

## The Objectively and Subjectively Measured Level of Managerial Competencies as the Basis for Andragogical Counselling

DOI: 10.15804/tner.2021.65.3.09

### Abstract

The study is a part of the research on the coaching method as a tool for adult personality development related to the managerial potential development. The aim was to find out differences between subjectively and objectively measured levels of managerial potential in a research sample and to compare differences in their positions as managers and non-managers. The study was based on the conception of managerial potential development. The article gives results of the Hogan Personality Inventory (HPI) where the managerial potential was measured in seven competencies. The results were compared with the research sample's self-assessment in a questionnaire of own design. The finding was that managers achieved better results in objectively measured competencies than in subjectively measured competencies. They scored highest in the objectively measured managerial competence Inquisitive and lowest in the objectively measured managerial competence Adjustment. Candidates achieved better results in objectively measured competencies than in subjectively measured competencies. They scored highest in the objectively measured managerial competence Interpersonal Sensitivity and lowest in the objectively measured managerial competence Adjustment. In subjective self-assessment, managers achieved higher mean scores than candidates in the competence Ambition. Managers, again, scored higher than candidates in subjective assessment of the competence Inquisitive. In subjective assessment, candidates scored highest in the managerial competence Interpersonal Sensitivity and lowest in the managerial competence Learning Approach. There were no statistically significant differences between managers and candidates for managerial positions in the managerial potential.

**Keywords:** *adult education, coaching, personality development, managers, candidates, Hogan Personality Inventory, self-assessment questionnaire*

## **Introduction**

The contribution focuses on differences between subjectively and objectively measured levels of managerial potential in a research sample that will form the basis for andragogical counselling design. Experience, as stated by Hogan, Hogan & Warrenfeltz (2007), reveals that individuals tend to over-estimate the level of their competencies compared to how they are estimated by others.

The application relevance of the research is in implementation of the innovative approach to support professional development programmes for managers. It should result in formulation of an andragogical concept supporting professional development of managers and talents. Development needs of the research sample were determined by comparison of differences in objective and subjective assessment of competence levels and managerial potentials. The research plan is based on the assumption that managerial potential is formed by a set of competencies such as ambition, ability to assume responsibility, ability of strategic thinking and planning, ability to communicate and co-operate, etc. (Hogan, 2009). Presence or absence of the set of these characteristics and their levels has a decisive impact on the success or failure in the managerial position.

Managerial potential has been worked up in concepts of organizations' strategic management and concepts of managers' professional development. According to Maslov (2005 in Andreeva & Kifa, 2014), analyses of managerial potential help to understand the position of the organization at the stage of the organizational development beginning. Hence it is important for organizations to recognize the objective level of managerial competencies and managerial potential of their managers and talents for their targeted development.

In their research on the effectiveness of managerial potential development, DeMeuse et al. (2009) describe key issues related to the evaluation of effectiveness of development programmes, while focusing on the need to improve the psychometric quality of development tools. Theeboom, Beersma & van Vianen (2013) show that when working only with self-reports of the managerial potential level questions arise in a number of research publications about the objectivity of the results.

According to Fegley (2006), the most important activities for management of talent development include, among others, identification of gaps between the existing competencies of candidates for the job position and the needs of the position.

In the Czech conditions, Veteška & Kursch (2018) explore whether the legal form and size of the organization influence the effectiveness of talent development

methods. One of their confirmed hypotheses is that large private organizations, contrary to small organizations, consider several methods based on individual development (coaching, mentoring, individual development plan, counselling...) to be the most effective methods of developing talents.

The research by Shaikh, Bisschoff & Botha (2018) measuring management and leadership competencies of business school educated managers in South Africa on a sample of 362 managers brings a model to measure managerial and leadership competencies in a list of 11 competencies which are measured by 42 criteria (in our research, HPI measures 7 competencies by 41 criteria). The results show managers score highest in the competencies *Leading Change* and *Team Building* and lowest in the competencies *Personal Value System* and *Career Awareness*.

## **Methodology of Research**

The aim of our research was to find out differences between subjectively and objectively measured levels of managerial potential in a research sample and to compare differences in their positions as managers and non-managers. That was why we chose the Hogan Personality Inventory as a quality tool for objective measuring of managerial potential, and own non-standardized questionnaire measuring subjective assessment of the research sample's managerial potential.

Our research included managers and non-managers from the IT sector, Manufacturing, Automobile, Pharma, IT & Telco, Finance, FMCG sectors of companies in the Slovak Republic. For the purpose of this paper we focused on two groups of employees, in particular on:

- Talents – non-managers, not in managerial positions, but working in organizations as candidates for managerial positions,
- Managers at the middle and top management level.

The research was carried out in May 2020. The research sample consisted of 127 respondents (71 men – 55.91% and 56 women – 44.09%) who were administered the Hogan Personality Inventory (hereinafter referred to as the “HPI”) when attending employee development training. Levels of personal competencies were measured on 7 scales of the HPI by Hogan, Hogan & Warrenfeltz (2007) – *Adjustment, Ambition, Sociability, Interpersonal Sensitivity, Prudence, Inquisitive and Learning Approach* – by means of 206 statements evaluated by respondents on a 5-point scale (I totally disagree – I disagree rather than agree – I neither agree nor disagree – I rather agree than disagree – I totally agree). The HPI measures also managerial potential. Respondents can fill in the inventory online on the Hogan

Assessment Systems' site (<http://www.gotohogan.com>). The inventory contains evaluative statements and respondents express the degree of their agreement or disagreement on a 5-point scale.

Smither & Hogan (2008) claim that research and practice show that the personality and its profile is one of the best indicators of how people build relationships, approach work and education and what jobs fit them best. The HPI regularly ranks high in validity and reliability rankings published by renowned professional psychology institutions, e. g. British Psychological Society. Reliability of the HPI is 0.81 and validity 0.54 (<https://ptc.bps.org.uk/tests-and-testing/psychological-tests>). The so-called optimal managerial profile by Curphy & Hogan (2012) defines the optimal level of individual competencies in descriptions of the HPI scales.

Our own non-standard questionnaire Self-Assessment of the Personality Profile and Potential (Sebahodnotenie osobnostného profilu a potenciálu ) ([https://forms.office.com/Pages/DesignPage.aspx?fragment=FormId%3DPloyMhgZ-zE6exmbjltAjdX0BCDgEc9Jg\\_RT3Y16iRUQ0NEOERTQVhNWlhRWUdaTU-dINzILUIJOSC4u](https://forms.office.com/Pages/DesignPage.aspx?fragment=FormId%3DPloyMhgZ-zE6exmbjltAjdX0BCDgEc9Jg_RT3Y16iRUQ0NEOERTQVhNWlhRWUdaTU-dINzILUIJOSC4u)) with the same competencies and items with similar meanings identified the level of self-assessment in the research sample. Almost 45% (57 persons) of respondents were managers and more than 55% (70 persons) were talents in training for managerial positions. Most respondents, 68, had experience from 7 to 15 years = 55.54%; followed by 31 respondents with experience between 16 and 20 years = 24.40%, and least respondents, 28 = 22.04%, had experience from 0 to 6 years.

The research problem was defined by means of the following research questions:

- RQ1: Are there any differences between the achieved subjectively and objectively measured managerial competencies in managers?
- RQ2: Are there any differences between the achieved subjectively and objectively measured managerial competencies in candidates for managerial positions?
- RQ3: Are there any differences between managers and candidates for managerial positions in the achieved objectively measured managerial competencies?
- RQ4: Are there any differences between managers and candidates for managerial positions in the achieved subjectively measured managerial competencies?
- RQ5: Are there any differences between managers and candidates for managerial positions in the managerial potential?

## Results of Research

Results were achieved by a quantitative statistical analysis using parametric and non-parametric tests. The tests were chosen depending on whether our data were evenly distributed. Student's independent two-sample t-test, Mann-Whitney's U-test, Paired t-test and Wilcoxon's test were used to analyze the data. These are tests designed to compare two groups within one variable or to compare two identical variables within one group.

### Differences between subjectively and objectively measured competencies in managers

Statistical significance was 0 for all competencies (Tab. 1). Managers scored highest in the objectively measured competence *HPI Inquisitive* (AM = 63.84; SD = 28.831) and lowest in the objectively measured competence *HPI Adjustment* (AM = 45.84; MDN = 43.00). In subjective assessment, they scored highest in the competence *S-Q Interpersonal Sensitivity* (AM = 16.30; SD = 1.802) and lowest in the competence *S-Q Sociability* (AM = 10.44; MDN = 11.00).

**Table 1.** Differences between subjectively and objectively measured competencies in managers (n = 57)

	Mean	SD	Paired t-test	
			t	Sig.
HPI Interpersonal Sensitivity	62.35	31.302	11.085	0.000
S-Q Interpersonal Sensitivity	16.30	1.802		
HPI Inquisitive	63.84	28.831	12.623	0.0000
S-Q Inquisitive	15.26	2.749		
	Mean	Median	Wilcoxon's test	
			Z	Sig.
S-Q Adjustment	12.46	13.00	-6.103	0.000
HPI Adjustment	45.84	43.00		
S-Q Ambition	15.21	15.00	-5.860	0.000
HPI Ambition	50.72	52.00		
S-Q Sociability	10.44	11.00	-6.473	0.000
HPI Sociability	56.93	62.00		
S-Q Prudence	13.26	13.00	-6.266	0.000
HPI Prudence	51.65	46.00		
S-Q Learning Approach	10.46	10.00	-6.489	0.000
HPI Learning Approach	63.16	61.00		

Legend: HPI – Hogan Personality Inventory; S-Q – Subjective questionnaire; SD – Standard deviation; t – Paired t-test value; Sig. – statistical significance; Z – Wilcoxon's test value; n – number

### Differences between subjectively and objectively measured managerial competencies in candidates for managerial positions

There were statistically significant differences between subjectively and objectively measured managerial competencies in candidates for managerial positions. Results revealed that candidates achieved better results in objectively measured competencies than in subjectively measured competencies. Statistical significance for all competencies was 0 (Tab. 2). Candidates scored highest in the objectively measured competence *HPI Interpersonal Sensitivity* (AM = 71.34; SD = 26.746) and lowest in the objectively measured competence *HPI Adjustment* (AM = 56.71; SD = 26.927). In subjective assessment, they scored highest in the competence *S-Q Interpersonal Sensitivity* (AM = 15.84; SD = 1.750) and lowest in the competence *S-Q Learning Approach* (AM = 15.84; SD = 1.441).

**Table 2.** Differences between subjectively and objectively measured competencies in candidates for managerial positions (n = 70)

	Mean	SD	Paired t-test	
			t	Sig.
HPI Adjustment	56.71	26.927	13.600	0.000
S-Q Adjustment	12.97	2.686		
HPI Sociability	65.01	26.271	17.475	0.000
S-Q Sociability	10.43	1.814		
HPI Interpersonal Sensitivity	71.34	26.746	17.169	0.000
S-Q Interpersonal Sensitivity	15.84	1.750		
HPI Prudence	60.74	27.748	14.371	0.000
S-Q Prudence	12.83	1.865		
HPI Inquisitive	70.26	26.593	17.799	0.000
S-Q Inquisitive	13.79	2.389		
HPI Learning Approach	65.10	29.026	15.894	0.000
S-Q Learning Approach	10.16	1.441		
	Mean	Median	Wilcoxon's test	
			Z	Sig.
S-Q Ambition	13.56	14.00	-7.067	0.000
HPI Ambition	58.73	64.00		

Legend: HPI – Hogan Personality Inventory; S-Q – Subjective Questionnaire; SD – Standard deviation; t – Paired t-test value; Sig. – statistical significance; Z – Wilcoxon's test value; n – number

### Differences between managers and candidates for managerial positions in managerial competencies (HPI)

Differences between managers and candidates for managerial positions were statistically significant only in one objectively measured managerial competence, this *Adjustment* ( $Z = -2.170$ ;  $p = 0.030$ ). Candidates for managerial positions ( $AM = 56.71$ ;  $MDN = 55.00$ ) achieved higher mean scores than managers themselves ( $AM = 45.84$ ;  $MDN = 43.00$ ). Results in the rest of objectively measured managerial competencies were not statistically significant. Student's test (Tab. 3) and Mann-Whitney's U-test (Tab. 4) significance results were not less than or equal to 0.05. Managers and candidates for managerial positions scored about the same in the rest of managerial competencies.

**Table 3.** Differences between managers and candidates for managerial positions in managerial competencies (HPI)

HPI	Managers (n=57)		MP Candidates (n=70)		Levene's test		Student's t-test	
	Mean	SD	Mean	SD	F	Sig.	t	Sig.
Interpersonal Sensitivity	62.35	31.302	71.34	26.746	2.785	0.098	-1.745	0.083
Inquisitive	63.84	28.831	86.00	27.748	0.604	0.438	-1.302	0.195

Legend: HPI – Hogan Personality Inventory; MP – managerial position; SD – Standard deviation; t – Student's t-test value; Sig. – statistical significance; F – Levene's test value; n – number

**Table 4.** Differences between managers and candidates for managerial positions in managerial competencies (HPI)

HPI	Managers (n=57)		MP Candidates (n=70)		Mann-Whitney's U-test	
	Mean	Median	Mean	Median	Z	Sig.
Adjustment	45.84	43.00	56.71	55.00	-2.170	0.030
Ambition	50.72	52.00	58.73	64.00	-1.476	0.140
Sociability	56.93	62.00	65.01	70.00	-1.593	0.111
Prudence	51.65	46.00	60.74	66.00	-1.829	0.067
Learning Approach	63.16	61.00	65.10	75.00	-0.241	0.809

Legend: HPI – Hogan Personality Inventory; MP – managerial position; Z – Mann-Whitney's U-test value; Sig. – statistical significance; n – number

### Differences between managers and candidates for managerial positions in managerial competencies (Subjective Questionnaire)

Differences between managers and candidates for managerial positions were significant only in two subjectively measured managerial competencies, this *Ambition* ( $t = 3.762$ ;  $p = 0.000$ ) and *Inquisitive* ( $t = 3.240$ ;  $p = 0.002$ ). In *Ambition*, managers (AM = 15.21; SD = 2.266) achieved higher mean scores than candidates for managerial positions (AM = 13.56; SD = 2.613). In *Inquisitive*, managers, again, scored higher (AM = 15.26; SD 2.749) than candidates (AM = 13.79; SD = 2.389). The rest of subjectively measured managerial competencies returned no statistically significant results. Student's t-test significance results (Tab. 5) were not less than or equal to 0.05. Managers and candidates scored about the same in the rest of managerial competencies.

**Table 5.** Differences between managers and candidates for managerial positions in managerial competencies (Subjective Questionnaire)

S-Q	Managers (n=57)		MPCandidates (n=70)		Levene's test		Student's t-test	
	Mean	SD	Mean	SD	F	Sig.	t	Sig.
Adjustment	12.46	2.465	12.97	2.686	0.391	0.533	-1.115	0.267
Ambition	15.21	2.266	13.56	2.613	0.855	0.357	3.762	0.000
Sociability	10.44	1.637	10.43	1.814	1.402	0.239	0.032	0.974
Interpersonal Sensitivity	16.30	1.802	15.84	1.750	0.199	0.656	1.439	0.153
Prudence	13.26	1.587	12.83	1.865	2.671	0.105	1.395	0.165
Inquisitive	15.26	2.749	13.79	2.389	0.944	0.333	3.240	0.002
Learning Approach	10.46	1.283	10.16	1.441	0.032	0.858	1.221	0.224

Legend: S-Q – Subjective Questionnaire; MP – managerial position; SD – Standard deviation; t – Student's t-test value; Sig. – statistical significance; F – Levene's test value; n – number

### Differences between managers and candidates for managerial positions in managerial potential (Subjective Questionnaire)

There were no statistically significant differences between managers and candidates for managerial positions in managerial potential. Mann-Whitney's U-test significance results (Tab. 6) were not less than or equal to 0.05. Managers achieved the same managerial potential as candidates.



**Table 6.** Differences between managers and candidates for managerial positions in managerial potential (Subjective Questionnaire)

S-Q	Managers (n=57)		MP Candidates (n=70)		Mann-Whitney's U-test	
	Mean	Median	Mean	Median	Z	Sig.
Managerial potential	46.21	47.00	50.79	52.00	-0.939	0.348

Legend: S-Q – Subjective Questionnaire; MP – managerial position; Z – Mann-Whitney's U-test value; Sig. – statistical significance; n – number

## Discussion

Managers achieved better results in objectively measured competencies than in subjectively measured competencies. They scored highest in the objectively measured managerial competence *HPI Inquisitive* and lowest in the objectively measured managerial competence *HPI Adjustment*.

Candidates, too, achieved better results in objectively measured competencies than in subjectively measured competencies. They scored highest in the objectively measured managerial competence *HPI Interpersonal Sensitivity* and lowest in the objectively measured managerial competence *HPI Adjustment*. In subjective assessment, they scored highest in the managerial competence *Interpersonal Sensitivity* and lowest in the managerial competence *Learning Approach*.

Differences between managers and candidates for managerial positions were statistically significant only in one objectively measured managerial competence, that is *Adjustment*. Candidates achieved higher mean scores than managers themselves.

Differences between managers and candidates for managerial positions were statistically significant only in two subjectively measured managerial competencies, that is *Ambition* and *Inquisitive*. Managers achieved higher mean scores than candidates in the competence *Ambition*. Managers, again, scored higher than candidates also in the competence *Inquisitive*.

Managers achieved about the same managerial potential as candidates.

The research “Measuring management and leadership competencies of business school educated managers in South Africa” by Shaikh, Bisschoff & Botha (2018)

on a sample of 362 managers – business school graduates in South Africa brought a model to measure managerial and leadership competencies. After identification of relevant managerial competencies from literature, the relevance and importance of the competencies were confirmed statistically and followed by a list of 11 managerial competencies measured by 42 criteria. Results revealed that the competencies *Personal Value System* (2.58) and *Career Awareness* (3.18) – closest to the competence *Ambition* in our research – achieved the lowest scores on a 0 to 5 point scale with 0 the lowest and 5 the highest score; in practice, this means that these competencies were not well developed among manager-respondents, and managers needed to develop those two competencies. The highest scores were achieved in the competencies *Leading Change* (4.53) – closest to the competence *Inquisitive* in our research – and *Team Building* (4.43) – closest to the competence *Interpersonal Sensitivity* in our research.

The article elucidates the level of managerial competencies in managers and candidates for managerial positions and their subjective assessment and differences, with the aim to increase the effectiveness and quality of future development programmes. Competencies should be further developed in accordance with the work environment and the content of the job position. This issue should become part of research bringing answers to main questions from the area of competence development.

## **Conclusion**

The findings allowed us to identify respondents' strengths and developmental aspects, and to assess their managerial potentials. Davis (1999) states that a person can deceive oneself (and others) worse at the level of behaviour than at the level of perception and attitudes. The results of the study will be used as the basis for implementation of the andragogical counselling development programme in the form of coaching for managers and talents.

If we understand adult education, thus also coaching, as “a system of formative influences and activities that shape and develop a person's personality traits so that the person is able to put them into use in happy and successful life and work in human society” (Pavlov, 2015, p. 14), then we can speak also about the context of one's potential exploiting and targeted strengthening. Belcourt & Wright (1996, p. 199) give a number of reasons for differences in the management development from the regular staff training, including application of different methods, especially coaching. The originality of the research is in the formation of the coaching

programme aimed at gaps in individual competencies. It means developing the theory in the nation-wide and European context, because it is connected with evidence-based andragogical counselling.

According to Hogan, Hogan & Warrenfelt (2007) an individual can look for development solutions also by means of appropriately chosen training methods. Czichos (2011) maintains that recognizing differences between measured results in assessed competencies helps coaches to tailor a coaching programme to individual respondents.

Main recommendations for the personality development of our research sample and the defined goals and content of coaching will be an important output of the research.

The limit of the paper is the fact that the respondents are managers or future managers who are somehow “forced” into the development by their employers and who need to deliver higher and better performance in the area of people and task management to accomplish the goals of their employers’ companies as in Simon & von der Gathen (2002). They are motivated respondents, but the threat can be seen, also according to findings by Gorell & Gillian (2015), in the fact that their motivation may be only external, not internal.

In future we shall focus on comparative exploration of differences between the level of the research sample’s managerial potential objectively measured before and after completion of the development programme in the form of coaching. We see further potential in the research and development of tools measuring the effectiveness of the development of managers’ potential.

## References

- Andreeva, E.V., & Kifa, L.L. (2014). Managerial potential development: theoretical and methodological grounds. *Евразийский союз ученых*, 9(6), 19–23.
- Belcourt, M., & Wright, P.C. (1998). *Vzdělávání pracovníků a řízení pracovního výkonu. (Managing Performance through Training and Development)*. Praha: Grada Publishing.
- Curphy, G.J., & Hogan, R. (2012). *The rocket model: Practical advice for building high performing teams*. Tulsa, OK: Hogan Press.
- Czichos, R. (2011). *Das lerne ich nie!...lernstilgerechte Kommunikation im Unterricht, im Training, im Seminar, im Coaching* (I will never learn this!...learning style appropriate to Communication in the classroom, in training, in seminars and in coaching). Aachen: Shaker Verlag.
- Davis, P. (1999). *Managing the Cooperative Difference: A Survey of the Application of Modern Management Practices in the Cooperative Context*. Geneva: International Labour Office, Cooperative Branch.

- De Meuse, K.P., Dai, G., & Lee, R.J. (2009). Evaluating the effectiveness of executive coaching: Beyond ROI?. *Coaching: An international journal of theory, research and practice*, 2(2), 117–134.
- Fegley, S (2006). Talent management survey report. *Society for Human Resource Management*. Virginia: Alexandria. Retrieved 22/03/2021 from <https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/documents/2006%20talent%20management%20survey%20report.pdf>
- Gorell, R., & Gillian, J. (2015). *50 Top Tools for Coaching. A complete toolkit for developing and empowering people*. London, Philadelphia, New Delhi: Kogan Page.
- Hogan, R. (2009). *Personality and the Fate of Organization*. New York: Psychology Press.
- Hogan, R., Hogan, J., & Warrenfeltz, R. (2007). *Hogan Guide. Interpretation and Use of Hogan Inventories*. New York: Hogan Press.
- Pavlov, I. (2015). Súčasnosť a perspektívy teórie výchovy dospelých v sústave andragogických vied (Present and Perspectives of the Adult Education Theory in the System of Andragogical Sciences). *Lifelong Learning – celoživotní vzdělávání*, 5(1), 8–28.
- Shaikh, A., Bisschoff, C.A., & Botha, C.J. (2018). Measuring management and leadership competencies of business school educated managers in South Africa. *Journal of Business and Retail Management Research*, 13(2).
- Simon, H. & von der Gathen, A. (2002). *Das grosse Handbuch der Strategieinstrumente* (The great manual of strategy instruments). Frankfurt/New York: Campus Verlag.
- Smither, R. & Hogan, R. (2008). *Personality Theories and Applications*. Tulsa: HoganPress.
- Theeboom, T., Beersma, B., & van Vianen, A.E. (2014). Does coaching work? A meta-analysis on the effects of coaching on individual level outcomes in an organizational context. *The Journal of Positive Psychology*, 9(1), 1–18.
- Veteška, J., & Kursch, M. (2018). The Research on the Efficiency of the Methods of Talent Management within. *The New educational review*. 52(2), 28–42.