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Understanding job performance through persistence and job competency

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Abstract

Two related researches are presented in this paper: the first study tested a predicting model of the job performance based on competency matching indices analysis, on a sample of 200 Romanian employees, while the second one analyzed the influence of three persistence factors on the job performance. Surprisingly, results showed that job competency matching index proved a low predictive power for the job performance, while two persistence factors seemed to be high predictive. These results might question the general assessment practice beliefs in the human resources field.

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1. Introduction

Literature abounds in definitions, models and methods for the assessment and understanding of the job performance. Theories and practices were developed to enable HR professionals to directly enhance job performance (Holton & Yamkovenko, 2008). Unfortunately, each author defines job performance in a significantly different manner. The debate regarding the nature of performance reveals two approaches. Some authors see the performance as being results and outcomes, and define it as the history of produced results of a certain determined activity or in a certain position (Ainsworth & Smith, 1993; Bernardin et al., 1995b, *apud* Robertson, Callinan & Bartram, 2002, p. 140). From this perspective, global job performance should be the sum (or average) of job outcomes. On the other hand, the most of the authors consider the job performance as the sum of behaviours that employee controls in a certain context (Robertson, Callinan & Bartram, 2002; Bartram, 2000; Campbell et al., 1993), which are relevant for the

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organizational objectives (Schmitt & Chan, 1998). If behaviours can be evaluated separately, performance is understood as an interconnected series of behaviours (Robertson, Callinan & Bartram, 2002).

The current paper aims at understanding the job performance, defined here as sum of behaviours, by exploring its relationships with persistence and job competency. We refer to persistence as the quality of the goal-related pursuits, manifested as the tendency to remain engaged in specific goal-related activities, despite difficulties, obstacles, fatigue, prolonged frustration or low perceived feasibility (Constantin, 2010). We analyze the influence of three persistence factors on the job performance: current purposes pursuing (CPP), recurrence of unattained purposes (RUP), and long term purposes pursuing (LTPP). Job competencies are, for some authors, important prerequisites of job performance (Lucia & Lepsinger, 1999; McClelland, 1973). They represent abilities to use knowledges, skills, behaviours and personal characteristics in order to successfully perform professional tasks (Ennis, 2008) and „are causal-related to the efficacy and /or superior performance” (Boyatzis, 1982, p. 23).

2. The present study

The referral literature offers many models of job performance factors. While the traditional approach relates performance and the IQ and personality traits, the current approaches promote the idea that performance is function of individual capacities and motivation. This idea was extended and theorised by Campbell (1993) who proposed a multidimensional model of performance. The declarative knowledge, procedural knowledge and motivation, as choosing behaviours are the main performance determinants promoted by this model. Taking into account the Campbell's theoretical ideas, our research aims at investigating the influence of job competencies and persistence factors on the job performance. For each study of the research, we have formulated two main hypotheses:

Hypothesis 1: Job competency is a good predictor for job performance. Operationally, we expect positive correlations between job competency levels and standard required competency levels, and, also, between job competency and competency matching indices between job competency and standard required competency.

Hypothesis 2: Persistence factors will positively predict competency matching indices and job performance.

3. Method

3.1. Sample

The subjects were employees of seven medium size Romanian based companies. A number of 200 of the total number of the employees were involved in the first study (participation rate was 86.2%; 23 employees refused to participate, and other 9 completed the questionnaires in an invalid manner). The mean age is 42.2 years.

After 3 months, 110 employees from the first sample agreed to participate in the second study (participation rate 55%, mean age 30.7 years).

3.2. Measures

For competency assessment we have developed ad-hoc *checklists*, based on the data collected by the Competency Elicitation Interviews (Faix et al., 1991). During special management meetings in each company, the management team collectively defined a checklist with competencies for each position/level

in the company. We called it the standard required competency; it contains 12 competencies clustered in three categories, scored on four points bars. Then the management was invited to assess the employees' current competencies. A total score was calculated, resulting an overall job competency level, which was compared with a previous calculated standard required competency level for each position.

Job performance was assessed using *Robertson's Performance Scale*. This measure was successfully used in other studies (Robertson & Gibbons, 1996; Robertson et al., 1997) as an overall job performance score, eliciting a high internal consistency reliability ($\alpha=.86$). The scale has 6 items (e.g.: "Achieves the objectives of the job"; "Demonstrates expertise in all aspects of the job") and the supervisor indicates whether he /she agrees or not with the behaviour described in a five-point scale. Its application is easy, with an average completion time of 5 to 10 minutes.

In the second study, a *Persistence Scale* (Constantin, 2010) measured three persistence factors: current purposes pursuing (CPP), recurrence of unattained purposes (RUP), and long term purposes pursuing (LTPP). It contains 62 items (e.g.: "I easily give up solving a problem that preoccupied me a longer period of time", "I remain motivated in activities that last for months"). The collected data were statistically analyzed with SPSS 17.0 for Windows.

4. Results

Table 1 shows the correlation analysis for testing the hypothesis of the first study. The statistical analysis partially supports the hypothesis. Firstly, there are significant correlations between actual job competency level, standard required job competency level and job performance level.

Table 1. Correlation analysis between current job competency levels, standard job competency levels and job performance

	1	2	3	4
1. Current Job Competency Level	1	.570**	.528**	.464**
2. Standard Job Competency Level	.570**	1	-.396**	.252**
3. Competency Matching Index	.528**	-.396**	1	.258**
4. Job Performance	.464**	.252**	.258**	1

Thus, current job competency levels positively correlate with standard required competency levels ($r = .570$, $p < .001$) and with matching competency index ($r = .528$, $p < .001$). An expected result was the negative correlation between standard required competency levels and matching competency index ($r = -.396$, $p < .001$). Moreover, job performance correlates positively with current competency levels ($r = .464$, $p < .001$), standard required competency levels ($r = .252$, $p < .001$), and with competency matching index ($r = .258$, $p < .001$).

Secondly, we wanted to find out if competency matching indices between current job competency and standard required competency will positively predict job performance. For that, we tested four prediction models. The collected data provided us with no evidence that competency matching indices (e.g.: competency matching index, technical competency matching index, methodological competency matching index, social competency matching index) would predict job performance.

To get a direct test of the hypothesis suggested in the second study, we applied a series of statistical formulae. The results showed no correlation between competency matching indices and persistence factors. Moreover, there is no significant correlation between current job competency and long term purposes pursuing (LTPP), current purposes pursuing (CPP), and recurrence of unattained purposes (RUP). However, when testing the influence of persistence factors on job performance, data showed

positive correlations between job performance and both long term purposes pursuing ($r = .384, p < .001$), and current purposes pursuing ($r = .468, p < .001$). Additionally, a strong positive correlation between LTPP and CPP ($r = .491, p < .001$) was found. To evaluate the prediction power of these persistence factors we tested some linear regression models. Thus, from three models tested, results indicate that job performance can be predicted by LTPP ($b = .391, t = 3.68, p < .01$), and CPP ($b = .275, t = 2.216, p = .03 < .05$). The RUP is the persistence factor which seems to have no prediction power.

Surprisingly, when we tested the prediction power of LTPP and CPP joined with current job competency level, we obtained a significant prediction model ($b = .387, t = 3.329, p = .001$).

5. Discussion

This study has two findings: the first one refers to the relationship between job performance and job competency. Starting from the common idea that the performance is based on competency, we still questioned the linearity of this relationship. And yes, our results confirm the existence of a strong relationship between performance and competency: we found positive correlations between job performance and current job competency level, standard required job competency level and competency matching index. However, the fact that the competency matching indices have not any prediction power suggests that this relationship is not a linear one. This finding brought to our attention the idea that, if an employee abilities, skills and knowledge are matching to the job requirements, this fact does not guarantee that this person will become a high performer.

The second finding of this study refers to the fact that we found a strong positive influence of two persistence factors (long term purposes pursuing - LTPP, current purposes pursuing - CPP) on job performance. Moreover, LTPP and CPP had a notable prediction power, suggesting that the performance is function of this individual variables. In other words, good performers are persons who pursued their current and long term purposes despite of any obstacles.

Additionally to these findings, a regression model that analyzed LTPP and CPP together with current job competency level suggested that these three variables could predict job performance. Thus, current job competency is predictive, while the matching level between job competencies and job requirements is not. For practice, these results could suggest the fact that a special attention should be given to the actual competencies and their development, rather than to the attempt to match competencies to job requirements.

Accepting the limitation of this research (e.g.: sample size, the need for some various assessment contexts), we underline two major strengths of this study, namely the acknowledgement that competencies alone are necessary but not sufficient to predict a high performance level and, secondly, the recognition of the idea that there might be other intimate individual-related variables, which in relationship with job competencies, might affect job performance. In conclusion, we see the study's findings as an alarm sign. First of all, because of the possible implications for professionals, who have to assess competencies and performance. In the current organizational context, where attention is paid to the trend of matching competencies to requirements, sometime the need of development of current competencies fade away. Secondly, these findings are challenging especially in the Romanian context, in relationship with the new promulgated Romanian Labor Law (2011). It stipulates that the dismissal of an employee should be based on a specific performance assessment. Thus, one major research question remains unanswered: How can we assess job performance in the absence of a clear image of performance predictors?

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