates as openness to change and creativity” and the practice of “encouraging staff to develop and share their knowledge”. The less positive assessment was granted to the practice of “taking risk, experimenting and the presence of an incentive system to reward innovative achievements of the staff”. In the case of nurses, most of the positive reviews concerned practices that “encourage staff development and share of knowledge” (as in managers) and “employee evaluation system that takes into account criteria related to creativity and innovation”. In the other two assessments of practices by nurses were more negative. On the other hand, the lowest assessment of all practices within the employability of innovation-oriented was set by doctors. Only in relation to the practice of “encouraging staff to develop and share of knowledge” 49% of this group of respondents expressed a positive opinion. In summary it can be assumed that the weakest link in the innovativeness-oriented employability in the surveyed hospitals is the lack of an incentive system rewarding innovative employees and the lack of encouraging staff to experiment and take risks. It is worth mentioning that the lack of incentive for innovation by many authors was pointed to as a fundamental obstacle in the development of pro-innovative people management practices (Amabile, 1988; Kanter, 1983) and requires removing from the way to the development of innovation in organization. In the event of a practice of encouraging risk and experimentation a clear message from management

should occur in hospitals that supports such actions and is ready to bear the risk associated with testing of new products and services. Management should create values that promote risk-taking and demonstrate that it is good behaviour (Arad, Hanson, Schneider, 1997). At the same time, it is important to ensure freedom of workers in decision-making. On the other hand the best respondents received a positive evaluation practice of encouraging staff to develop and share of knowledge. This situation testifies to the growing awareness of the need for development of hospitals staff, especially in such complex and variable conditions of the functioning of the health sector.

As seen from the above image, innovation-oriented employability research in the surveyed hospitals requires changes. Hospitals need a comprehensive approach to the test problems by raising the level of implementation of all practices related to obtaining and maintaining employment for the development of innovation. At the same time, it is necessary here to take into account the needs and expectations of the various professional groups and their verification with the objectives of hospitals. In summary, the studies are not free from limitations. First of all, there are significant differences between numbers of respondents in groups, which probably affected the results (but it was not possible to acquire a larger number of surveys of smaller groups which are in every hospital doctors and managers). Furthermore, the survey covered only the selected hospitals. The selection of the sample was not random, which is largely associated with serious reluctance of hospitals for this type of research. Despite these limitations, it seems that the results obtained may, however, provide guidance to chief executives of hospitals in relation to the need for stronger innovation-oriented employability practices of these organizations. At the same time it should broaden the scope of research on other practices, such as: labour relations and career planning so that a greater degree model innovation-oriented employability.

The concept of innovation-oriented employability presented in the article shaped hardly a theory, but can certainly serve as a starting point for a better understanding of the issues and further empirical research. Such studies seem to be quite urgent, especially that the literature increasingly pointed to the need to effectively attract and retain staff, in particular professionals, whose competence and motivations are a key success and innovation factor.

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