



Periódico Trimestral, digital e gratuito publicado pela Academia Brasileira de Ciências Contábeis | Available online at www.repec.org.br REPeC, Brasília, v. 15, n. 2, art. 7, p. 243-259, Apr./Jun. 2021 | DOI: http://dx.doi.org/10.17524/repec.v15i2.2841 | ISSN 1981-8610

The effects of behavioral factors on the task performance of forensic accounting experts

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Abstract

Objective: To analyze the effects of decision-making styles, cognitive flexibility, and personality traits on the task performance of forensic accounting experts.

Method: A survey was conducted with forensic accounting experts, and a final sample of 259 valid responses was obtained. The partial least squares structural equation modeling was used to analyze data. **Results:** The behavioral factors cognitive flexibility, and personality traits were positively related to task performance, whereas decision-making styles were negatively related.

Contributions: These results indicate that the scope of analysis needs to be expanded beyond the positivist perspective; that is, one cannot assume that individuals improve performance solely on rational work commands. These results also open up opportunities for investigations and encourage new approaches and constructs to explain behaviors related to individuals' task performance.

Keywords: Decision-making styles; Cognitive flexibility; Personality traits; Forensic accounting experts.

Published in Portuguese and English. Original Version in Portuguese.

Received in 1/24/2021. Ask to Revise on 3/17/2021. Resubmitted on 4/1/2021. Accepted on 4/29/2021 by Dr. Gerlando Augusto Sampaio Franco de Lima (Editor). Published on 6/30/2021. Organization responsible for the journal: Abracicon.



1. Introduction

The rationality of the decision-making process is addressed in the literature from two main perspectives. The first investigates rationality (Melo & Fucidji, 2016) based on expected utility (Neumann & Morgenstern, 1947; Malkiel & Fama, 1970; Santos & Barros, 2011). The second, based on bounded rationality (Simon, 1955), considers a debate of behavioral factors. Although these coexist, on the one hand, there is an economic view focused on formal means, instruments, and processes that individuals use to make optimal decisions. On the other hand, the psychological perspective analyzes human decisions considering mind and behavioral influence, focusing on motivation, cognition, attitudes, actions, and communication (Birnberg, Luft & Shields, 2006).

Therefore, the decision-making process, more than selecting and evaluating alternatives from an economic perspective, represents how individuals collect information to make decisions and analyze a given problem and make judgments to make a choice (Perez, Valero, Cesar & Medeiros Júnior, 2017). This more comprehensive view is the object of study of cognitive psychology, which is concerned with investigating individuals' perceptions regarding the external world, where external reality is constructed based on an inner view through representations (Neufeld, Brust & Stein, 2011). Psychology also deals with the decision-making process from a sub-area that addresses personality traits though, which are relatively stable characteristics that may affect one's perception of risk among tasks (Lauriola & Levin, 2001).

Even though psychology has achieved a satisfactory level of knowledge of both approaches, there are gaps concerning the decision-making process, for instance, changing personality traits by will (Hudson & Fraley, 2015), changing personality throughout life (Chopik & Kitayama, 2017), and issues related to cognitive limitations (Cagnin, 2009). Therefore, we assume that task performance can be analyzed from a holistic perspective, in which cognitive abilities and personality traits interact and influence choices (Macêdo, 2016).

Decision-making styles refer to differences among people regarding information processing used to solve problems and make decisions in different contexts (Thunholm, 2004), and from the perspective of individuals' responses to the context and how these are interpreted (Scott & Bruce, 1995). This variable helps understanding individual differences influencing decision-making (Benbasat & Dexter, 1982) and is used to analyze the effect of cognitive styles on the allocation of resources (Chenhall & Morris, 1991), to solve complex business problems using accounting information (Cheng, Luckett & Schulz, 2003) and as a determinant factor of organizations' accounting choices (Ge, Matsumoto & Zhang, 2011).

Given the ability of individuals to rationalize and process information, this study also explores the cognitive flexibility factor. According to Martin and Rubin (1995), cognitive flexibility refers to individual cognitive flexibility, which, in any situation where alternatives are available, individuals are willing to be flexible and adapt supported on self-efficacy in being flexible.

Regarding personality traits, people with a low level of emotional stability (neuroticism) are more susceptible to negative emotions and inhibited cognitive resources, and generally project their inner emotions into their work (George & Zhou, 2007). On the other hand, the conscientiousness trait affects task performance through motivational mechanisms, such as setting high goals (Barrick & Mount, 1993; Monzani, Ripoll & Peiró, 2015).

Cubel, Nuevo-Chiquero, Sanchez-Pages and Fernandez (2016) analyzed the five broad personality traits (openness to experience, conscientiousness, extraversion, neuroticism, and agreeableness) and found that neurotic individuals presented worse productive performance and that more conscious individuals performed better. From this perspective, task performance is considered the outcome of behaviors reflected on actions (Bendassolli, 2012). It is inserted on a collective process of construction of meanings (Weick, 1995), therefore, goes beyond function and depends on constant interactions with peers and stakeholders in uncertain environments.



In accounting research, in addition to the mainstream being focused on the functionalist view of phenomena, there is a certain asymmetry of findings between behavioral decision-making approaches, sometimes implemented in cognitive studies (Lucena, Fernandes & Silva, 2011; Butler & Ghosh, 2015, Oblak, Licen & Slapnicar, 2018), sometimes in studies addressing personality (Monzani, Ripoll & Peiró, 2015). This aspect prompts further research, including studies with a more holistic approach to decision-making behavior and its practical effect and the use of instruments to capture different effects. Bromwich and Scapens (2016) note that researchers wanting to verify a more significant impact on practice need to be aware of what occurs in the practical world, and based on that, work toward problem-solving.

In this sense, decision-making styles, cognitive flexibility, and personality traits are a set of interesting aspects to investigate task performance among accounting experts, as these influence information processing in the development of skills and knowledge (Riding, 1997). Hence, this study's objective is to analyze the effects of decision-making styles, cognitive flexibility, and personality traits on the task performance of forensic accounting experts.

Analyzing decision-making styles from the perspective of task performance provides the means to allocate accountants in functions adapted to their cognitive characteristics to improve task performance (Fuller & Kaplan, 2004). Faced with the challenges imposed on the work of accounting experts, Lonescu (2012) explains that cognitive flexibility is a critical feature that helps individuals perform complex tasks, multitask, seek innovative solutions, and adapt to changing demands. In this sense, the decisions of professional accounting experts are the product of choices about how to develop planned routines at a job (Marras, 2011). According to Mahama and Cheng (2013), cognitive psychology can explain task performance because it reflects individual perceptions.

This study contributes to the literature by considering a holistic approach to analyzing the effects of decision-making styles, cognitive flexibility, and personality traits on the task performance of forensic accounting experts. From this perspective, Santos, Sisto, and Martins (2003) emphasize differences in how individuals usually think and perceive situations and different learning strategies and relate data from the context and draw conclusions. Additionally, it advances on studies in forensic accounting, which focuses on issues concerning the compliance of expert work.

Considering that forensic work is developed in two inseparable dimensions, the technical and human dimensions, analyzing behavioral factors can favor the practice, as the work of accounting experts is developed in an environment in which these professionals interact with procedural parts, technical assistants, and judiciary representatives. Consequently, accounting experts' task decisions are made after considering the matters that involve these individuals and interests. Thus, we assume that behavioral variables complement rationality and influence decision-making (Kahneman, 2012).

In the dimension of accounting experts' task performance, this study's results indicate the need for regulatory bodies to create standards that consider the critical aspects of experts' decision-making. These standards can encourage universities to improve the syllabus of accounting forensic discipline, considering there is a high level of misinformation regarding the challenges and opportunities of the accounting expert job market (França & Barbosa, 2015). Finally, they encourage professionals to seek new training possibilities, not restricted to technical-instrumental performance (Hoog, 2008). Hence, in the direction proposed by Murro and Beuren (2016) regarding accounting expertise networks, eminently theoretical pragmatic and technical knowledge in this field is expanded.

2. Literature Review and Hypotheses

There is a constant need for human beings to make decisions amidst risk or uncertainty to minimize undesirable outcomes and promote positive results (Hastie, 2001). The economic theory relies on rational decisions to achieve the best results, which assumes that formal methods are the most efficacious to decrease biases and achieve goals (Lima Filho, Bruni, Sampaio, Cordeiro Filho & Carvalho Jr., 2010). Bernstein (1997) considers rationality essential to make decisions under uncertainty because rational behavior makes people more objective toward information without optimistic or pessimistic influences.

However, contrary to what is proposed by rational choice theories originated from economic sciences, decision-makers do not fully control rationality (Plous, 1993). In these circumstances, cognitive styles reflect individual differences in an individual's cognitive organization, which work as a mediating element between skills and personality (Messick, 1984). Santos, Sisto and Martins (2003) consider that cognitive styles help explain the boundaries between cognition and personality. Rationality does not compensate for fragmented knowledge regarding the conditions surrounding one's actions and perceptions regarding phenomena and the laws that enable predicting the future consequences of actions based on the knowledge of current circumstances (Pereira, Löbler & Simonetto, 2010).

Psychology is supported on the idea that individuals develop their view of the world; hence what an individual thinks and feels can result from a different perception given the situations s/he is faced with (Santos, Sisto & Martins, 2003), so that the amount of information, the work's complex environment (Luft, Shields, & Thomas, 2016), and personal characteristics influence decision-making styles (Frankovsky, Birknerova & Zbihlejova, 2016).

Regarding decision-making styles, Scott and Bruce (1995) developed the instrument General Decision-Making Style Inventory (GDMS), which Löbler, Reis, Nishi and Tagliapietra (2019) validated for the Brazilian context. This instrument is intended to capture each of the five decision-making styles (dependent, avoidant, rational, intuitive, and spontaneous). The instrument's Brazilian version presented satisfactory and adequate psychometric measures.

In turn, according to Motowildo, Borman and Schmit (2013), task performance is related to productive activities in which raw material is transformed into products or services that meet and maintain the technical core. Therefore, this variable is directly related to the organization's technical issues, whether through the performance of technical processes or the maintenance of technical requirements.

Hence, in the specific scope of task performance of forensic accounting experts, the first research hypothesis is proposed:

H₁: Decision-making styles positively influence the task performance of forensic accounting experts.

In addition to decision-making styles, Pereira, Silva and Tavares Jr (2017) explain that in an environment influenced by emotions, lack of proper knowledge of situations, and limited rationality, accounting decisions are influenced by stakeholders' pressure. This context is not different from the job of an expert facing conflicts of interest of third parties, methodological debates, and deadline pressure, having to make choices and judgments (Mendonça Neto, Cardoso, Oyadomari & Silva, 2009).



In diligences *in loco* and other socialization processes, accounting experts interact with other individuals and debate their interests and feelings. In these circumstances, behavior goes through social cognition; that is, individuals become aware of alternatives. The level of recognition differentiates people more cognitively flexible and willing to make adjustments from those who see only one behavioral response (Martin & Rubin, 1995). The adaptive dimension of the cognitive flexibility theory may explain it; that is, an individual may make changes to respond to the demands imposed by changes in problems or situations (Guerra, Candeias & Prieto, 2014). Hence, the way individuals interpret the environment and change their mental model to guide behavior is influenced by cognitive styles (Mueller & Shepherd, 2016).

This interaction that modifies and is modified by the environment is associated with cognitive components called executive functions and is related to an individual's ability to engage in goal-oriented behavior through voluntary, independent, autonomous, self-organized, and goal-oriented actions (Capovilla, Assef & Cozza, 2007). In addition, these functions are linked to planning, monitoring, and cognitive flexibility, whereas cognitive flexibility influences goal-oriented behavior (Capovilla et al., 2007); thus, it may affect task performance.

Initially studied by Spiro, Vispoel, Schmitz, Samarapungavan and Boerger (1987), cognitive flexibility is related to advanced levels of knowledge acquisition, which enables acting more effectively in a novel or complex situation. Martínez and Brussoni (2018) analyzed expert decision-makers and concluded that cognitive flexibility, that is, the ability to combine cognitive processing with the type of problem in question, enables decision-makers to perform better because they change decision-making habits for a deeper prior analysis of the context.

In this context, cognitive flexibility can be represented by attention flexibility, a process that involves individual skills to focus, allocate and refine stimuli; by representational flexibility, related to the ability to analyze, synthesize and retrieve information; and response flexibility, linked to the ability to create strategies, plans, and programs, in short, ability to make decisions and execute (Guerra, 2013).

Considering the particular context of task performance of forensic accounting experts, the second research hypothesis is proposed:

H₂: Cognitive flexibility positively influences the task performance of forensic accounting experts

If this hypothesis is confirmed, it will reinforce the idea that the technical competence of forensic accounting experts is influenced by cognitive-behavioral factors, which suggest that professional performance depends on personal characteristics that differentiate individuals and their skills.

However, it is possible that personality traits also affect the judgment of facts in addition to decisionmaking styles and cognitive flexibility (Cunha, Silva, Peyerl & Haveroth, 2019). An individual's personality is unique and distinguishes people according to consistent patterns of feelings, thoughts, and behaviors (Trentini, Hutz, Bandeira, Teixeira, Gonçalves & Thomazoni 2009), and tends to influence how people respond to decision-making contexts (Scott & Bruce, 1995).

In the literature, Saucier (1994) explains that awareness is linked to the ability to reflect upon phenomena before making a decision, extraversion is associated with the level of sociability, agreeableness concerns an individual ability to be kind to him/herself and others, neuroticism refers to a tendency to experience emotional instability, and finally, openness to experiences concerns an individual's ability to face new challenges.



According to Debusscher, Hofmans and Fruit (2016), the relationship between personality traits and task performance occurs through perceptions of work pressure and task complexity, which may trigger momentary states of neuroticism, predicting momentary task performance. From this perspective, but narrowing the lens to the specific context of task performance among forensic accounting experts, the third hypothesis is proposed:

H₃: Personality traits positively influence the task performance of forensic accounting experts.

Figure 1 presents the three latent variables (decision-making styles, cognitive flexibility, and personality traits), the two first are cognitive variables whereas personality traits are intrinsic to individuals.



Source: developed by the authors.

In the relationships presented, task performance is expected to be understood based on the proposed variables, and current literature is expected to advance through the joint analysis of cognitive variables and personality traits.

3. Methodological procedures

A survey was conducted with the population of accounting experts. The lists of accounting experts were taken from the National Registry of Experts of the Federal Accounting Council (CNPC, 2020) and professional associations. With the study population established, a structured questionnaire developed on Google Forms was sent via email to 3,200 accounting experts from November 9th to December 2020. The final sample was composed of 259 respondents, which corresponds to 8.09% of the population.

The profile of respondents indicates that 71.4% were men aged 55+ years old. Regarding education, 62.9% of the respondents reported a specialization. One aspect draws attention regarding experience as an accounting expert; despite the prevalent age group not being young, 30.9% of the respondents reported an experience from 1 to 5 years in the field. Thus, demographic data suggest that the respondents meet the conditions necessary to answer the survey.



The study instruments (Appendix A) were extracted from previous studies investigating one or more of the constructs object of this investigation. A five-point Likert scale was used to rate all the statements, regardless of the original scale, though the initial semantics of each instrument's limits were maintained.

An instrument developed by Scott and Bruce (1995), General Decision-Making Style Inventory (GDMS), was used to capture each of the five decision-making styles (dependent, avoidant, rational, intuitive, and spontaneous). The original instrument contains 25 statements rated on a five-point Likert scale. When Löbler, Reis, Nish and Tagliapietra (2019) validated it to the Brazilian context, however, the number of statements was reduced to 19, and internal consistency (Cronbach's alpha) of 0.624 was obtained.

Cognitive flexibility was investigated using an instrument proposed by Martin and Rubin (1995). It measures the individuals' ability to integrate knowledge and actions related to problem-solving. There are four statements for each of the three dimensions of flexibility (attention, representational, and response). These statements were initially rated on a six-point Likert scale ranging from 1 (totally disagree) to 6 (totally agree), but a five-point Likert scale was adopted in this study.

The instrument developed by Gosling, Rentfrom and Swann (2003) was used to analyze personality traits. They modeled their questionnaire on the descriptors of the big-five instruments proposed by Goldberg (1992). It captures five of the main personality traits consolidated in the literature and comprises ten statements, two for each dimension, rated on a seven-point Likert scale. In this study, we agreed to adopt a five-point Likert scale.

Finally, task performance was verified using an instrument designed by Kathuria and Davis (2001) and adapted by Mahama and Cheng (2013). It was originally composed of four statements rated on a five-point Likert scale ranging from 1 (not satisfied) to 5 (very satisfied).

For descriptive statistics and hypothesis testing, the partial least squares structural equation modeling (PLS-SEM) was performed using Smart PLS, version 3. This method can be defined as a set of techniques that simultaneously examines a group of theoretical relationships between one or more independent variables and one or more dependent variables (Hair Jr., Hult, Ringle & Sarstedt, 2014). It is suitable to model complex relationships with multiple dependence and independence relationships between latent variables (Hair Jr. et al., 2014).

4. Descriptions and Analysis of Results

4.1 Measurement Model

In structural equation modeling, data are analyzed in two stages. Confirmatory factor analysis is performed in the first stage to verify covariance between latent variables, which results in the measurement model (Anderson & Gerbing, 1988; Bido & Silva, 2019). The second stage consists of a structural model that reflects the adjustments necessary to optimize the model.

The model's reliability and discriminant validity was analyzed in the measurement model. Discriminant validity was based on cross-loading verification, which indicates whether the values of the original latent variables' largest loadings are larger than the remaining (Chin, 1998). In addition, criteria proposed by Fornell and Larcker (1981) were used to verify whether the square roots of the average variance extracted (AVE) of each construct were larger than the constructs' correlations.

Table 1 presents the statistical values of the variables considered in the model's robustness analysis, such as Cronbach's alpha, rho_A, composite reliability, R², and average variance (AVE).

Table 1 Measurement Model

Panel A – Without excluding indicators									
Variables	Cronbach's alpha	rho_A	Composite reliability	R²	Average variance extracted (AVE)				
Decision-making styles	0.712	0.785	0.112	0.187	0.195				
Cognitive flexibility	0.730	0.759	0.792	0.159	0.252				
Personality traits	0.681	0.718	0.744	0.326	0.252				
Task performance	0.786	0.813	0.862	0.327	0.613				
Panel B – Excluding indicators									
Variables	Cronbach's alpha	rho_A	Composite reliability	R²	Average variance extracted (AVE)				
Decision-making styles	0.742	0.769	0.749	-0.127	0.289				
Cognitive flexibility	0.730	0.759	0.792	0.199	0.252				
Personality traits	0.681	0.718	0.744	0.344	0.252				
Task performance	0.786	0.813	0.862	0.317	0.612				

Source: Study's data

Panel A in Table 1 shows that the measurement model initially presented some values below the minimum statistical significance suggested in the literature, that is, Cronbach's alpha and composite reliability with loadings <0.7 (Hair Jr. et. al, 2014), and AVE values <0.50 (Henseler, Ringle & Sinkovics, 2009). Bido and Silva (2019) recommend excluding indicators with lower loadings. To preserve the constructs' content validity, however, we opted for excluding the lowest possible number of indicators, even though AVE did not reach the desired statistical significance.

Panel B in Table 1 shows that Cronbach's alpha presented a significant improvement for decisionmaking styles but not for personality traits. In turn, the composite reliability for decision-making styles started presenting statistical significance. Eliminating six statements (10, 12, 13, 14, 16, and 19) from the cognitive flexibility construct resulted in an insignificant increase in AVE though. Thus, it does not harm the model's reliability, but it is a restriction.

Hence, in the second stage of the statistical analysis, we considered the situation in which six indicators were excluded.



4.2 Structural Model

Table 2 presents the statistical values of the data analyzed for the structural model, considering the relationships proposed in the study's hypotheses.

Descriptive statistics									
	Hypotheses	VIF	Original sample	Standard deviation	t-value	p-value			
Decision-making styles → Task performance	H ₁ (-)	1.286	-0.127	0.061	2.082	0.037			
Cognitive flexibility → Task performance	H ₂ (+)	1.662	0.199	0.068	2.915	0.004			
Personality traits → Task performance	H1(+)	1.749	0.344	0.078	4.422	0.000			

Table 2 Descriptive statistics

Legend: Values of p≤0.05; VIF: ≤2; Standard deviation ≤5

Source: Study's data

The descriptive statistics presented satisfactory significance for the relationships analyzed, in which VIF values showing collinearity of data are below 2, the standard deviation is considered low, and p-values are significant at ≤ 0.05 level. Also, note that decision-making styles are negatively related to task performance while the remaining relationships are positive, as expected.

4.3 Discussion of Results

The literature provides theoretical support for the construct task performance to be analyzed under three domains: task performance, contextual performance, and counterproductive behavior at work (Sackett & Lievens, 2008). This study's focus was on task performance though, which is linked to behaviors that contribute to the production of a good or service.

Hypothesis H_1 was negatively related to decision-making styles and task performance with p=0.037, significant at 0.05, i.e., the hypothesis was rejected. The characteristics of subjectivity and individuality (Harren, 1979) present in the perception of tasks and decision-making (Sohail, 2013) may be a complexity factor. Additionally, the self-regulation factor, that is, the ability of an individual to maintain a stable pattern of decisions over time (Löbler et al., 2019; Thunholm, 2004), not measured in this study, may contribute to a negative relationship.

Thunholm (2004) notes that further studies addressing the relationship between decisionmaking styles and task performance on real-life decision-making at work are needed. Unfortunately, this relationship could not be analyzed in this study, but the results indicate a gap in the literature. This is magnified in the forensic field because the work is not standardized, and each expert establishes the methodology that better adapts to the object of investigation, which may impact task performance.

Hypothesis H_2 was confirmed for the sample analyzed, with a p-value=0.004, which supports the assumption that cognitive flexibility is positively related to the task performance of forensic accounting experts. The need for accounting experts to adapt to the most diverse work strategies influences task performance.

This inference is supported by Martin and Rubin (1995), who emphasize that cognitive flexibility is the ability of individuals' consciousness to recognize the options and alternatives available, be willing to be flexible and adaptable, and have self-efficacy in being flexible. Thus, it may improve the decision-making process and lead individuals to adapt to the task (Laureiro-Martínez & Brusoni, 2018).



Hypothesis H_3 was accepted considering that a positive statistical relationship was found for the relationship between personality traits and the task performance of forensic accounting experts, with a p-value=0.000. This result is consistent with Gridwicha, Kulwanich, Piromkam and Kwanmuangvanich (2020), who used structural equation modeling and found a positive statistical relationship between personality traits and job performance.

5. Final Considerations

This study analyzed the effects of decision-making styles, cognitive flexibility, and personality traits on the task performance of forensic accounting experts. The results show that task performance is of complex measurement that may, in addition to economic rationality, be explained by behavioral variables, such as those considered in this study.

Additionally, it contributes to the literature by showing that one needs to expand the scope of analysis of task performance beyond positivist approaches; that is, one cannot assume that individuals improve their performance solely by rational work commands. Therefore, this study's results open up possibilities for investigations and encourage a search for new approaches and constructs to explain behaviors related to individuals' task performance.

This study also presents practical contributions as it considers behavioral aspects in empirical research that may affect task performance among forensic accounting experts. Identifying the effects of behavioral factors on task performance may contribute to select and nominate experts who are apt to present expert reports more adherent to the object of investigation and more efficient in promoting the balance of justice.

Therefore, considering Frezatti's (2020) influences and mentioning the importance of the wellbeing research should generate in the lives of people, this study was intended to find behavioral answers to understand decision-making and reduce bias in the work of forensic accountants. Parsimony is necessary when making inferences though, considering that subjective measures may lead individuals to interpret questions differently (Kahneman & Krueger, 2006).

Regarding this aspect, it is also essential to consider the restrictions of a self-report questionnaire (Skinner, 1978), considering we cannot identify whether the items chosen by the respondents represent their actual behavior or a socially desirable behavior (Tracey, 2016).

Another bias of self-reporting tools is acquiescence, which is a tendency of individuals to choose items without adequately analyzing their content (Zanon, Lessa & Dellazzana-Zanon, 2018). Definitive responses may not be found in the first scientific attempt (Frezatti, 2020), however, so that this study is not an end in itself but a starting point to support future research.

Finally, the analyses performed here do not allow for the generalization of all tasks performed in the forensic field, which suggests the need for future studies to analyze the performance of specific tasks and the relationship between forensic accounting standards, the professional's methodological choices, and judgment expectations, considering that even if a forensic accountant follows legal guidelines, his/ her report may not meet the object of investigation. Additionally, in-depth research and case studies or experiments can be relevant to investigate this subject.



Appendix A – Study's Instruments

Personality Traits (Gosling, Rentfrom & Swann, 2003)

Please indicate for each of the following statements the extent to which you agree or disagree with the pair of characteristics that apply to you, considering a scale from 1 (strongly disagree to 5 (strongly agree).

- 1. I see myself as extraverted, enthusiastic.
- 2. I see myself as critical, quarrelsome.
- 3. I see myself as dependable, self-disciplined.
- 4. I see myself as anxious, easily upset.
- 5. I see myself open to new experiences, complex.
- 6. I see myself as reserved, quiet.
- 7. I see myself as sympathetic, warm.
- 8. I see myself as disorganized, careless.
- 9. I see myself as calm, emotionally stable.
- 10. I see myself as conventional, uncreative.

Decision-making styles (Scott & Bruce, 1995; instrument validated in Brazil by Löbler, Reis, Nishi & Tagliapietra, 2019)

Please indicate for each of the following statements concerning how an individual makes important decisions, the extent to which you agree or disagree, considering a scale from 1 (strongly disagree) to 5 (strongly agree).

- 1. I often need the assistance of other people when making important decisions.
- 2. I rarely make important decisions without consulting other people.
- 3. If I have the support of others, it is easier for me to make important decisions.
- 4. I use the advice of other people in making my important decisions.
- 5. I like to have someone steer me in the right direction when I am faced with important decisions.
- 6. I postpone decision-making whenever possible.
- 7. I often put off making important decisions
- 8. I generally make important decisions at the last minute.
- 9. I put off making decisions because thinking about them makes me uneasy.
- 10. I make decisions logically and systematically.
- 11. My decision-making requires careful thought.
- 12. When making a decision, I consider various options in terms of a specified goal.
- 13. I explore all of my options before making a decision.
- 14. When making decisions, I rely upon my instincts.
- 16. When making a decision, I trust my inner feelings and reactions.
- 17. I generally make snap decisions.
- 18. I often make decisions on the spur of the moment.
- 19. I make quick decisions.

Cognitive Flexibility (Martin & Rubin, 1995)

Please indicate for each of the following statements the extent to which they represent your beliefs and feelings about your behavior, considering a scale from 1 (strongly disagree) to 5 (strongly agree).

- 1. I can communicate an idea in many different ways.
- 2. I avoid new and unusual situations.
- 3. I feel like I never get to make decisions.
- 4. I can find workable solutions to seemingly unsolvable problems.
- 5. I seldom have choices when deciding how to behave.
- 6. I am willing to work at creative solutions to problems.
- 7. In any given situation, I can act appropriately.
- 8. My behavior is a result of conscious decisions that I make.
- 9. I have many possible ways of behaving in any given situation.
- 10. I have difficulty using my knowledge on a given topic in real-life situations.
- 11. I am willing to listen and consider alternatives for handling a problem.
- 12. I have the self-confidence necessary to try different ways of behaving.

Task performance (Kathuria and Davis, 2001, adapted by Mahama and Cheng, 2013)

Please indicate for each of the following situations your level of satisfaction with your performance at work, considering a scale from 1 (not satisfied) to 5 (very satisfied).

- 1. Accuracy of the work performed.
- 2. Amount of the work performed.
- 3. Quality of the work performed.
- 4. Operational efficiency.

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