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Agent's Performance Versus Life Insurance Company Effectiveness: Five Factor Model

Abstract: The purpose of this article is to demonstrate the crucial role of five factor model of Costa and McCrae implementation in the context of life insurance industry effectiveness from both theoretical and practical perspectives. There was implemented and tested the five factor model (FFM) of Costa and McCrae, based on a case study of four largest life insurance companies, one domestic and three international ones, on the basis of international scientific projects conducted from 2008 to 2014 and sample of 796 most effective life insurance agents. The results imply the existence of a positive correlation between openness to experience and neuroticism traits and the life insurance agent's efficiency. The study is focused on job, or task based cues, but there are other factors that may be relevant. Future research might study those variables as situational moderators as well. In this context, it is important to accept an assumption concerning the permanence of personality traits [McCrae, Costa 2003], and the response to items on a personality inventory at any one moment is determined by many traits, states and features of immediate situation.

Key words: competitive advantage, efficiency, human performance, management, organization, personality traits

Introduction

In the sciences of management, the maxim stating that behaviour constitutes the consequence of the characteristics of a person and a situation is considered as a truism. However, when going beyond the framework of generalization, it continuously constitutes an area of many controversies [Lucas, Donnellan 2009]. There are inveterate causes of this discourse [Judge et al. 2015] and the controversy is based on two most frequently quoted criticisms concerning the relation of an individual and external determinants:

measures of personality traits possess a relatively modest predictive value in the context of the comprehensive behaviours of an individual. Furthermore, their explanatory value is not supported with an adequate taxonomic process [Funder 2006]. In the case of the latter problem, the claim seems to be justifiable that through research, more significant progress was made in the classification and determination of personality traits rather than of situational factors. Author concludes that situational variables tested in the research published are almost complete in an ad hoc perspective. Buss [2009] claims that a nearly total lack of development in the area of the conceptualization of a situation in a non-arbitrary manner constitutes one of the most essential obstacles. Even in the case of uniqueness, no assumption is justifiable that a conceptual foundation that includes a situational context cannot be developed as a predictor of social [Mishel, Shoda 1995] or organizational behaviours [Joshi, Roh 2009, Trevino 1986]. Concerning the previous criticism, some researchers undermine the value of the scientific achievements of the abovementioned perspective. Haney and Zimbardo [2009] argue that individual differences represent in fact a modest contribution to the explanation of human behaviours. In the literature related to organization and management, views can be identified according to which personality indexes possess little usefulness in the prediction of professional effectiveness [Hogan 2007]. At present, approaches to the usefulness of personality traits in the context of the determination of productivity in relation to the previous critical remarks emphasize that in 1950s–1960s researchers focused on the validation of the personality inventory as an index of the future professional success, which is also legitimized in 21st century. Moreover, further deepened analysis allows one to find an internal contradiction among the protagonists of a negative evaluation of personality traits in relation to organizational effectiveness [Ones et al. 2007, Roberts 2009], although in the earlier studies by the present proponents of the theories of traits [Barrick et al. 2001], criticisms can also be found regarding its validation.

Theory development and hypotheses

Coefficients of effectiveness in life insurance companies: praxeological approach
As a result of an analysis of the indicators concerning the effectiveness of the operational activities of life insurance companies that have been functioning to date, it was possible to identify solely a quantitative and static perspective of effectiveness taking into consideration only aggregated financial information whose values are established by law [Insurance Act 2015]. There was an exclusion of those factors that emphasize the significance of a qualitative perspective of effectiveness, which constitutes the results of the activities undertaken by insurance agents, and the significance of the value

of relations created by them with customers for the effectiveness of insurance companies. Therefore, another conception for the effectiveness measures of life insurance companies was proposed. The conception accepted combines the praxeological [Gasparski 2013] perspective of the effectiveness assessment of the activity of life insurance companies through the effectiveness of the professional activeness of insurance agents. Therefore, the author suggests that the effectiveness of life insurance companies needs to be characterized by other quantities connected indirectly or directly with the premium volume obtained from the sale of life insurances by agents, particularly by the number of appointments (relation agent-client) necessary to close the insurant contract (purchase policy). It should be emphasized that this solution highlights the significance of the individual activeness of single persons: entrepreneurs. In the context of the effectiveness of the whole organization, this is related to life insurance companies, which constitutes in a direct manner a reference to the praxeological assumptions, and also points to the defectiveness of statutory indexes based on a strictly statistical effectiveness perspective [Janowski 2015].

Personality profile of the effective life insurance agent: FFM implementation
An increase of the productivity/effectiveness level of first contact personnel in service organizations, whose operational activity is based on sales personnel, constitutes the subject of scientific research and special emphasis by managing personnel in the abovementioned companies [Verbeke 2011]. As a result, the scientific environment and practitioners worked out a consensus, namely that such factors as the following: knowledge connected with sales, adaptation sales, cognitive abilities, perception of the seller's role and motivation decide about the effectiveness of the sales process. Although critical opinions also appear, namely that these conclusions were inferred from statistical interactions between the seller and the customer [Evans 2012].

Those life insurance companies where effectiveness is realized in the praxeological context constitute those companies where, in accordance with the laws of the Austrian school of economics, the personality traits of first contact personnel: insurance agents are one of the main factors that determine the effectiveness of the sale of insurances. Hence, in order to conducted research, a model of the effectiveness assessment of the system of human resources management based on the fundamentals of the five-factor theory was implemented, consists of five personality dimensions:

Openness to experience: this is understood as manifested tolerance towards difficulties appearing during stress causing professional situations, curiosity of innovative solutions, low sensitivity towards the working environment which is characterized by a high amplitude of emotional strains [McCrae, Costa 2003]. Individuals with

a high level of openness frequently use external assessment tools that enable them to learn fast [Busato *et al.* 1999]. Empirical research confirmed that openness is positively correlated with adaptability [LePine *et al.* 2000]. According, the author predicts,

Hypothesis 1: The life insurance company effectiveness will be positively associated with openness to experience.

Conscientiousness: in accordance with the opinion formulated by Costa and McCrae [2003], constitutes a trajectory of motivation to achieve goals, which to significant degree extends the scope of individual adaptability [Pulakos *et al.* 2000]. It was also found, in the empirical research, that conscientiousness is negatively correlated with absence from work, and it is reflected in self-discipline and sense of responsibility [Colquit, Simmering 1998].

Hypothesis 2: The life insurance company effectiveness will be positively associated with consciousness.

Agreeableness: individuals with a high level of this trait are compliant and oriented onto positive social interactions [Graziano, Tobin 2009, pp. 46–61]. They manifest channeled emotional reactions. Ward et al. suggest that a tendency to compromise is a feature that determines the occurrence of depressions and generation of a high level of stress in the context of challenges in the working environment. Furthermore, empirical research results demonstrate that the conciliatory manner is positively correlated with adaptability [Ward et al. 2004].

Hypothesis 3: The life insurance company effectiveness will be positively associated with extraversion.

Extraversion: in the opinion of Hogan [2007], this is a construct whose components include sociability (including exhibitionism and expression) and ambition (including initiative and impetus). Individuals with a high level of extraversion demonstrate a high level of sociability which enables them to obtain support from their friends to solve complex problems in their working environment [Wilt, Revelle 2009, pp. 27–45].

Hypothesis 4: The life insurance company effectiveness will be positively associated with extraversion.

Neuroticism: this includes anxiety, annoyance, hostility, depressions, impulsiveness and sensitivity [Komarraju et al. 2011]. It exerts a strong negative influence on psychological and socio-cultural adaptation, it accompanies depression and the individual's increasing problems [Widiger 2009, pp. 129–146], while lack of adaptation, which is characteristic of this trait, may constitute a consequence of a deficit in abilities and its negative impact on the efficiency of specific domains [Collings, Mellahi, 2009; Eaton, Bradley, 2009].

Hypothesis 5: The life insurance company effectiveness will be positively associated with neuroticism.

Method

The conducted research was based on the inductive method, which is particularly useful and adequate when the conceptual base cannot determine identifiable dimensions in a simple way [Williamson et al. 1982]. This method requires an expert approach to an analysis of the content of the sample. It is based on a post hoc factor analysis [Anderson, Gebring 1991, pp. 732–740; Kerlinger 1986] and it asserts a correct categorization of factors [Ford, MacCallum 1986]. In addition to this, a comparative analysis of the existing literature of the subject increased the validation level of the research results [Eisenhardt, Graebner 2007]. Moreover, the case study was constructed through the use of an iteration process based on a consonance of theoretical assumptions and empirical evidence [Araujo, Dubois 2004, Dubois, Gadde 2002]. The implementation of the case study in the development of a theory enhances inductive research through the creation of an adequate theory that determines scientific development and that is testable [Gibbert, Ruigrok 2010]. The purpose of the research was to identify whether the personality trait intensities are correlates of an effective life insurance agent.

Participants and Procedures

812 most effective insurance agents (according to their sales results for the 5 years preceding the research, top 10% of the whole population of each company) constituted the selection criterion. All the agents who met this criterion were covered by the research. These agents were the intermediaries of AVIVA TUNŻ S.A. (AVIVA), Amplico Life S.A. (AMPLICO), Nationale Nederlanden S.A. (NN), Powszechny Zakład Ubezpieczeń na Życie S.A. (PZU) and their Lithuanian branches, four insurance companies that operate in Poland and Lithuania and possess the largest share in the market (combined 78,9%). The agents were instructed to complete the Five Factor questionnaires. To ensure confidentiality, each questionnaire was anonymous and put in an envelope when given to researcher. A total of 812 sets of questionnaires were returned, and 16 sets were excluded due to extensive missing data or irregular patterns, resulting in 796 valid sets, with a final response rate of 94,70%. Background information for the participants was as follow: 39% were male, 61% female, the majority of agents were between 30-50 years of age (74%); 59,80% had college degree, 40,20% a graduate degree; all the participants had more than 5 year life insurance sales experience.

Measures

A personality questionnaire of the five factor model constructed by Costa and McCrae [2003] based on the five-degree Likert scale was implemented in the research, ranging from 1 (strongly disagree) to 5 (strongly agree).

The effectiveness of life insurance company was measured with the number of the agent's appointments with the customer prior to the purchase of the policy (this value was taken from the monthly reports of unit managers) of for each company separately. This conception of effectiveness is a determinant of human activity based on Austrian School of Economics. It reflects the relation between individual performance and organizational effectiveness [Von Mises 2014].

Territorial scope of the research: Poland, Lithuania (Polish branches).

Duration of the conducted research: 2011–2014.

Data Analyses

The hypotheses were tested regarding the number of agent's appointments, necessary to sale the life insurance policy. Independence tests related to the research point to the occurrence of a statistically significant connection between the number of appointments held by the agent with the customer prior to the purchase of a policy. In the context of the determinants referred to above, an analysis of the personality traits of agents-entrepreneurs was implemented, which completed the standard FFM questionnaire, their gender, age and education level. To test Hypotheses, a multiple regression was conducted with the individual number of agent's appointments (NONA) as the dependent variable and personality traits, gender, age and education as the independent ones. All the hypotheses were tested complexly, excluding the redundant describing variables.

Results

Test of agent's performance – the differences between life insurance companies

The results of the abovementioned research are confirmed with an analysis of the average values of the number of the agent's appointments with the customer prior to the purchase of the policy: they differ significantly ($\aleph^2$=131.15, $\aleph^2$ HR=137.91). AVIVA agents need on average 1.50 of appointments for the conclusion of the contract by the customer. This result is statistically significantly higher than in the example of the remaining companies: PZU: 2.09, NN: 2.19 and Amplico: 2.32 [table 1].

Table 1. Sales efficiency of life insurance agents

Life insurance company	[n]	$\bar{x}^*$	SD	Mdn	LSD**			
					AVIVA	AMPLICO	NN	PZU
AVIVA	311	1.50	.78	1	-	.00	.00	.00
AMPLICO	62	2.32	.74	2	.00	-	.43	.14

NN	144	2.19	1.50	3	.00	.43	-	.38
PZU	279	2.09	1.29	4	.00	.14	.38	-

* Average number of appointments necessary to sell life insurance policy (NONA), $\aleph^2 = 131.15$, $\aleph^2 HR = 137.91$

** Bonferroni adjustment was implemented.

Source: own research.

Tests of personality traits of FFM

The aim of this test was to find the level of trait intensities (O, C, E, A, N) which characterize the effective life insurance agent (the maximum trait intensity could reach was 100, the minimum – 0). Descriptive statistics and correlations for the variables can be found in table 2.

Table 2. Descriptive statistics and correlations

Variable	M	SD	O	C	E	A	N
O	41.41	19.49	-				
C	57.18	21.95	.37	-			
E	61.75	20.36	.52	.38	-		
A	51.89	21.65	.22	.16	.16	-	
N	29.04	19.29	-.22	-.50	-.46	-.27	-

$p < .0001$

Source: own research.

For age, gender, and education level p-level was implemented. Hypotheses were tested with a series of least squares multiple regression. Table 3 includes the results for all hypotheses testing including the control variables.

Table 3. Openness to experience, consciousness, extraversion, agreeableness, neuroticism, age, gender and education level as predictors of job performance

Variables	β	$SE\hat{\beta}$	P
Openness to experience	.195	.005	.000
Consciousness	.981	.010	.000
Extraversion	-.017	.010	.086
Agreeableness	.131	.012	.001
Neuroticism	.295	.006	.001

Age	.011	.007	.320
Gender*	.149	.112	.171
Education Degree			
College	.269	.118	.023
Technical college	.372	.090	.000
University	.345	.080	.000
Technical University	-.145	.115	.207

$\hat{\beta}$ = average bootstrapped regression coefficient, SE$\hat{\beta}$ – bootstrapped standard error of $\hat{\beta}$, *female = 0, male = 1, n = 796, ** c-college = 1, tc-technical college = 2, u-university = 3, tu-technical university = 4. Source: own research.

According to the trait *"Openness to experience",* results suggest that the intensity level of trait "O" is positively associated with agent's performance ($\hat{\beta}$=.195, p=.000). This supports Hypothesis 1. Referring to "Consciousness", the mentioned trait intensity had a significant positive effect on agent's effectiveness ($\hat{\beta}$=.981, p=.000). This supports Hypothesis 2. In the contrary to abovementioned ones, basis on results ($\hat{\beta}$=-.017, p=.086), trait "E" should not be taken into consideration in the context of life insurance agent's effectiveness (statistically insignificant). It does not support Hypothesis 3. Whereas, a relation of "Agreeableness" intensity and agent's performance level is positive but weak ($\hat{\beta}$=.131, p=.001). It supports Hypothesis 4. Finally, in the context of trait "Neuroticism", results prove the intensity level of trait "N" is positively associated with agent's performance ($\hat{\beta}$=.295, p=.001). This supports Hypothesis 5.

Moreover, it is particularly important to recruit the individuals with the technical college ($\hat{\beta}$=.372, p=.000) and university ($\hat{\beta}$=.345, p=.000) degree to achieve the competitive advantage.

Discussion and Conclusions

The main purpose of the study was to provide a confirmatory analysis of the relation between personality traits of life insurance agents and their job performances by including only scales that were explicitly designed to measure the Big Five personality dimensions. The results were highly consistent with the original paper of Barrick and Mount [1991], in that "conscientiousness" was identified to have the highest validity of the Big Five dimensions for overall job performance. Conscientious sales representatives are more likely to strive for accomplishments [Gatewood et al. 2011]. It is also noteworthy

that there is almost a directly proportional dependence between life insurance sales effectiveness and the traits of openness to experience and neuroticism. These findings correspond to recent analyses of Behling [1998], Uppal and Mishra [2014]. Personality is likely to be the critical dispositional basis for determining how the person interacts or is motivated once an individual has chosen an environment, that is consistent with one's interest [Judge, Ilies 2002]. Authors claim that people high in Conscientiousness and Neuroticism (emotional stability) more likely to set goals, have higher expectations their efforts will determine favourable consequences and think they can do more (have higher self-efficacy) than those low in the citied above traits. Enhanced performance motivation, in turn, is expected to be an important predictor of performance [Ilies et al. 2011]. Yet, there are the criticisms also. Furnham [2008] claims that agreeableness, neuroticism and openness to experience were not found to be positively correlated with sales performance. Yet, the mentioned results were conducted on FMCG market. Life insurance policy, according to Rogozinski [2012], it is not a physical product but a promise of the payment of cash benefits in the case of death or reaching the retirement age; hence, decision-making criteria concerning purchase are different in the case of polices. Contrary to the expectations, the analysis showed that level of extraversion intensity is not correlated to sales efficiency. According to the previous research of Barrick et al. [2001], and Bing, Lounsbury [2000], it was found that Extraversion was a valid predictor of performance in jobs characterized by social interaction, such as sales personnel and managers. However, these authors did not take life insurance agents into consideration in they research. Hence, it is difficult to relate in an explicit manner their conclusions to the specificity of the life insurance market.

Between the traits of Conscientiousness, Agreeableness [McCrae, Costa 2003], the determinant of effectiveness by their occurrence is perceptible only and solely in the situations of strictly defined intensities which, if exceeded, may cause its abrupt reduction.

The research results also reveal that age and gender are not statistically significant for life insurance company effectiveness. Referring to the education level, there exists a legal regulation which obliges a person who is applying for work as an insurance agent to possess secondary education as a minimum. Nevertheless, in order to recruit people with a higher potential probability of a professional success achievement, seeking people with secondary technical education or higher education is justifiable.

Implicitly or explicitly, the model of Costa and McCrae developed and tested in this study received general support. A direct comparison of the variables comprising theoretical explanations suggested that trait activation theory may be relatively important in explaining when and how personality trait intensity is predictive of job

performance. While some have questioned the practical relevance of personality variables for human resource selection decisions [Joyce, Slocum 2012], the results imply, when there is reason to believe that the trait is relevant to the job context, that validities cannot be characterized as "disappointingly low" [Christiansen, Tett 2007] to any but the most captious observer. In responding to Morgeson et al.'s [2007] critique of the personality–performance literature, Tett and Christiansen (2007) claimed, "The ideal situation for any worker is one providing opportunities to express his or her traits… such that trait expression is valued positively by others" [Judge, Zapata 2015, p. 1168].

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