"Conscientiousness and cognitive skills in security sphere: Associations and configurations"

| AUTHORS | Orlando E. Contreras-Pacheco (iD)
Juan Camilo Lesmez-Peralta (iD)
Hugo E. Martínez-Ardila (iD) |

NUMBER OF REFERENCES	NUMBER OF FIGURES	NUMBER OF TABLES
62	2	5

Orlando E. Contreras-Pacheco,
Ph.D., Professor, School of Industrial
Engineering and Management,
Industrial University of Santander,
Colombia. (Corresponding author)

Juan Camilo Lésmez-Peralta, MBA,
Assistant Professor, School of Industrial
Engineering and Management,
Industrial University of Santander,
Colombia.

Hugo E. Martínez-Ardila, Ph.D.,
Associate Professor, School
of Industrial Engineering and
Management, Industrial University of
Santander, Colombia.

Orlando E. Contreras-Pacheco (Colombia), **Juan Camilo Lésmez-Peralta** (Colombia), Hugo E. Martínez-Ardila (Colombia)

CONSCIENTIOUSNESS AND COGNITIVE SKILLS IN SECURITY SPHERE: ASSOCIATIONS AND CONFIGURATIONS

Abstract

In balancing the mission of state security forces and bodies, private security guards are expected to provide partial fulfillment to society's sturdy desire for safety and security. They exert responsibility for protecting housing and commercial communities, as well as institutions and critical infrastructure systems, including manufacturing, utilities, transportation, and health and educational facilities. Acknowledging that these individuals must possess specific capabilities for a satisfactory level of performance, this study aims to empirically explore how those capabilities interact to obtain a good fit for their job. In order to accomplish this objective, the paper scrutinizes the insights of 94 Colombian security guards. It examines the potential associations (through a partial least squares-structural equation modeling) and configurations (through a fuzzy-set qualitative comparative analysis) between the personality trait of conscientiousness and two relevant cognitive skills: mental agility and visual memory. The findings revealed coincidences and contradictions between techniques and addressed constructs' arrangements to understand how individual capabilities are associated with work outcomes. Even though conscientious individuals tend to perceive strong compatibility with the security job, the skills under study display signs of being contingent on obtaining the same work attachment effect. This study concludes that a security guard's job specification must privilege the possession of a conscientiousness trait and, if possible, self-perception of proficiency in cognitive skills, such as mental agility and visual memory, to obtain a correct fitting for the job.

Keywords	job analysis, private security guards, conscientiousness, mental agility, visual memory
JEL Classification	J24, M54

INTRODUCTION

It appears that involving security guarding activity in everybody's life has never been more evident (and necessary) than now. Regardless of whether evidence and facts show that humankind lives in a reasonably secure environment, people increasingly feel unsafe (Raja et al., 2020). Security personnel, in general, and private security guards, in particular, strive to compensate for such feelings. They protect property, people, equipment, money, and other assets from various risks by enforcing preventive measures (Nalla & Wakefield, 2014). Accordingly, what security guarding services offer, ultimately, is to meet a natural need of the human being, which consists in experiencing a perception of safety. In that sense, calls have been made to promote better development of the private security profession (Akbas et al., 2018). Human resource management (HRM) professionals must adequately develop security guards' characteristics and competencies to fit their job correctly. That is why working as a private security guard is only for somebody or some conditions (Button, 2008).

For its part, HRM literature has proven that psychosocial traits predict the appropriate specification of any job (Resick et al., 2007). Likewise, different elements like specific skills and dexterities have been identified as mechanisms for determining the compatibility between individuals and the tasks they perform at work (Matzler et al., 2011). However, considering those characteristics can reflect individual capacities, they could also be connected in various manners or even treated as categories that illustrate unconventional realities among these concepts. Security guarding is not the exception to these notions. Given its criticality, it seems worthwhile to obtain a reasonable understanding of this job's conditions and circumstances (Fagel et al., 2020; İşsever et al., 2021; Nalla & Cobbina, 2017).

For instance, it is common to conceive that an archetypal security guard should possess a conscientiousness (CT) personality and be proficient in skills such as mental agility (MA) and visual memory (VM). Nonetheless, it is unclear how these individualities interact to explain an eventual fit with their job (person-job fit; JF). Consequently, it is suggested that a more nuanced coverage of these variables' roles is contingent on combinations of several alternative paths for explaining results concerning individual work-related behaviors. The present study contemplates addressing the abovementioned problem. In essence, it provides a better understanding of how traits and capabilities can interconnect for determining the status of relevant outcomes, such as the compatibility of individuals with their own job.

1. LITERATURE REVIEW AND HYPOTHESES

Job analysis may be viewed as the input of any human resource-related decision par excellence (Singh, 2008). Within the HRM body of knowledge, job analysis reflects earning data and information about jobs through methodical scrutiny of job content (Lunenburg, 2012). Job design is the subsequent outcome of this process. According to Voskuijl (2005), the typical components of a job analysis/design are a job description (i.e., duties and responsibilities) and a job specification (i.e., profile and qualifications). Correspondingly, it is acknowledged that jobs should be designed by considering the knowledge, skills, abilities, and personalities of the individuals performing those jobs (Afsar et al., 2015). In that spirit, it has been stated, for example, that personality characteristics can foresee the appropriate specification of any job (Resick et al., 2007). In the same manner, different elements like specific skills and dexterities have been identified as mechanisms for determining the compatibility between individuals and their tasks at work (Matzler et al., 2011).

Several notions imply the compatibility of an individual with their work environment: person-organization fit, person-group fit, person-value fit, and JF, among others. This last concept mainly refers to the congruence of an individual's knowledge, skills, abilities, needs, and values with the job requirements (Edwards, 1991). In addition, it is usually described as the perceived degree of adjustment between an individual and his/her job (Wong & Tetrick, 2017). Since organizations bet on obtaining and achieving good profiles to fill the correct positions within their structures (Mitchell et al., 2001), JF is, therefore, a crucial element in admitting (i.e., recruitment, selection, and hiring) and training employees.

Within the relevant literature, the concept of JF is generally understood as a desired outcome in the workplace. It is also usually more associated with personal and career development than with aspects of an organizational nature (Cable & DeRue, 2002). For instance, concerning the association between person-job fit and innovation behavior, Huang et al. (2019) assert that knowledge and skills in a particular arena are crucial to obtain creative conduct among individuals. Likewise, JF theoretical approach suggests that personality traits are essential in determining how individuals will adapt to a specific job or tasks they perform (Bui et al., 2017).

Security guards are at the core of the private security industry, which has now seen a significant expansion worldwide (Gooptu, 2013; Nalla & Wakefield, 2014). By keeping this in mind and attending the call of scholars like Fagel et al. (2020) and İşsever et al. (2021), it is worthwhile to revisit the importance of understanding psychological traits and cognitive skills in shaping these individuals' JF. The funda-

mental assumption underlying this idea is that a security guard should be hardworking, dependable, responsible, careful, and reliable (Abraham & Morrison, 2003). At the same time, it is expected that security guarding constitutes a job that requires self-control, initiative, response capability, and attention to detail (Dvojmoč, 2016; Lésmez-Peralta et al., 2022; Lubbe & Barnard, 2013). A focus on the CT trait, together with abilities like VM and MA, are, in consequence, expected for completing this specific job specification.

Considering personality as a set of cognitions and emotional patterns that evolve and define the potential for observable behaviors, an individual's personality has always been considered a significant predictor of performance (He et al., 2019; Uher et al., 2013). In this sense, numerous scholars (Cobb-Clark & Schurer, 2012; DeYoung et al., 2007; Milfont & Sibley, 2012; Zell & Lesick, 2022) are familiar with the term conscientiousness because of its inclusion in the five-factor model ('Big Five') of personality traits: agreeableness, extraversion, emotional stability, openness, and conscientiousness (John & Srivastava, 1999). Specifically, the notion of CT is a continuum of concepts that describes personal dissimilarities in the propensity to be self-controlled, to plan, to be goal-directed, and to be capable of delaying gratification (Roberts et al., 2014).

CT performs a role in most of the main domains of life. It is considered the most potent factor among the 'Big Five' when organizational behavior scholars are interested in understanding the working behavior of employees. Indeed, CT is one of the most reliable predictors of work outcomes, including integrity (Murphy & Lee, 1994), empowerment (Sutherland et al., 2007), and even job productivity (Perry et al., 2010). Workers ranked highly on the CT scale tend to be more productive, fair, honest, dependable, and high-performance-oriented than their colleagues (Brown et al., 2011). Consequently, adhering to behaviors related to CT constitutes a desirable set of features for almost any job in any workplace.

Since conscientious individuals are preferred for occupying security positions, it could be expected that this personality trait is a determinant for fitting this job. Therefore, in that order of ideas, and considering the working context studied in the present paper, CT has been proposed as an essential element for defining a competency model in the security occupation (Lubbe & Barnard, 2013).

Subsequently, as an essential theoretical foundation, it is underlined that several cognitive skills are usually demanded to appropriately perform a job within any organization (Kautz et al., 2014). Security positions are not the exception to this notion. To this effect, cognitive skills or cognitive capacities are generally defined as intelligence or mental abilities. However, in reality, they are beyond that characterization. Cognitive skills are mental mechanisms developed in childhood and allow individuals to function effectively. These mechanisms are intended for receiving, selecting, processing, storing, and retrieving the information individuals need to relate to their context (Ericsson & Oliver, 1994). Specifically, the most common cognitive skills imply memory, attention, perception, creativity, and abstract or analogical thought. MA and VM, for example, are two of them.

On the one hand, MA is the scope to which a person is comfortable with complexity, sifts through problems, is inquisitive, and can make new connections between different concepts (Veale et al., 2013). On the other hand, Kristjánsson and Campana (2010) define VM as the retaining and processing of visual data amid it is no longer available in the sensory system.

Particularly in organizational behavior and HRM, it is worth mentioning that "the highest levels of cognitive skills are generally referred to as expert performance" (Ericsson & Oliver, 1994, p. 416). It is then expected that a personal trait demanded as a requirement for a specific job (such as CT for security guards) must be complemented by the specific cognitive skills in the corresponding job specification. Furthermore, positions related to security functions demand many skills, such as MA and VM (Ioffe & Yesin, 2012). Therefore, it is conceivable to insinuate that security guards' conscientiousness is directly associated with mental agility and visual memory.

Nonetheless, a lineal logic like the one presented up to this point seems distant to be sufficient. Thus far, the study has suggested the role of CT
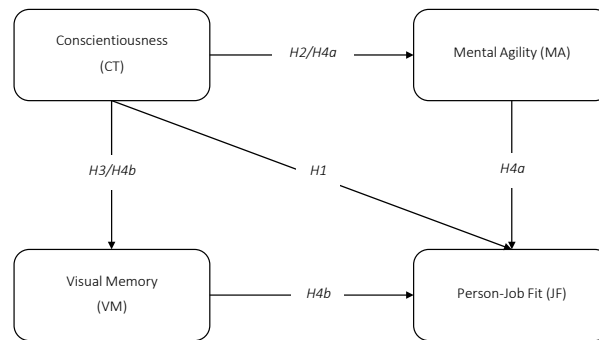
Figure 1. Correlational model

as a possible antecedent of JF, MA, and VM. The combined effects of conscientiousness and ability appear to be very effective in various contexts (Perry et al., 2010). Furthermore, studies consistently support the influence of both MA and VM on JF for security guarding occupations (Matzler et al., 2011). Quick decision-making and visual recognition are critical elements of security activities (Lésmez-Peralta et al., 2022). Several studies have emphasized their complementarity as critical indicators of the level of fit a specialized job compels.

Within the context of security guarding, the present study aims to explore how a conscientious personality can interact with cognitive skills such as MA and VM to predict individual compatibility with their job. To do so, the study tests a conceptual model through a mixed-method (i.e., correlational and configurational) approach.

First, the study explores the conventional effect of CT, combined with MA and VM, on the JF of private security guards. Second, in line with Gębczyńska and Kwiotkowska (2018) and Kuchciak and Warwas (2021), the study intends to obtain alternative configurations of those interac-

tions to comprehend how to harmonize these concepts for the sake of predicting (or not) individual compatibility with the job. In this spirit, and considering the analysis performed up to this point, it is hypothesized that:

H1: *Security guards' conscientiousness is directly associated with their person-job fit.*

H2: *Security guards' conscientiousness is directly associated with their mental agility.*

H3: *Security guards' conscientiousness is directly associated with their visual memory.*

H4a: *Security guards' mental agility partially mediates the association between conscientiousness and person-job fit.*

H4b: *Security guards' visual memory partially mediates the association between conscientiousness and person-job fit.*

H5: *Alternative configurations exist that address model equifinality and allow various construct combinations for establishing person-job fit among security guards.*
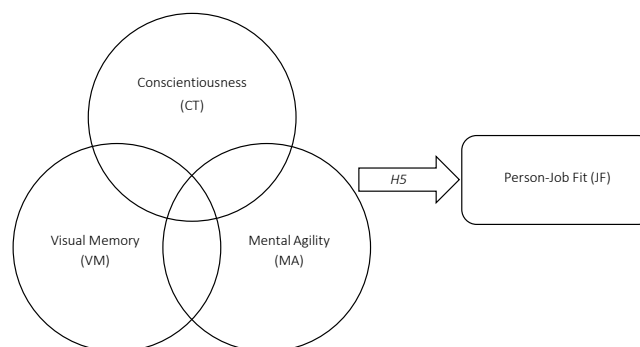

Figure 2. Configurational model

The correlational research model (for representing *H1*, *H2*, *H3*, *H4a* and *H4b*) is shown in Figure 1. The configurational research model (for representing *H5*) is shown in Figure 2.

2. METHODOLOGY

The data collection was based on an in-person survey conducted on 101 private security guards. The instrument ensured written informed consent, which highlighted the confidentiality of the data and stressed that respondents' names and other personal data would not be requested. After excluding seven responses that could not be used for analysis, 94 individuals constituted the final sample (Table 1). Specific methodological indications (Hair et al., 2022; Ragin, 2009) reassure the sample size's sufficiency for claiming external validity. The fieldwork was completed in Colombia; a country with more than 292,000 security guards (SuperVigilancia, 2022), representing a figure that outnumbers the number of police guards operating within that territory – 141,000 (Policía Nacional de Colombia, 2022).

Apart from demographic questions targeted at gathering respondents' information, the instrument comprised 25 items assessing the four latent variables in the study. They were measured on a five-point Likert scale from 'strongly disagree' to 'strongly agree.'

In order to increase reliability and comparability, all the measurements resulted from recognized scales. CT was measured through a 9-item scale designed and validated by John and Srivastava (1999). Self-perceptions of both MA and VM were measured through corresponding scales (a 4-item scale for the former and a 3-item scale for the latter) adapted from Yedinak and Fleserius' (2014) proposal. Finally, perceptions of JF were measured through a 9-item scale designed and validated by Brkich et al. (2002). All the scales were translated into Spanish using a structured translation and back-translation process to ensure reliability. Lastly, the questionnaire items were presented in a mixed order to reduce common method bias. Corresponding scales can be seen in Table 2.

Table 1. Respondents' profile

Demographic and control variable		Frequency	%
Gender	Male	74	78.72%
	Female	20	21.28%
Age	21-25	18	19.15%
	26-30	25	26.60%
	31-35	16	17.02%
	36-40	22	23.40%
	Over 40	13	13.83%
Seniority in security guarding (years)	1-3	16	17.02%
	4-6	20	21.28%
	7-12	20	21.28%
	12-15	27	28.72%
	16 or more	11	11.70%

Note: n = 94.

Three control variables were considered to ensure suitable model specification and account for probable alternative interpretations for dissimilarities in JF behavior. It is realistic to assume that particular respondent individualities would influence several effects. In particular, the study controlled for the respondent's age, gender (weighed with a dummy variable), and seniority (years) in security positions.

Concerning the data analysis, in the first instance, a correlational examination was applied to test *H1*, *H2*, *H3*, *H4a*, and *H4b*. In turn, the study then used a configurational assessment to test *H5*. This dual approach aims to complement and contrast both methods (Contreras-Pacheco et al., 2022; Rahman et al., 2022; Skarmeas et al., 2018). Furthermore, the above permits the study to analyze, in detail, different paths of the possible arrangements of the proposed model and ultimately provides a new approach to understanding linear results (Skarmeas et al., 2018).

First, the study employed a partial least squares-structural equation modeling (PLS-SEM) approach, a component-based statistical procedure for correlational modeling applicable in exploratory research. The data are analyzed in two simultaneous steps by considering their qualities. Firstly, within the measurement model, the study evaluated the validity and construct reliability, as well as the model's capability to reproduce the data satisfactorily (i.e., the goodness of fit). Second, the structural research model is inspected to assess the linear relations (*H1, H2,* and *H3*) and the mediation analyses (*H4a* and *H4b*). For that purpose, a consistent bootstrapping procedure

of 5000 sub-samples was applied. Afterward, the study observed path coefficients, *t*-statistics, *p*-values of each association, and the explained variance of each dependent variable. PLS-SEM was chosen because it is a highly efficient multivariate analytical technique and makes virtually no suppositions about the primary data distributions (Lowry & Gaskin, 2014). This process was done through the use of SmartPLS v3.3.1.

The second examination method was through a fuzzy-set qualitative comparative analysis (fsQCA), which was used to assess alternative arrangements for the four constructs in the study (*H5*). In order to do so, the study transformed the set of predictor variables into fuzzy variables. Following Skarmeas et al. (2018), a set of variables representing the constructs used initially in the correlational examination was created. Intending to do this, the study calculates the observed variables' arithmetical means for every construct. A new dataset contains the four evaluated constructs, transmuted into a condition to determine set belongingness. Each of these conditions denotes a value that specifies either the presence or absence of the corresponding condition in a specific result (Ragin, 2009). This procedure of transmutation is named 'data calibration.' For this purpose, it is presumed that the constructs presented, in advance, a structure implying that once the value of the measured variable rises, the membership of this same variable also rises to a given result within the fuzzy set (Goertz, 2006). Attending Woodside (2013), the study stipulated three qualitative calibration anchors: 0.05 for complete non-belongingness, 0.50 for the maximum ambiguity point, and 0.95 for the threshold of complete belongingness.

Lastly, the study addressed the configurations of constructs (in presence or absence) that bring out the diverse outputs. This analysis was completed through the fs/QCA v3.0 software. It aims to understand how a particular latent variable can be explained by agreeing to the levels of belongingness of the remaining variables. According to the others, every construct is independently analyzed as an output variable (i.e., four different fsQCA inspections were performed). In order to do so, several suggestions formulated by Fiss (2011), Ragin (2008, 2009), and Skarmeas et al. (2018)

were taken into account. Based on them, the study calculated both consistency and coverage. While the former indicates the extent (on a 1-10 scale) to which a construct combination spawns a particular outcome, the latter refers, in percentage, to the number of cases with high belongingness represented by a specific linear complex condition (Ragin, 2008). The present paper proposes the consistency cut-off point for every combination with a value higher than 0.8 (which indicates adequacy).

3. RESULTS

Before obtaining correlational findings, the study measures the Kaiser-Meyer-Olkin test (KMO) and Bartlett's sphericity (BTS) test. The former test validates sampling adequacy and strength of the partial correlation among variables. The latter test discards a possible redundancy between variables and factors, indicating that the dataset is suitable for a data reduction technique. While the score of the KMO was 0.89 (above the threshold of 0.60), the result of the BTS indicated a significant level ($p = 0.00$) (Tabachnick & Fidell, 2014).

The study then weighted the items on their corresponding factors. Most items achieved adequate factor loadings (*FL*) between 0.65 and 0.95 (Tabachnick & Fidell, 2014). Although assessing the model's goodness is not a significant concern for PLS (Chin, 1998), the study still checked this on the measurement model. Model fit indices were measured; first, the standardized root means residual (*SRMR* = 0.070), and second, the normed fit index (*NFI* = 0.901). These adequate model-fit scores, together with acceptable values of Cronbach's Alpha (*α*) and Composite Reliability (*CR*), were obtained for each construct, indicating the reliability and robustness of the empirical model (Hu & Bentler, 1999; Loewenthal & Lewis, 2021). Following indications from Lowry and Gaskin (2014), the values achieved for the determination coefficients (R^2) additionally expose that the model adequately replicates the observed outcomes (MA, VM, and JF). Acceptable discriminant validity is achieved since every construct's average variance extracted (*AVE*) is higher than 0.5. The values in Table 2 support these outcomes.

Table 2. Measurement model (loadings, reliability, and model determination)

	Constructs and Items	FL	Mean	SD	α	CR	AVE	R²
	Conscientiousness (CT) (John & Srivastava, 1999)							
CT1	I am someone who does a thorough job.	0.849						
CT2	I am someone who can be somewhat careless. (R)	0.711						
CT3	I am someone who is a reliable worker.	0.900						
CT4	I am someone who tends to be disorganized. (R)	0.698						
CT5	I am someone who tends to be lazy. (R)	0.774	3.951	1.033	0.781	0.801	0.670	–
CT6	I am someone who perseveres until the task is finished.	0.799						
CT7	I am someone who does things efficiently.	0.926						
CT8	I am someone who makes plans and follows through with them.	0.881						
CT9	I am someone who is easily distracted. (R)	0.795						
	Mental Agility (MA) (Yedinak & Fleseriu, 2014)							
MA1	I make mistakes easily. (R)	0.871						
MA2	My head feels foggy. (R)	0.707	3.887	1.109	0.880	0.897	0.617	0.431
MA3	I am slow to think about things. (R)	0.833						
MA4	I need help with daily/monthly personal matters. (R)	0.718						
	Visual Memory (VM) (Yedinak & Fleseriu, 2014)							
VM1	I have trouble remembering faces and facial features. (R)	0.920						
VM2	I easily forget car license plates. (R)	0.791	4.262	1.038	0.850	0.876	0.753	0.398
VM3	People remind me of things I have forgotten or recent events. (R)	0.887						
	Person-Job Fit (JF) (Brkich et al., 2002)							
JF1	My current job is not really for me. (R)	0.874						
JF2	This job is not really what I would like to be doing. (R)	0.859						
JF3	All things considered; this job suits me.	0.901						
JF4	This is not the right type of work for me. (R)	0.752						
JF5	My goals and needs are met in this job.	0.701	4.105	0.956	0.809	0.912	0.660	0.347
JF6	My current job is motivating.	0.804						
JF7	My abilities, skills, and talents are the right type for this job.	0.866						
JF8	There must be another job for which I am better suited. (R)	0.798						
JF9	I can use my talents, skills, and competencies in my current job.	0.732						

Note: (R) Reverse coded.

As for the hypotheses testing, Table 3 shows the correlations among the different studied variables. It also shows the path coefficients and determines whether they occur. The path coefficients corresponding to *H1* and *H3* were significant, while the path coefficient corresponding to *H2* was insignificant. Additionally, the study tested the mediation analyses addressed in *H4a* and *H4b* accordingly. However, while *H4a* was rejected, *H4b* was supported. Hence, *H1, H3*, and *H4b* were finally endorsed. However, *H2* and *H4a* were rejected.

Therefore, by considering a direct association between CT and JF (*H1*) and between CT and VM (*H3*), empirical findings support the hypothesis, which affirms that VM can act as a partial mediator within the former relationship (*H4b*). Similarly, since the study did not find support for a direct association between CT and MA (*H2*), there was no support for the mediation function of MA within this relationship

(*H4a*) either. Finally, even though it was not hypothesized, the results did find support for considering JF an outcome resulting from both MA and VM independently (paths number 4 and 5).

Notably, no control variable influence was statistically significant ($t < 1.96$). However, since this behavior did not modify connections in the model, these results are not informed here.

Subsequently, the configurational results are reported. Table 4 shows the most substantial fsQCA results for the four studied variables. In support of *H5*, the study identifies a pattern of equifinality in obtaining JF. Furthermore, the study suggests that each variable (except MA) is susceptible to being understood in light of the remaining constructs.

According to these findings, the study can sustain that the models achieved by the fsQCA are informative since most have consistency values

Table 3. PLS-SEM research model results

Path – Hypothesis		Examined Path	Regression Weight	t*	Link Exists?	Result
Direct Paths						
1.	H1	CT → JF	0.613	21.337	✓	Supported
2.	H2	CT → MA	0.108	0.874	✗	Not supported
3.	H3	CT → VM	0.458	3.250	✓	Supported
4.		MA → JF	0.736	26.495	✓	–
5.		VM → JF	0.874	36.002	✓	–
6.		MA → VM	0.225	1.539	✗	–
Indirect Paths						
7.	H4a	CT → MA → JF	0.024	0.012	✗	Not supported
8.	H4b	CT → VM → JF	0.399	1.979	✓	Supported

Note: * When *t* > 1.96, the existent association is significant, with a confidence level equal to 95%.

larger than 0.74 and coverage between 0.25 and 0.65 (Ragin, 2008). In this spirit, when examining the conditions that persist in the different alternatives (pathways), it is concluded that: *i)* CT is a function of VM and JF; *ii)* MA appears not to be a function of any other construct; *iii)* VM is a function of CT, but presents a peripheral, or not a necessary condition of either MA or JF, that is, no separate construct (neither in absence or presence) has an effect on all the assemblies that leads to it; and finally, *iv)* JF is a function of CT, MA, and VM, that is, high values or self-perceptions of these variables imply the presence of JF. The relationships are summarized in Table 5.

The findings clearly show that the compatibility between an individual who performs security

guarding and the tasks they perform at work is related to the self-perception of mental agility and the self-perception of conscientiousness in complementing the capability of having an excellent visual memory. However, these findings are more complex than envisioned beforehand. This study insinuates that conventional associations among variables exist but can also be evidenced through alternative patterns and combinations obtained through the methodological complementarity of correlational and configurational techniques. In this sense, several upfront findings (obtained in the correlational examination) can be subject to various conditions better described in the configurational analysis. These findings deliver a more nuanced discernment about managing a security guard job analysis and design.

Table 4. fsQCA consistency and coverage

Complex solution		Consistency	Coverage
1. Conscientiousness (CT)			
a)	VM * JF	0.843	0.596
	M1	0.843	0.596
M1: *VM * JF → CT*			
2. Mental Agility (MA)			
	M2	0.708	0.221
M2: *MA*			
3. Visual Memory (VM)			
a)	CT * MA	0.903	0.583
b)	CT * JF	0.870	0.691
	M3	0.892	0.647
M3: *CT * MA + CT * JF → VM*			
4. Person-Job Fit (JF)			
a)	CT * MA * VM	0.834	0.527
	M4	0.834	0.527
M4: *CT * MA * VM → JF*			

Table 5. fsQCA results

Configuration	Model	Pathway	CT	MA	VM	JF
Conscientiousness (CT)	CT = f (MA, VM, JF)	a)			●	●
	Result				●	●
Mental Agility (MA)	MA = f (CT, VM, JF)					
	Result					
Visual Memory (VM)	VM = f (CT, MA, JF)	a)	●	●		
		b)	●			●
	Result		●	Ø		Ø
Person-Job Fit (JF)	JF = f (CT, MA, VM)	a)	●	●	●	
	Result		●	●	●	

Note: While a small black circle points out a high presence of a particular condition, a large white circle (not in this case) points out a low presence or absence. While a large black circle points out a core-necessary presence condition, a large white circle (not in this case) points out a lack. The symbol "Ø" implies a peripheral, but not necessary, condition. A blank space in a pathway means "do not care."

4. DISCUSSION

The correlational analysis found that self-perceived individuals as conscientious are a determinant for feeling compatible with the security job. Conscientiousness can be shaped by the self-assessment of visual memory in simultaneous concurrence with the perception of having a position in which one can feel compatible. Besides, the study concludes that the self-perception of good visual memory performance is a partial mediator for such job adjustment. Conversely, the study learned that alternative arrangements exist thanks to the configurational analysis. Moreover, it was found that, although it was impossible to demonstrate any correlation between the two cognitive skills in the study, the configurational analysis implies other realities. Within the explored context, MA and VM do not precisely behave in an exclusionary fashion.

The configurational results also suggest that conscientiousness, mental agility, and even person-job fit can influence (tangentially) the self-assessment of visual memory. This observation means that, although the three former constructs are indeed conditions of the latter, they do not have to be together to explain how an individual self-perceives in terms of their visual memory and recall. Finally, the study can somehow describe a significant vagueness regarding the influence of adjustment-with-job achievement. While the correlational analysis unveils an apparent sufficient connection of only two constructs (CT and VM) for influencing JF, the configurational analysis indicates a mandatory concomitance of the three independent variables (CT, MA, and VM) for obtaining the same output. In other words, even though MA does not correlate with the other variables, this particular cognitive skill could be needed, together with the other two capabilities, for assembling appropriate security guarding job specifications.

According to the results obtained, it is confirmed that cognitive skills may be required for a particular job or position that are not necessarily reconcilable with the personality characteristic that, in appearance, is acknowledged as the most appropriate for such a job/position. Conversely, this phenomenon should be seen as something other than an inconsistency. On the contrary, it results from the natural dynamics of the contemporary HRM essence. For this case, in line with previous literature (Abraham & Morrison, 2003; Dvojmoč, 2016; İşsever et al., 2021; Lubbe & Barnard, 2013), the study determined that an individual who holds a security guarding position should be a scrupulous individual with clear skills to retain visual images in his memory. However, that same individual would also need to reason efficiently to quickly and effectively make certain decisions, which might not seem like the previously manifested conscientiousness. The present work claims that, instead of conflicting with each other, these characteristics can be complementary among them to reach the appropriate level of compatibility of the individual with the respective position.

The study provides several contributions. In the first instance, the present work confirms previous academic insights. By acknowledging the im-

portance of defining security guarding functions (Fagel et al., 2020; Nalla & Cobbina, 2017) and intending to complement Lubbe and Barnard's (2013) competency model, it suggests a plausible pathway that interlinks conscientiousness with visual memory in order to establish person-job fit. Although conscientiousness is usually presented as a personality trait, the study relaxed this notion to explore its proclivity to interact with other individual capabilities; thus, it was treated as such. In this spirit, more than a determination of personal descriptions contained in a specific category of individuals, the particular quality of being conscientious is found to be a proper compliment to the ability to preserve characteristics of the senses of visual experience for the sake of achieving good security guarding JF.

The second contribution is derived from the configurational results. Indeed, several scholars have recently recommended configurational techniques to obtain more and better insights into the fundamental nature of different occupations, professions, and trades (Gębczyńska & Kwiotkowska, 2018; Kuchciak & Warwas, 2021). In that sense, this complementary study could better understand how to design or analyze security positions. It discovered alternative configurations that lead to different interpretations of the involvement of conscientiousness, mental agility, visual memory, and person-job fit. The most noteworthy finding was that an intersection of the three former individualities creates the perception of the latter outcome. In agreeing with this result, a security job specification must contain such elements to indicate satisfactory job performance.

In the context of the security industry, this paper has practical implications for companies in general and human resource managers in particular. The findings reveal the need to address the many constructs' arrangements to understand how job competencies are related to each other to adequately design/analyze job positions. In line with Resick et al. (2007), a good job design must consider different characteristics to guarantee proper job implementation. Since the components of a job specification tend to produce diverse work outcomes (Lunenburg, 2012), the result appears to help make appropriate decisions within the HRM domain. The findings are relevant insights for

constructing a proper security guard job design. In consequence, the HRM function of a security company must ensure the incorporation of these criteria into the different HRM activities: the selection of the right individual to carry out the work as a security guard, the initial and projected training, the future job prospects, and the level of compensation and the measurement of performance, among others.

The study also has a methodological benefit. By addressing the example of several scholars (Contreras-Pacheco et al., 2022; Rahman et al., 2022), it provides a novel example demonstrating the rewards of using a dual correlational-configurational approach within the HRM literature. This complementarity offers insights into the asymmetric versus symmetric associations among the observations and somehow compensates for each method's limitation between them. Several problems, such as the capability to deal with asymmetry, equifinality, causal complexity, and nonlinear relationships, are adequately overcome when using this dual technique. Notably, concerning the configurational approach, the study addresses an issue that has remained elusive by asking how different factors combine to influence work outcomes, like JF. For instance, the results challenge some conventions of correlational methodologies. It highlights the asymmetric and nonlinear relationship between two cognitive skills (MA and VM) that are, in appearance, away from each other. In this sense, the fsQCA results displayed some equifinal conditions (causal formulas) leading to the same effect, insinuating equifinality and, therefore, causal complexity.

Regardless of the several attractive insights obtained, the study must acknowledge the existence of some limitations. First, since the survey was developed in Colombia, the results may not be possible to generalize for every geographical context. Despite this, future researchers are encouraged to consider transferring the framework proposed here to similar contexts like Latin American countries or other developing economies. This practice can lay the groundwork for further conclusions, which, in the long run, would create a substantial research contribution with both relevance and rigor. Next, this is a cross-sectional study. Even though there is a methodological balance between

correlational and configurational analyses, they cannot overcome the study's restriction for examining the causal relationship. However, given that the equifinality discussion is explicitly addressed when achieving the fsQCA findings, it is believed this fact appropriately frames the research intentions and does not influence the interpretation. In this sense, the study obtains insights based on the different variables' connection, but clarifications of the time-based order between them are achievable only with a longitudinal examination.

Notwithstanding the difficulty of the study context, future studies could collect panel data and test a causal model, leading to more insightful understandings. Further, considering that knowledge cannot be negligible, future studies can be more wide-ranging by involving other individual capabilities and work outcomes. The purpose of these eventual examinations would be to assimilate better how these constructs interact, evolve, and handle HRM managers. At the same time, there are also compelling research opportunities for being more normative-oriented. Instead of focusing on the mere worker perception, they can be concentrated on more functional aspects of HRM, like the correct compensation scale or the adequate performance appraisal criteria.

CONCLUSION

Framed within the context of private security HRM, this paper aimed to explore associations and configurations among a conscientious personality and both mental agility and visual memory of security guards to predict person-job fit. The study concludes that the personal trait of conscientiousness can influence the self-assessment of visual memory and the security guard's perception of having a job in which they can feel compatible.

Furthermore, the study established that the self-perception of good visual memory performance is a partial mediator for achieving such alignment. It is also found that alternative arrangements exist for understanding the phenomenon, as mentioned above. Although the correlational analysis could not demonstrate any association between the cognitive skills in the study, a closer look at the potential model configurations helped to elucidate a more comprehensive idea. A conscientious security guard who feels proficient in both skills (mental agility and visual memory) is prone to experience a proper sense of fitting with their job.

Consequently, the study deepens the theoretical understanding of relationships between traits and capabilities and provides relevant guidance for private security HRM professionals to achieve adequate individual and organizational outputs.

AUTHOR CONTRIBUTIONS

Conceptualization: Orlando E. Contreras-Pacheco, Hugo E. Martínez-Ardila.
Data curation: Juan Camilo Lésmez-Peralta.
Formal analysis: Orlando E. Contreras-Pacheco, Hugo E. Martínez-Ardila.
Funding acquisition: Orlando E. Contreras-Pacheco, Hugo E. Martínez-Ardila.
Investigation: Orlando E. Contreras-Pacheco.
Methodology: Orlando E. Contreras-Pacheco, Juan Camilo Lésmez-Peralta.
Project administration: Juan Camilo Lésmez-Peralta.
Resources: Hugo E. Martínez-Ardila.
Software: Orlando E. Contreras-Pacheco.
Supervision: Juan Camilo Lésmez-Peralta.
Visualization: Hugo E. Martínez-Ardila.
Writing – original draft: Orlando E. Contreras-Pacheco, Juan Camilo Lésmez-Peralta.

REFERENCES

1. Abraham, J. D., & Morrison, J. D. (2003). Relationship between the Performance Perspectives Inventory's Conscientiousness Scale and Job Performance of Corporate Security Guards. *Applied HRM Research, 8*(1), 45-48. Retrieved from https://psycnet.apa.org/record/2004-11250-004

2. Afsar, B., Badir, Y., & Khan, M. M. (2015). Person–job fit, person-organization fit and innovative work behavior: The mediating role of innovation trust. *Journal of High Technology Management Research Person, 26*(2), 105-116. https://doi.org/10.1016/j.hitech.2015.09.001

3. Akbas, F., Dursun, Y. G., & Ürün, E. (2018). Problems and Development of Private Security Profession. *Eurasian Journal of Researches in Social and Economics, 5*(6), 230-240.

4. Brkich, M., Jeffs, D., & Carless, S. A. (2002). A global self-report measure of person-job fit. *European Journal of Psychological Assessment, 18*(1), 43-51. http://dx.doi.org/10.1027//1015-5759.18.1.43

5. Brown, S. D., Lent, R. W., Telander, K., & Tramayne, S. (2011). Social cognitive career theory, conscientiousness, and work performance: A meta-analytic path analysis. *Journal of Vocational Behavior, 79*(1), 81-90. https://doi.org/10.1016/j.jvb.2010.11.009

6. Bui, H. T. M., Zeng, Y., & Higgs, M. (2017). The role of person-job fit in the relationship between transformational leadership and job engagement. *Journal of Managerial Psychology, 32*(5), 373-386. https://doi.org/10.1108/JMP-05-2016-0144

7. Button, M. (2008). *Doing Security: Critical Reflections and an Agenda for Change.* Hampshire: Palgrave Macmillan. https://doi.org/10.1057/9780230583634

8. Cable, D. M., & DeRue, D. S. (2002). The Convergent and Discriminant Validity of Subjective Fit Perceptions. *Journal of Applied Psychology, 87*(5), 875-884. https://doi.org/10.1037//0021-9010.87.5.875

9. Chin, W. W. (1998). The Partial Least Squares Approach to Structural Equation Modeling. In G. A. Marcoulides (Ed.), *Modern Methods for Business Research* (pp. 295-336). Mahwah, New Jersey: Lawrence Erlbaum Associates.

10. Cobb-Clark, D. A., & Schurer, S. (2012). The stability of big-five personality traits. *Economics Letters, 115*(1), 11-15. https://doi.org/10.1016/j.econlet.2011.11.015

11. Contreras-Pacheco, O. E., Claasen, C., & Garrigós-Simón, F. J. (2022). Stakeholder perceptions in organizational crisis management: Exploring alternative configurations. *Journal of Management & Organization,* 1-22. https://doi.org/10.1017/jmo.2022.55

12. DeYoung, C. G., Quilty, L. C., & Peterson, J. B. (2007). Between Facets and Domains: 10 Aspects of the Big Five. *Journal of Personality and Social Psychology, 93*(5), 880-896. https://doi.org/10.1037/0022-3514.93.5.880

13. Dvojmoč, M. (2016). Competences of Security Guards in Slovenia as Assessed by Users and Security Managers. *VARST-VOSLOVJE: Journal of Criminal Justice and Security, 18*(4), 400-417. Retrieved from https://www.fvv.um.si/rv/arhiv/2016-4/02_Dvojmoc_rV_2016-4-E.html

14. Edwards, J. R. (1991). Person-job fit: A conceptual integration, literature review, and methodological critique. In C. L. Cooper & I. T. Robertson (Eds.), *International Review of Industrial and Organizational Psychology, 6* (pp. 283-357). John Wiley & Sons. Retrieved from https://psycnet.apa.org/record/1991-98004-008

15. Ericsson, K. A., & Oliver, W. L. (1994). Cognitive Skills. In A. M. Colman (Ed.), *Companion Encyclopedia of Psychology, 1* (pp. 415-433). Abingdon, OX: Routledge.

16. Fagel, M. J., Fennelly, L. J., & Perry, M. A. (2020). The Security Officer of the 21st Century. In *The Professional Protection Officer: Practical Security Strategies and Emerging Trends* (pp. 33-39). Elsevier Inc. https://doi.org/10.1016/B978-0-12-817748-8.00003-1

17. Fiss, P. C. (2011). Building Better Causal Theories: A Fuzzy Set Approach to Typologies in Organization Research. *Academy of Management Journal, 54*(2), 393-420. https://doi.org/10.5465/AMJ.2011.60263120

18. Gębczyńska, M., & Kwiotkowska, A. (2018). Paths to Explain Employee Job Satisfaction: A Fuzzy-Set Analysis. *Sciendo, 1*(1), 569-576. https://doi.org/10.2478/mape-2018-0072

19. Goertz, G. (2006). *Social Science Concepts: A User's Guide.* Princeton, NJ: Princeton University Press.

20. Goertz, G., & Mahoney, J. (2009). Scope in Case Study Research. In D. Byrne & C. C. Ragin (Eds.), *The SAGE Handbook of Case-Based Methods* (pp. 307-317). London: SAGE Publications, Inc.

21. Gooptu, N. (2013). Servile Sentinels of the City: Private Security Guards, Organized Informality, and Labour in Interactive Services in Globalized India. *International Review of Social History, 58*(1), 9-38. https://doi.org/10.1017/S0020859012000788

22. Hair, J. F., Hult, G. T., Ringle, C. M., & Sarstedt, M. (2022). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM).* (3rd ed.). Thousand Oaks: SAGE Publications, Inc.

23. He, Y., Donnellan, M. B., & Mendoza, A. M. (2019). Five-factor personality domains and job performance: A second order meta-analysis. *Journal of Research in Personality, 82,* 103848. https://doi.org/10.1016/j.jrp.2019.103848

24. Hu, L., & Bentler, P. M. (1999). Cut-off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1-55. https://doi.org/10.1080/10705519909540118

25. Huang, W., Yuan, C., & Li, M. (2019). Person–Job Fit and Innovation Behavior: Roles of Job Involvement and Career Commitment. *Frontiers in Psychology, 10*, 1134. https://doi.org/10.3389/fpsyg.2019.01134

26. Ioffe, S., & Yesin, S. (2012). Personnel Security outside the Box. *Psychology, 3*(2), 217-230. https://doi.org/10.4236/psych.2012.32031

27. İşsever, H., Ezirmik, E., Şeker, N., Sağlam, Z. B., Öztan, G., & Canatar, F. (2021). Problem Solving and Personality in Security Officers. *Journal of Economy Culture and Society, 64,* 105-118. https://doi.org/10.26650/JECS2020-814539

28. John, O. P., & Srivastava, S. (1999). The Big-Five Trait Taxonomy: History, Measurement, and Theoretical Perspectives. In L. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research, 2* (pp. 102-138). Berkeley, CA: University of California.

29. Kautz, T., Heckman, J. J., Diris, R., Weel, B., & Borghans, L. (2014). *Fostering and measuring skills: Improving cognitive and non-cognitive skills to promote lifetime success* (NBER Working Paper No. 20749). Cambridge, MA. https://doi.org/10.3386/w20749

30. Kristjánsson, Á., & Campana, G. (2010). Where perception meets memory: A review of repetition priming in visual search tasks. *Attention, Perception, & Psychophysics, 72*(1), 5-18. http://dx.doi.org/10.3758/APP.72.1.5

31. Kuchciak, I., & Warwas, I. (2021). Designing a Roadmap for Human Resource Management in the Banking 4.0. *Journal of Risk and Financial Management, 14*(12), 615. https://doi.org/10.3390/jrfm14120615

32. Lésmez-Peralta, J. C., Contreras-Pacheco, O. E., & Reyes-Rodríguez, J. F. (2022). Subjective vitality of night workers: Association with physical and mental health. *Problems and Perspectives in Management, 20*(1), 277-287. https://doi.org/10.21511/ppm.20(1).2022.23

33. Loewenthal, K. M., & Lewis, C. A. (2021). *An Introduction to Psychological Tests and Scales.* Abingdon, OX: Routledge.

34. Lowry, P. B., & Gaskin, J. (2014). Partial Least Squares (PLS) Structural Equation Modeling (SEM) for Building and Testing Behavioral Causal Theory: When to Choose It and How to Use It. *IEEE Transactions on Professional Communication, 57*(2), 123-146. https://doi.org/10.1109/TPC.2014.2312452

35. Lubbe, L., & Barnard, A. (2013). Security Guarding: A Competency Model. *South African Journal of Labour Relations, 37*(1), 79-96. Retrieved from http://hdl.handle.net/10500/13748

36. Lunenburg, F. C. (2012). Human Resource Planning: Forecasting Demand and Supply. *International Journal of Management, Business, and Administration, 15*(1), 1-10. Retrieved from http://www.nationalforum.com/Electronic%20Journal%20Volumes/Lunenburg,%20Fred%20C.%20Human%20Resource%20%20Planning-%20Forecasting%20Demand%20%20Supply%20IJMBA%20V15%20N1%202012.pdf

37. Matzler, K., Renzl, B., Mooradian, T., van Krogh, G., & Mueller, J. (2011). Personality traits, affective commitment, documentation of knowledge, and knowledge sharing. *The International Journal of Human Resource Management, 22*(2), 296-310. https://doi.org/10.1080/09585192.2011.540156

38. Milfont, T. L., & Sibley, C. G. (2012). The big five personality traits and environmental engagement: Associations at the individual and societal level. *Journal of Environmental Psychology, 32*(2), 187-195. https://doi.org/10.1016/j.jenvp.2011.12.006

39. Mitchell, T. R., Holtom, B. C., Lee, T. W., Sablynski, C. J., & Erez, M. (2001). Why People Stay: Using Job Embeddedness to Predict Voluntary Turnover. *Academy of Management Journal, 44*(6), 1102-1121. https://doi.org/10.5465/3069391

40. Murphy, K. R., & Lee, S. L. (1994). Personality Variables Related to Integrity Test Scores: The Role of Conscientiousness. *Journal of Business and Psychology, 8*(4), 413-424. https://doi.org/10.1007/BF02230957

41. Nalla, M. K., & Cobbina, J. E. (2017). Environmental factors and job satisfaction: The case of private security guards. *Security Journal, 30*(1), 215-226. https://doi.org/10.1057/sj.2016.12

42. Nalla, M. K., & Wakefield, A. (2014). The Security Officer. In M. Gill (Ed.), *The Handbook of Security* (pp. 727-746). London: Palgrave Macmillan. https://doi.org/10.1007/978-1-349-67284-4_32

43. Perry, S. J., Hunter, E. M., Witt, L. A., & Harris, K. J. (2010). P = *f* (Conscientiousness × Ability): Examining the Facets of Conscientiousness. *Human Performance, 23*(4), 343-360. https://doi.org/10.1080/08959285.2010.501045

44. Policía Nacional de Colombia. (2022). *Cifras de Personal.* (In Spanish). Retrieved February 12, 2022, from https://www.policia.gov.co/talento-humano/estadistica-personal/cifras

45. Ragin, C. C. (2008). *Redesigning Social Inquiry: Fuzzy Sets and Beyond.* Chicago: The University of Chicago Press Books. https://doi.org/10.7208/chicago/9780226702797.001.0001

46. Ragin, C. C. (2009). Qualitative Comparative Analysis Using Fuzzy Sets (fsQCA). In B. Rihoux & C. C. Ragin (Eds.), *Configurational Comparative Methods: Qualitative Comparative Analysis (QCA) and Related Techniques* (pp. 87-121). Thousand Oaks, CA: SAGE Publications, Inc. https://dx.doi.org/10.4135/9781452226569.n5

47. Rahman, M. S., Hussain, B., Hassan, H., & Synthia, I. J. (2022). Optimisation of knowledge sharing behaviour capability among sales executives: application of SEM and fsQCA. *VINE Journal of Information and Knowledge Management Systems, 52*(4), 531-554. https://doi.org/10.1108/VJIKMS-06-2020-0115

48. Raja, U., Azeem, M. U., Haq, I. U., & Naseer, S. (2020). Perceived

threat of terrorism and employee outcomes: The moderating role of negative affectivity and psychological capital. *Journal of Business Research, 110*, 316-326. https://doi.org/10.1016/j.jbusres.2020.01.026

49. Resick, C. J., Baltes, B. B., & Shantz, C. W. (2007). Person-Organization Fit and Work-Related Attitudes and Decisions: Examining Interactive Effects With Job Fit and Conscientiousness. *Journal of Applied Psychology, 92*(5), 1446-1455. https://doi.org/10.1037/0021-9010.92.5.1446

50. Roberts, B. W., Lejuez, C., Krueger, R. F., Richards, J. M., & Hill, P. L. (2014). What Is Conscientiousness and How Can It Be Assessed? *Developmental Psychology, 50*(5), 1315-1330. https://doi.org/10.1037/a0031109

51. Singh, P. (2008). Job Analysis for a Changing Workplace. *Human Resource Management Review, 18*(2), 87-99. https://doi.org/10.1016/j.hrmr.2008.03.004

52. Skarmeas, D., Saridakis, C., & Leonidou, C. N. (2018). Examining relationship value in cross-border business relationships: A comparison between correlational and configurational approaches. *Journal of Business Research, 89,* 280-286. https://doi.org/10.1016/j.jbusres.2017.12.039

53. SuperVigilancia. (2022). *Personal Operativo Acreditado*. (In Spanish).

Retrieved February 15, 2022, from https://www.supervigilancia.gov.co/publicaciones/9098/personal-operativo-acreditado/

54. Sutherland, R., De Bruin, G. P., & Crous, F. (2007). The Relation between Conscientiousness, Empowerment, and Performance. *SA Journal of Human Resource Management, 5*(2), 60-67. http://dx.doi.org/10.4102/sajhrm.v5i2.120

55. Tabachnick, B. G., & Fidell, L. S. (2014). *Using Multivariate Statistics*. Harlow: Pearson.

56. Uher, J., Werner, C. S., & Gosselt, K. (2013). From observations of individual behaviour to social representations of personality: Developmental pathways, attribution biases, and limitations of questionnaire methods. *Journal of Research in Personality, 47*(5), 647-667. https://doi.org/10.1016/j.jrp.2013.03.006

57. Veale, T., Feyaerts, K., & Forceville, C. (2013). E Unis Pluribum: Using Mental Agility to Achieve Creative Duality in Word, Image, and Sound. In T. Veale, K. Feyaerts, & C. Forceville (Eds.), *Creativity and the Agile Mind: A Multi-Disciplinary Study of a Multi-Faceted Phenomenon* (pp. 37-59). Berlin/Boston: De Gruyter Mouton. https://doi.org/10.1515/9783110295290

58. Voskuijl, O. (2005). Job Analysis: Current and Future Perspec-

tives. In A. Evers, N. Anderson, & O. Voskuijl (Eds.), *The Blackwell Handbook of Personnel Selection* (pp. 27-47). Malden, MA: Blackwell Publishing Ltd. Retrieved from https://hdl.handle.net/11245/1.274075

59. Wong, C. M., & Tetrick, L. E. (2017). Job Crafting: Older Workers' Mechanism for Maintaining Person-Job Fit. *Frontiers in Psychology, 8*, 1548. https://doi.org/10.3389/fpsyg.2017.01548

60. Woodside, A. G. (2013). Moving beyond multiple regression analysis to algorithms: Calling for a paradigm shift from symmetric to asymmetric thinking in data analysis and crafting theory. *Journal of Business Research, 66*(4), 463-472. https://doi.org/10.1016/j.jbusres.2012.12.021

61. Yedinak, C. G., & Fleseriu, M. (2014). Self-perception of cognitive function among patients with active acromegaly, controlled acromegaly, and non-functional pituitary adenoma: a pilot study. *Endocrine, 46,* 585-593. https://doi.org/10.1007/s12020-013-0106-9

62. Zell, E., & Lesick, T. L. (2022). Big five personality traits and performance: A quantitative synthesis of 50+ meta-analyses. *Journal of Personality, 90*(4), 559-573. https://doi.org/10.1111/jopy.12683