

Relations Between Management Competences and Organizational Success Considering Gender Issues—Research Results

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The purpose of this study is to identify the relations between the competences of the management staff and the success of the organization with the account of gender differences based on the opinions of the 427 representatives of the enterprises located in Poland, in the Lower Silesian region. In order to review the formulated hypotheses a quantitative and qualitative research procedure was conducted with the use of the survey questionnaire method. The binomial test was employed to examine the significance of the competence differences. The trend study was performed with the Cochran-Armitage test, whereas the calculation of the correlation power was made with the use of the tetrachoric correlation concept. The management staff's competences which correlated with the success of the organization were identified and the competence differences which are a strong point of women and men in managing. The extension of the drawn conclusions onto the entire population is invalid due to the selection, structure, and size of the research sample. However, this does not diminish their cognitive value especially that it has been an unexplored area so far. The results of the research will enable the selection of the management staff from the viewpoint of the competences which translate into the success of the organization as well as entrusting women and men with such tasks in the organization where they can make use of their strong points.

Keywords: competences, success, organization, gender, manager, leadership

Introduction

Enterprises are currently facing significant challenges, uncertainty and necessity to deal with change. Globalization, development of modern technologies, knowledge, and innovation create opportunities for development and profits, however they also increase risk, reduce reaction time, and make mistakes more costly and with less predictable outcomes. This has been confirmed recently by negative economic events in many countries and the global crisis. Succeeding in such conditions becomes increasingly difficult. The situation poses higher requirements for managerial staff and their competences. Many researchers try to find out which of these competences correlate with business success and whether gender issues play a role? There are opinions that indicate a connection between managerial competences and the success of the organization (Bailom, Matzler, & Tschernja, 2009). Other authors (Ranft, Zinko, Ferris, & Buckley, 2006) share the opinion that CEOs are a personification of the company, however there is no clear evidence that competences of executives

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are in any way related to the success of the organization. As a consequence of this discussion, the main aim of this paper has been formulated, consisting in the identification of those competences of managerial staff that correlate with organizational success, with consideration to gender issues on the basis of empirical research. Presentation of results will be preceded with establishing basic terminology for competences and organizational success.

Competences, Success of the Organisation—Determination of Terminology

Competences are still understood in an ambiguous way. The method and scope of defining them is determined by the field of science and its interdisciplinarity, cultural and national differences and views propagated by large organisations, such as the European Union or the OECD. The polemics continues, with particular intensity in the case of competences of the management staff (Boyatzis, 1982; Chęłpa, 2003, pp. 10-18; Niedzielski & Walkowiak, 2004, pp. 229-238; Małyk-Musiał, 2005; Rakowska, 2007; Antczak, 2008; Moczyłowska, 2008; Orczyk, 2009; Ragg, 2011). The discrepancies in views concern primarily the determination of what components they include. Understanding of the scope of this term diversely hinders the analysis of human capital effectiveness (Orczyk, 2009, p. 20). Another impediment is the fact that competences are not permanent, given once and for all, since they become updated through the pursuit of professional activities and, as a dynamic structure, evolve under the influence of the changes taking place in the economy and human life (Kwiatkowski & Symela, 2001, p. 22). It is often stated that the beginnings of the interest in competences date back to 1973, when McClelland published his paper *Testing for Competence Rather Than for Intelligence* (McClelland, 1973), in which he drew attention to the fact that neither psychological tests nor school grades or school reports make it possible to predict a person's professional success. This sparked broad interest in competences and the manners of defining them. Competences are the inherent potential of the human being which leads to the behaviours that contribute to satisfying the requirements for a given position within the business environment, which in turn leads to achieving the desired results (Boyatzis, 1982). Competence is also defined as capability or ability. "It is a set of related but different sets of behavior organized around an underlying construct, which we call the 'intent'. The behaviors are alternate manifestations of the intent, as appropriate in various situations or times" (Boyatzis, 2008, p. 6). Boyatzis emphasises that competence is influenced by the way of organising a given activity, which comprises culture, structures, maturity of a given field in terms of criteria, position of the performer, as well as the business environment: economic, political, social, religious, and environmental. However, according to this author, competences depend on the set of three variables influencing behaviour. These crucial variables, which are threshold in nature, involve:

- Proficiency and professional experience, which indicate the level of competence;
- Recognised, procedural, functional knowledge, which indicates certain thresholds of competence;
- Cognitive skills which enable unassisted performance of a new task and which are related to memory.

Discerning correlation and inferring, thus, indicating not only the achievement of competences, but also the possibility to develop them (Boyatzis, 2008). A similar perception of competences is presented by Levy-Leboyer (1997). According to him:

Competences concern the integrated use of aptitudes and personality traits, and also acquired knowledge, in order to complete a complex mission within the enterprise. They constitute a specific category of individual characteristics, strongly related to systems of values and the acquired knowledge. (p. 19)

Armstrong defines competences firstly as personal behaviours (skills) manifested by a person related to the achievement of desirable results, and secondly, as a behavioural standard, postulated set of behaviours necessary for an employee who wants to fulfill tasks and functions connected with the job (areas of competence) effectively (Armstrong, 2000). Kanungo and Misra (1992) present a view that also deserves attention. They regard competences as superior to qualifications, as the latter grow from and build on the former. The authors define competences as general properties of an individual: emotional, intellectual, and orienting attitudes which favour the completion of potential tasks. An interesting view is also presented by Whiddett and Hollyforde, who state that job competence is a set of qualities of individual comprising elements characteristic for this person, such as motivation, personality characteristics, skills, self-evaluation related to functioning within a group and the knowledge acquired and used by the person (Whiddett & Hollyforde, 2003, p. 13). In his book Poczowski writes that the term “competences” includes the total of fixed qualities of an individual which form a cause and effect relationship with the effects of this individual’s work which are high or above average and which have a universal dimension (Poczowski, 2003, p. 153). Rostkowski argues that competences are all the characteristics of employees, such as knowledge, skills, experiences, aptitudes, ambitions, values, and acting styles, the possession, development and application of which by the employees enable the implementation of their company strategy (Rostkowski, 2004, p. 41). In accordance with the Recommendation of the European Parliament and of the Council of the European Union, the term “competences” (following numerous consultations and lack of unanimity) is defined as a combination of knowledge, skills, and attitudes which are situation-specific. Oleksyn is an advocate of a broad definition of competences, with personal predispositions among their components. In his definition of competences Oleksyn lists the following elements: internal motivation, aptitudes and predispositions, knowledge, education, experience and practical skills, health and fitness, other psychophysical characteristics important in the process of work, attitudes and behaviours expected in the workplace, formal power to act (Oleksyn, 2007, p. 30). Moczyłowska, in her definition of competences, emphasises their desirable relationship not only with the success of the organisation, but also with the success of the employee. According to her, competences are all the qualities and powers of employees and organisations which, used and developed in the process of work, serve achieving the goals of the organisation and personal goals of employees consistent with them (Moczyłowska, 2008, p. 35). Hence, in search of a consensus and, most importantly, taking into consideration the aim of this study, the author defines competences as a set of qualities of an individual comprising elements characteristic for this person, such as motivation, personality characteristics, skills, self-evaluation related to functioning in a group, and the knowledge acquired and used by the person.

Similarly to competences, the success of the company is broadly defined, which is influenced mainly by a large variety of goals and expectations of shareholders and stakeholders. The success of the enterprise can be understood in terms of its goal, strategy, and task completion (Kaleta, 2009, p. 43), successful completion of an undertaking (Penc, 1996, p. 58), good financial results, profitability, size, market share and position, value, skilful management, recognition by the customer and the community (Cieśliński, 2009). Success can also be perceived in terms of survival and development (Strużyna, 2009, p. 92; Cieśliński, 2009, p. 25), employees’ knowledge (Parzych, 2009, p. 846) and their competences (Bailom et al., 2009), intellectual capital or creation of appropriate conditions of work and motivation (Mazurkiewicz, 2010, p. 36; Cieśliński, 2009). Fast action, flexibility, integration of activity (Ashkenas, 1998; Cieśliński, 2009), as well as innovation capacity (Kay, 1996, p. 8; Ashkenas, 1998; Bailom et al., 2009; Szarucki, 2011) can also be measures of success. Qualifying a

company to be placed on the ranking lists of the best business entities by independent organisations and on the basis of objective criteria can also prove its success. In her research, the author of this study adopted the last definition of the success of the enterprise, bearing in mind numerous limitations resulting from this approach.

Purpose of the Research, Research Problems, and Hypotheses

The major purpose of the empirical research was to identify the relations between the competences of the management staff and the success of the organisations with the account of gender differences based on the opinions of the representatives of the enterprises located in Poland, in the Lower Silesian region. Another research purpose was to determine the differences in the area of strong points (by self-evaluation) occurring between the women and men on managing positions in the best enterprises from ranking lists and those beyond.

The conducted empirical exploration was aimed at finding the answers to the posed research problems, which were formed into the following questions:

- Which competences of the management staff are correlated with the success of the organisation (achieving very good results)?
- Are there any differences in the area of the competences of the management staff (including their strong points) depending on gender and achieved results of the organisation and if so, what are they?

In the phase of preparing the empirical research the following operational hypotheses were adopted:

H1: There are significant correlations between the competences of the management staff and the success of the enterprise (achieving very good results).

H2: There are significant differences in the area of strong points between the management staff depending on gender and the achieved results of the organisation.

The primary subject under research was the competences of the management staff. The employed research method was indirect, uninterfering, oriented on identifying the hidden (latent) variables, i.e., management competences, particularly psychological characteristics, knowledge and skills, by drawing conclusions about them based on the information obtained during the research. It was assumed in this research that psychological characteristics are understood as predispositions to certain behaviours demonstrating supra-situational stability, which results in the fact that human behaviours are similar despite different conditions, and that they are a relatively permanent and recognisable behavioural pattern which is typical for the human being (Listwan, 2005, p. 20; Eyre & Smallman, 1998; Zimbardo & Ruch, 1994). When evaluating psychological characteristics, their components, such as intellectual capacity, temperament and personality were taken into consideration (Chelapa, 2003, p. 50). In order to evaluate personality the Five-Factor Model of Personality and the Five-Factor Theory of Personality (the Big Five Model) (McCrae & Costa, 2005, 2008; Siuta 2006; Oleś, 2009, pp. 406-410) were adopted.

Research Methods

In order to review the formulated hypotheses, a quantitative and qualitative research procedure was conducted with the use of the survey questionnaire method. The examined management staff were asked in the survey what competences are crucial in management and which of them are their strong points. The survey was structured such that the respondents could choose the crucial competences from the suggested possibilities or provide their own suggestions. The author had assumed that the process of identifying the crucial management competences would be based on self-evaluation. The selection of this method resulted mainly from the

possibility to conduct the research within the period provided for implementing a research project, co-financed from the European Union's funds, which was rather short. On the other hand, the management staff are extremely reluctant to observations or tests. However, if considering the research carried out with the use of self-reports from the purely quantitative point of view, considerably more research were conducted in this manner than with the employment of the evaluation performed by an observer. Researchers indicate that probably the most important contribution of the research applying evaluation was proving that self-reports may be characterised by accuracy (McCrae & Costa, 2005, p. 59). The usefulness of self-evaluation in the process of identifying characteristics is emphasised by numerous authors. Cattell represents the view that the indicators of characteristics are the behaviours which are observable and about which the examined individuals may be asked (self-evaluation) or which may be subjected to tests (Cattell, 1957). As a result of his research, Cattell was able to positively review the hypothesis that the personality examination conducted independently on the data from self-report (self-evaluation) and on the data from observations lead to discovering the same structure of the examined person's characteristics since the object of cognition remains the same. Similarly, in the Five-Factor Theory of Personality, McCrae and Costa point to the assumption related to the human nature, proving that it may be self-reported to a large extent, which means that an individual is normally aware of the characteristics they have (McCrae & Costa, 1999, 2008). This standpoint is shared by Drucker, who emphasises that "in their professional activity the employee can and should recognise their strong points and undertake the tasks where their skills and predispositions may be best employed" (Drucker, 1999, p. 173).

Of course, the issue of credibility and reliability of the provided answers needs to be taken into account. The author assumed that there is a lower threat from the viewpoint of the lack of motivation to give answers carefully, since the respondents were not anonymous and was aware that their statements would be analysed. However, in certain cases the examined individuals might have made a more or less conscious attempt to present themselves in a more favourable light (higher evaluation of their strong points). On the other hand, it is worth taking into consideration that the Polish management staff tend to depreciate their strong points (Uzycki, 2009) relative to the management staff of a different nationality, e.g., American. Similarly, women have a lower self-esteem than men (McCarty, 1986; Möbius, Niederle, Niehaus, & Rosenblat, 2011). Despite these practical limitations, self-evaluation seems to be a valuable and reliable source of information. Quota sampling was used in the research not only due to the goals of the research but mainly due to the research possibilities. In quota sampling the criteria which significantly differentiate the population by the object of the research (Lohr, 1999; Rao, 2000) are defined. This approach was chosen because the approved sample largely corresponds to the population structure in terms of the distinguished characteristics; secondly, the units inside the group (layers) are characterised by higher uniformity. Thus, the examined population was divided into groups according to specific criteria and the selection for them was purposive. The selection of enterprises and respondents for the purpose of the research was based on gender, the level of management staff (medium and higher), the achieved results (the best enterprises in ranking lists and beyond), and the location of the enterprise (the Lower Silesian region). The fact that there are considerably fewer women in management than men, particularly on the highest positions, posed a significant difficulty. The above situation justified the purposive selection. As is emphasised by Rusnak, "if the sample is too small relative to the general community, it is safer to select its components in a purposive manner" (Rusnak, 1999, p. 306). Purposive selection, according to Hammersley and Atkinson, permits the exposure and better recognition of the phenomena and processes which are the object of the research due to narrowing down the number of the examined cases and minimising the differences between

them (Hammersley & Atkinson, 2000). The arbitrary (not random) selection of persons for the purpose of the research allows the researcher to select the members of the population whose potential of providing reliable information is the highest (Kotler, 2005, pp. 136-137; Kotler, Armstrong, Saudres, & Wong, 2002, p. 376). Thus, the conducted research was idiographic in nature, i.e., the conclusions refer solely to the examined population. Abandoning the extensive generalisation of the results does not need to diminish their cognitive values (Chęłpa, 2003, p. 151) and, as the examples of the published results of the research demonstrate, numerous authors employ purposive selection of the examined sample (Nogalski, 1986; Witkowski, 1995; Stolarska, 1998; Błaszczuk, 1999; Szaban, 2000; Morawski, 2009). In order to determine the percentage share of the distinguished groups, their actual distribution in the population was used (by employment, according to the data from the Central Statistical Office for 2007). The only deviation applied in the research was concerned with the share of women, who perform managing functions significantly less frequently than men. From the viewpoint of research goals, it was decided that efforts should be made to examine the same number of their opinions as in the case of men.

Statistical methods of data analysis were employed for compiling the data. The binomial test was used for examining the significance of the differences. Since the variable was able to assume more than two values (1)-(5), it was categorised and only the competences which were considered important (4) or very important (5) by the respondents and which were their strong (4) or very strong (5) points were subjected to the analysis. In the remaining cases the zero value was adopted. This approach enabled the division of competences into the significant, less significant and insignificant ones. The trend study in the contingency table was performed with the Cochran-Armitage test (Agresti, 2002; Liu, Berger, & Hershberger, 2005), whereas the calculation of the correlation power was made with the use of the tetrachoric correlation concept (Harris, 2006; Drasgow, 2006; Olsson, 1979).

Description of the Sample Group

The research was conducted among the management staff from 339 enterprises, including 22 large, 100 small and medium, and 89 microenterprises. The share of foreign capital in the capital structure was indicated by 21% of the companies. All the enterprises had their registered offices in Poland, in the Lower Silesian region, and were selected for the research from two databases prepared specially for the purpose of the research. One database included 530 enterprises which were in ranking lists (List 2000 Rzeczpospolita 2008, Ranking GazeleBiznesu 2008, Ranking of Lower Silesian enterprises 2008, List 500 Rzeczpospolita 2009, Forbes Ranking of the most prestigious hotels in Poland 2009). The other group was composed of the remaining companies selected in a purposive manner based on the recommendations of the business and academic circles and employer associations. The proportion of the percentage share of enterprises in both bases was the following: 20%—companies from ranking lists and 80%—companies beyond ranking lists. The research included the total number of 427 persons holding management position at the medium and higher management level, among whom there were 248 men (57%) and 179 women (43%).

The dominant group among the respondents consisted of the individuals at the age of 30-49 (62.8%). There were 22.9% of those aged 25-29. The smallest group (14.3%) was composed of the persons aged 50-65. The vast majority of the examined management staff (75.3%) had higher education. The largest group included the representatives of the higher level management (61%) that is the persons holding positions such as: chairman of the management board, chairman of the supervisory board, member of the management board,

member of the supervisory board, director, deputy director, owner/co-owner. Among the higher level management staff the persons being owners and co-owners of enterprises were also distinguished (39.5%). The lowest and medium level management staff (39%) included the persons employed as: manager, foreman, and master.

Relations Between the Management Staff and the Success of the Organization

Empirical research was conducted on the management staff from the enterprises achieving very good results (in ranking lists) and from enterprises beyond the lists in order to review H1 that there are correlations between the competences of the management staff and the success of the enterprise. The competences of these two groups were confronted and an attempt to determine the relations between competences and the success of the enterprise (the ranking list) was made. The presentation of the obtained results will begin with the analysis of the results according to the convention adopted in the study, i.e., first the relations of success with psychological characteristics, then with knowledge, and finally skills will be discussed. It was decided to begin the correlations analysis with psychological characteristics, having in mind their base nature relative to knowledge and skills and their high supra-situational stability. The answer to the question: "If a given competence of a representative of the management staff is their strong point, does the probability that they are a representative of an enterprise in the ranking list (achieving very good results)?" was interesting in the context of the research purpose. The Cochran-Armitag test was applied in order to review this hypothesis. The results of the test revealed the existence of the tendency (trend) according to which if emotional stability, openness to experiences and conscientiousness are a strong point of a respondent, the increase in the probability that they belong to the management staff of an enterprise in the ranking list which is statistically significant (see Table 1). Hence, these results lead to the conclusion that these competences are crucial in management and translate into successes of the organisation (very good results).

Table 1

Statistically Significant Correlations Between the Management Staff's Competences Which Are Their Strong Point and the Success of the Enterprise (the Ranking List) Based on the Results of the Cochran-Armitage Test

Management staff's competences which are their strong point	Cochran-Armitage statistics	<i>p</i> -value
Emotional stability	2.74	0.01
Openness to experiences	1.72	0.09
Conscientiousness	1.69	0.09

Note. Source: Own work based on the results of the research. Emotional stability is defined as composure, self-confidence, resistance to stress, realist thinking; Openness to experiences is understood in the research as seeking new experiences, activity, and tolerance for changes, creativity, broad horizons and interests, phantasy, originality, good manners, aesthetics, sensibility, having ideas; and Conscientiousness means good organisation, inclination to orderliness, meticulousness, effectiveness, responsibility, ambition, persistency, self-discipline, dutifulness, striving for achievements, specifying goals independently and their achievement, prudence, orderliness, practicality, diligence.

From the viewpoint of reviewing the formulated hypotheses it was crucial to recognise the correlations between the psychological competences of the management staff and the success of the enterprise (the ranking list). Only one statistically significant correlation was noticed, i.e., one between the success of the enterprise and emotional stability, which indicates that the higher the level of the management staff's emotional stability,

the more successful the enterprise (better financial results) (see Table 2).

In the case of knowledge of the management staff and its relations with the success of the enterprise, the conducted research revealed several correlations. The results of the Cochran-Armitage test confirmed the existence of the tendency (trend) according to which if economic and general knowledge of a respondent, their familiarity with and comprehension of the problems faced by the enterprise and the staff, their familiarity with trends and forecasts related to the economy are the respondent's strong point, the increase of the probability that they belong to the management staff from an enterprise in the ranking list is statistically significant (see Table 3).

Table 2

Statistically Significant Correlations Between Psychological Competences of the Management Staff and the Success of the Organization (Enterprises in Ranking Lists)

The management staff's psychological competences which are their strong point in management	Tetrachoric correlations	Error	Left end point of the confidence interval	Right end point of the confidence interval	Significant
Emotional stability	0.18	0.09	0.03	0.33	yes

Note. Source: Own work based on the results of the research.

Table 3

Statistically Significant Correlations Between the Knowledge of the Management Staff and the Success of the Enterprise (Ranking List) Based on the Results of the Cochran-Armitage Test

The management staff's competences which are their strong point in management	Cochran-Armitage statistics	p-value
Economic knowledge	3.11	0.00
Familiarity with and comprehension of the problems faced by the enterprise and the staff	2.10	0.04
General knowledge	1.89	0.06
Familiarity with the trends and forecasts related to the economy	1.73	0.08

Note. Source: Own work based on the results of the research.

The existence of correlations between certain areas of knowledge of the management staff and the success of the enterprise was confirmed also by analysing the statistically significant tetrachoric correlations. They give justification to the following conclusion: the greater the economic, general and management-related knowledge of the management staff and the better their familiarity with and comprehension of the problems faced by the enterprise and the staff, the better results and the higher positions on ranking lists of the enterprises managed by them (see Table 4).

Thus, it may be assumed that it was the stress on the above areas of knowledge of the management staff that exerted a direct impact on the actual increase of competitive advantage and better financial results of the examined enterprises in ranking lists. Knowledge is the major resource and growth factor of competing economies in the contemporarily developing economies based on knowledge and innovation. However, as was proved by the conducted research, some of its areas are correlated with the success of the organisation to a greater extent. The familiar with the economic knowledge, and more importantly, the comprehension of the problems which have been faced by the staff, turned out to be crucial.

It was possible to confirm the presence of the tendency (trend) in the area of skills indicating that if a respondent's strong point is management skills, the ability to specify goals and methods of achieving them, to

provide employees with an appropriate workplace¹ and to communicate in a foreign language fluently, the increase of the probability that they belong to the management staff in an enterprise in the ranking list is statistically significant (see Table 5).

Table 4

Statistically Significant Correlations Between the Knowledge of the Management Staff and the Success of the Enterprise (Ranking List)

The management staff's knowledge which is their strong point in management	Tetrachoric correlations	Error	Left end point of the confidence interval	Right end point of the confidence interval	Significant
Economic knowledge	0.31	0.08	0.17	0.44	yes
Familiarity with and comprehension of the Problems faced by the enterprise and the staff	0.26	0.09	0.11	0.4	yes
General knowledge	0.24	0.1	0.08	0.39	yes
Knowledge of the management sector	0.18	0.09	0.03	0.32	yes

Note. Source: Own work based on the results of the research.

Table 5

Statistically Significant Correlations Between the Skills of the Management Staff and the Success of the Enterprise (Ranking List) Based on the Results of the Cochran-Armitage Test

The management staff's competences which are their strong point in management	Cochran-Armitage statistics	p-value
Management skills	2.38	0.02
Ability to specify goals and methods of achieving them	2.32	0.02
Ability to provide employees with an appropriate workplace	2.29	0.02
Ability to communicate in a foreign language fluently	1.91	0.06

Note. Source: Own work based on the results of the research.

What was identified were statistically significant correlations, which prove that the higher the management staff's skills in managing, concentrating on the consumer, specifying goals and methods of achieving them, managing knowledge and knowledge workers, and translating the goals of the company into the individual goals of employees, the better results and positions on ranking lists of the enterprises managed by them (see Table 6).

Hence, the results of the research presented above confirmed that there are significant correlations between the competences of the management staff and the success of the enterprise.

Competences of the Management Staff Versus the Success of the Enterprise and Gender

In order to review the H2 hypothesis, which indicates that there are differences in the area of strong points between the management staff depending on gender and the achieved results of the enterprise, an attempt to recognise the differences² between the competences of women and men from the best enterprises in ranking lists and beyond was made. From the viewpoint of identifying the competences which translate into the success

¹ The ability to provide employees with an appropriate workplace means that they have the possibility to do what they can do best, they have appropriate materials and equipment, they know what is expected of them, the manager shows consideration for their opinions, appreciates them, shows that they trust them and care for them, talks to them regularly, enhances their sense of belonging and loyalty (Buckingham & Clifton, 2003).

² Based on the test of proportions.

of the enterprise, recognising differences between the men from the enterprises in ranking lists and those beyond is particularly interesting. A similar procedure needed to be applied in the case of women. The results turned out to be extremely interesting. It was observed that the men from the best enterprises (in ranking lists) have significantly higher competences in numerous areas. They are characterised by significantly lower reactivity, greater economic knowledge and better familiarity with and comprehension of the problems faced by the enterprise and the staff, greater ability to manage knowledge and knowledge workers and to translate the goals of the company into the individual goals of employees (see Table 7).

Table 6

Statistically Significant Correlations Between the Management Staff's Skills Which Are Their Strong Point in Management and the Success of the Enterprise (Ranking List)

The management staff's skills which are their strong point in management	Tetrachoric correlations	Error	Left end point of the confidence interval	Right end point of the confidence interval	Significant
Management skills	0.23	0.09	0.08	0.38	yes
Ability to concentrate on the consumer	0.19	0.09	0.04	0.34	yes
Ability to communicate in a foreign language fluently	0.18	0.09	0.04	0.33	yes
Ability to specify goals and methods of achieving them	0.18	0.09	0.03	0.32	yes
Ability to manage knowledge and knowledge workers	0.16	0.09	0.02	0.3	yes
Ability to translate the goals of the company into the Individual goals of employees	0.16	0.09	0.01	0.3	yes

Note. Source: Own work based on the results of the research. The ability to manage knowledge and knowledge workers—the entirety of processes enabling the creation, popularisation and application of knowledge to achieve the goals of the organisation: locating, obtaining, developing, sharing, popularising, applying and maintaining knowledge.

Table 7

Competences Which Are a Strong Point of the Management Staff From the Enterprises in Ranking Lists and Beyond—Statistically Significant Differences (Test of Proportions) Concerned With Men

The management staff's competences which are their strong point in management	Man list-man beyond list
Low reactivity	21%
Economic knowledge	20%
Ability to manage knowledge and knowledge workers	17%
Familiarity with and comprehension of the problems faced by the enterprise and the staff	17%
Ability to translate the goals of the company into the individual goals of employees	17%
General knowledge	14%
High speed	14%
Management skills	14%
Ability to communicate in a foreign language fluently	14%

Note. Source: own work based on the results of the research. Low reactivity is understood as low sensitivity to disturbances, high efficiency, short phase of preparing for work, faster concentration on crucial activities, ability to work intensively, at full capacity, in the face of disturbances, noise, emotional burdens, strong stress, time pressure, tiredness.

The case was similar for women. It turned out that the women from the enterprises in ranking lists differ from the women in the enterprises beyond the list in terms of competences; however, the differences refer to a smaller number of competences than in the case of men and concern only the area of knowledge and skills. The women from the enterprises in ranking lists are considerably more familiar with the trends and forecasts related

to the economy, have broader economic knowledge and are more familiar with the problems faced by the enterprise and the staff, and have a greater ability to forecast the future (see Table 8).

Table 8

Competences Which Are a Strong Point of the Management Staff From the Enterprises in Ranking Lists and Beyond—Statistically Significant Differences (Test of Proportions) Concerned With Women

The management staff's competences which are their strong point in management	Woman ranking list-woman beyond list
Familiarity with the trends and forecasts related to the economy	20%
Economic knowledge	19%
Familiarity with and comprehension of the problems faced by the enterprise and the staff	15%
Ability to forecast the future	14%

Note. Source: Own work based on the results of the research.

The obtained results of the research lead to the conclusion that the economic knowledge familiarity with and comprehension of the problems faced by the enterprise and the staff are a strong point of the management staff from the best enterprises in ranking lists, regardless of gender.

At the same time, the analysis conducted with respect to gender differences occurring between the management staff from the enterprises in ranking lists indicates that in this case the differences are not that significant and are related to merely two competences. Familiarity with the trends and forecasts related to the economy is definitely a stronger point of women, whereas lower reactivity—of men (see Table 9).

Table 9

Competences Which Are a Strong Point of the Management Staff From the Enterprises in Ranking Lists and Beyond—Statistically Significant Differences (Test of Proportions) Between Men and Women

The management staff's competences which are their strong point in management (variable)	Differences woman list-man list	Left end point of the confidence interval	Right end point of the confidence interval	p-value ³
Low reactivity	-24%	-43%	-4%	0.04
Familiarity with the trends and forecasts related to the economy	21%	2%	40%	0.07

Note. Source: Own work based on the results of the research.

Similar results were obtained from the calculations made with other statistical methods (see Table 10)⁴. The chance quotient⁵ proved that the chance that a person who performs managing functions in an enterprise in the ranking list and whose strong point is low reactivity is a man who is nearly three times greater than in the case of women (see Table 10).

The chance that a person who performs managing functions in an enterprise in the ranking list and whose strong point is familiarity with the trends and forecasts related to the economy is a woman which is 2.5 times greater than in the case of men (see Table 10). This chance is seven times greater (for women) in the case of the

³ If the test significance (0.1 was assumed) is greater than or equal to *p*-value, the null hypothesis is rejected—thus acknowledging that e.g. the differences between women and men are significant. The confidence intervals constructed for the difference between the percentages provide more possibilities for interpretation than scoring since they show the probability (0.9 was assumed) with which the interval accounts for the estimated difference.

⁴ The correlation between the low reactivity of the manager and the success of the enterprise is also confirmed by the chi-squared statistics, which indicates that there are bases for rejecting the null hypothesis with the error probability lower than 0.05, which means that there is a correlation between the competences of the management staff and the success of the enterprise.

⁵ The chance quotient (the relation of the probability that a given event will occur to the probability that it will not).

analysis of the data on the management staff from the enterprises in ranking lists (the chance quotient amounted to 7.35).

Table 10

Statistically Significant Correlations Between the Competences of the Management Staff From the Best Enterprises in Ranking Lists and Gender

The management staff's competences which are their strong point in management (variable)	Chi-squared statistics	<i>p</i> -value	<i>p</i> -value Fisher's test	Chance quotient	Gender strong point
Low reactivity	4.08	0.04	0.03	2.72	man
Familiarity with the trends and forecasts related to the economy	3.19	0.07	0.07	2.57	woman

Note. Source: Own work based on the results of the research.

Both above mentioned competences seem to be crucial in the context of the contemporary economic considerations. The significance of forecasting in management is significantly increasing together with the growth of the contemporary changeability and unpredictability of the environment. The ability of the management staff to notice the changes and developmental trends as well as to prepare effective strategies on their basis is crucial for modern enterprises and will permit the preparation for new chances, threats, and challenges. Therefore, the familiarity with the trends and forecasts related to the economy and the ability to apply them in practice will give considerable advantage to women in managing and will certainly directly contribute to greater successes of the organisation. Lower reactivity, which was identified in men and considered their strong point, seems to be a crucial determiner of the successes of modern enterprises. Low sensitivity to disturbances, high efficiency, short phase of preparing for work, faster concentration on crucial activities, ability to work intensively, at full capacity, in the face of disturbances, emotional burdens, strong stress, time pressure are the necessary attributes of working in the current conditions of managing and changeability of the environment.

Since women and men differ with respect to their strong points in management, cooperation between them is necessary.

Table 11

Statistically Significant Correlations Between the Competences of the Senior Management Staff From the Best Enterprises in Ranking Lists and Gender

The management staff's competences which are their strong point in management (variable)	Chi-squared statistics	<i>p</i> -value	<i>p</i> -value Fisher's test	Chance quotient	Gender strong point
High speed	2.72	0.10	0.07	6.25	man
Ability to manage knowledge and knowledge workers	2.32	0.13	0.07	5.56	man
Ability to manage talents	3.63	0.06	0.03	7.69	man

Note. Source: Own work based on the results of the research.

Interesting results were observed when analysing the correlations referring to competences (strong points) of the management staff in ranking lists and gender with only the higher level (without owners/co-owners) taken into consideration. Strong points of men were identified here. The chance quotient proved that the chance that a person who performs managing functions in an enterprise from the ranking list and whose strong point is high speed, the ability to manage knowledge and knowledge workers is a man which is six times greater than in the case of women, whereas when the ability to manage talents is at stake—it is nearly eight times greater than

in the case of women (see Table 11).

The analysis of the above highlighted observations leads to the conclusion that there are differences in the area of strong points between the management staff depending on gender and the achieved results of the enterprise.

Conclusions

The goal of the empirical research has been successfully achieved. Competences of managerial staff that correlate with organizational success (very good performance) have been identified. A trend has been confirmed that a strong point of managerial staff employed in companies from rankings is emotional stability, openness to new experiences and conscientiousness. Competences of managerial staff that correlate with organizational success are economic knowledge, familiarity with and comprehension of the problems faced by the enterprise and the staff, general knowledge, leadership, and customer focus. To a lesser degree, although still statistically significant is emotional stability, ability to specify goals and methods of achieving them, ability to fluently communicate in a foreign language, ability to translate the goals of the company into the individual goals of employees as well as the ability to manage knowledge and knowledge workers. Hence, the conclusion that the higher the competences of managerial staff in the areas listed above, the better performance of the organizations they manage and the higher position in rankings.

Differences between strong point of male and female managerial staff have been also established in terms of company performance. It has been observed that male managers from companies listed in the ranking have significantly higher competences in numerous areas than male managers in other companies. They are significantly less temperamental, have higher economic knowledge and better familiarity with and comprehension of the problems faced by the enterprise and the staff, higher ability to manage knowledge and knowledge workers as well as ability to translate the goals of the company into the individual goals of employees. On the other hand, female managers from companies included in the ranking are positively more familiar with the trends and forecasts related to the economy, better economic knowledge, better familiarity with and comprehension of the problems faced by the enterprise and the staff as well as better ability to forecast the future. Hence, the conclusion that enterprises listed in rankings are managed by managerial staff with higher competences.

Differences between strong points of men and women on managerial positions in enterprises listed in rankings have been identified. Women excel in familiarity with the trends and forecasts related to the economy, whereas men's reactivity is much lower. A very strong point in male managers (as compared with women) on higher managerial levels is high speed, ability to manage knowledge and knowledge workers, especially talent management.

The result of the research validates a general conclusion. Both competences, which are strong points in women, and competences which are strong points in men correlate with the success of the organization, which proves that better cooperation of male and female managers in management is necessary.

Extending the conclusion resulting from research onto the population as a whole is not valid because of structure and strength of the research sample. However, it does not decrease the cognitive value of the results, especially that it is an area that has been so far uncharted.

After the analysis, a few postulative conclusions also appear:

- Managerial staff should be selected in terms of competences that translate into organizational success;

- Male and female managers should be given such assignments in the organization that will let them deploy their best competences;
- Managerial staff should participate in lifelong learning more often and develop their strong points, and also these competences that correlate with organizational success;
- Organizations should build teams on the basis of diverse competences in terms of gender, as combining strong points of men and women will let companies succeed more.

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