

Personality Traits, Mindset and Entrepreneurial Potential of Individual in Startups

Traços de Personalidade, Mindset e Potencial Empreendedor Individual em Startups

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Abstract

Purpose: The Growth Mindset is a belief that drives individuals through development and learning goals. This belief can contribute – in a systemic way – to the organization as a whole. The paper explores the relationship between personality traits, Mindset, and Entrepreneurship potential in individuals related to startups.

Design/methodology/approach: The research uses the experimental design of Blackwell, Trzesniewski e Dweck (2007) and Luthans, Avey, Avolio, Norman e Combs (2006) with a one-shot approach. The sample consists of 108 individuals related to the San Pedro Valley Startups.

Research, Practical & Social implications: The results show a positive relationship between Growth Mindset and Entrepreneurial Potential. A positive relationship between Fixed Performance Mindset and Entrepreneurial Potential. There is no statistical relevance between Fixed Blocking Mindset and Entrepreneurial Potential.

Originality/value: The experimental design improves the analyses of mindset theory in the business field. Studies within administration that involve Mindset focus on a cross-sectional nature and are based on questionnaires.

Keywords: Growth Mindset; Entrepreneurial Potential; Personality Traits; Entrepreneurship.

Resumo

Objetivo: O Mindset de Crescimento é uma crença que impulsiona os indivíduos através de metas de desenvolvimento e aprendizado. Essa crença pode contribuir – de forma sistêmica – para a organização como um todo. O artigo explora a relação entre traços de personalidade, Mindset e Potencial Empreendedor de indivíduos que trabalham em *startups*

Método/abordagem: A pesquisa utiliza o design experimental de Blackwell, Trzesniewski e Dweck (2007) e Luthans, Avey, Avolio, Norman e Combs (2006) com uma abordagem *one-shot*. A amostra é composta por 108 indivíduos relacionados às Startups de San Pedro Valley.

Contribuições teóricas/práticas/sociais: Os resultados mostram uma relação positiva entre a mentalidade de crescimento e o potencial empreendedor. Uma relação positiva entre Mentalidade de Desempenho Fixo e Potencial Empreendedor. Não há relevância estatística entre Mentalidade de Bloqueio Fixo e Potencial Empreendedor.

Originalidade/relevância: O design experimental melhora as análises da teoria do mindset no campo da administração. Os estudos dentro da administração que envolvem o Mindset concentram-se em um caráter transversal e baseiam-se em questionários.

Palavras-chave: Mindset de Crescimento; Potencial Empreendedor; Traços de personalidade; Empreendedorismo

Introduction

Following the multiple intelligences theory of Gardner (1983), which suggests that the development of intelligence and capabilities implies training, effort, and dedication, Dweck (1986) proposes individual cognitive development as dependent on the goal-directed: directed toward learning or one's performance. Performance goal achievement leads to the belief that skills and competencies are linked to genetics and individual aptitude, thus limiting the malleability of individual abilities. This sets up a Fixed Mindset (Dweck, 2012; Dweck, 2017). On the other hand, when the belief relies on continuous improvement employing learning, one has the characterization of the Growth Mindset, pointed as a predecessor of better academic development, higher performance, greater engagement, and lower stressors, contributing to life improvement. (Schroder et al. 2017; Tang, Chen, Yang, Chung, & Lee, 2016; Claro, Paunesku, & Dweck, 2016; Bedford, 2017; Zeng, Hou, & Peng, 2016).

This study considers that Mindsets can be changed through educational treatments to develop a change in the mental configuration in the individual, which elevates their Growth Mindset and improves cognitive performance (Dweck, 2017; Blackwell, Trzesniewski, & Dweck, 2007). When the individual constantly learns, the theme "Mindset"

is linked to the entrepreneurial potential in his behavioral approach, as a behavior that he can develop within an organization (Hisrich, 1990; Maier & Zenovia, 2011; Antoncic & Hisrich, 2003). The importance of developing an entrepreneurial attitude in an individual can have positive consequences for organizations, such as individual satisfaction with their work (Antoncic & Antoncic, 2011), organizational performance (Felício, Rodrigues, & Caldeirinha, 2012) and, consequently, company growth (Antoncic & Hisrich, 2001).

Studies on Growth Mindset in on business field are still in the embryonic stage. Looking for Growth Mindset on the "Web of Science" base, 35 papers were founded in the last 15 years. Between them, the focus remains on the consumer behavior theory (Carnevale, Yucel-Aybat, & Kachersky, 2018; Japutra, Loureiro, Molinillo, & Ekinci, 2019; Puente-Diaz & Cavazos-Arroyo, 2018; Song, Lee, & Kim, 2019), leadership theory (Cäniels, Semeijn, & Renders, 2017; Wang, Owen, Shi, & Li, 2018), organizational citizenship behavior (Özduran & Tanova, 2017), prejudice in the workplace (Rattan & Dweck, 2018) and reaction through feedback (Zingoni & Byron, 2017). Wheeler and Omair (2018) and Ferreira, Pinho, Gonçalves e Christino (2020) advocates the importance of applying the Growth Mindset theory in the organizational context, but the majority of the studies concentrate on the fields of education and psychology (Wheeler & Omair, 2018; Ozduran &

Tanova, 2017). A paper that discusses a positive relationship between entrepreneurial potential and the Growth Mindset of business students was found through a transversal design (Ferreira, Bandeira, & Gonçalves, 2019). This research aims to provide a business management approach to Blackwell, Trzesniewski e Dweck (2007) treatment – commonly used in the educational field, adding Luthans et al. (2006) treatment to develop Psychological Capital as a way to potentialize the Growth Mindset in individuals in Startup's context. Huang and Luthans (2015) demonstrate a positive relationship between the Growth Mindset and Psychological Capital. Psychological Capital is a "kind of state" that defines individuals who plan and quickly build goals for themselves, revealing persistence to achieve these goals and cope well with adversity without hindering their development (Luthans & Youssef-Morgan, 2017). A growth Mindset and Psychological Capital are two constructs with similarities, such as the focus on learning goals, the ability to deal with risks and challenges, and confidence in the individual learning potential.

In addition, several works indicate the Big Five as predecessors of Mindset (Furnham, 2014; Defeyter, Caers, Vigna, & Berings, 2012; Jones & McMichael, 2015), such as openness or awareness linked to the Growth Mindset (Matzler & Mueller, 2011; Furnham, Chamorro-Premuzic, & McDougall, 2003); or introversion and neuroticism linked to the Fixed Mindset (Furnham,

2014; Jones & McMichael, 2015). These studies, however, are under a cross-sectional design, collected through a survey. Personality traits, specifically, are characteristics that differentiate individuals based on a specific pattern of knowledge (Cloninger, 1999). Within the personality studies, the study of the Five Great Personality Traits, "The Big Five", stands out, which form guaranteed dispositions manifested in relatively stable behavior patterns (Cobb-Clark & Schurer, 2011; McCrae & Costa Jr., 1999). These traits are Neuroticism, Extroversion, Kindness, Consciousness, and Openness. The "5 great features" is the dominant approach when studying the structure of the features (Roccas, Sagiv, Schwartz, & Knafo, 2002) and is a consolidated theory seen in (i) the considerable amount of longitudinal and cross-cultural studies (McCrae & Costa Jr., 1987); (ii) validation in different cultures, age, sex, and language; (iii) the fact that it represents an instrument formed by a natural language, universal adjectives that facilitate its generalization; and (iv) the fact of having hereditary traits, which gives the approach particular heredity.

In sum, based on experiments, the research aims to measure the effects of a Growth Mindset on the Entrepreneurial Potential (EP) of individuals linked to Startups. Specifically, the article seeks to: (i) measure the effects of the Growth Mindset related to the level of Entrepreneurial Potential among individuals linked to Startups; (ii) measure the effects of the Fixed Performance

Mindset related to the level of EP among individuals linked to Startups; and (iii) measure the effects of Fixed Blocking Mindset related to the level of EP among individuals linked to Startups.

Theoretical Model

In the proposed theoretical model, the five major personality traits (Openness, Conscientiousness, Amiability, Extroversion, and Neuroticism) are antecedent constructs of Mindset. Those with a growth-oriented mental configuration adopt learning-oriented attitudes and are open to new experiences and challenging tasks. They consider themselves constantly evolving beings, not fearing failures, considering them part of their natural curve. Thus, it is expected that an individual with an elemental trait of Openness will be more likely to develop a Growth Mindset (Dweck, 1999; McCrae & Costa, 1987; Judge, Higgins, Thoresen, & Barrick, 1999). This relationship has been proven in cross-cultural and transversal studies (Furnham, 2014; Defeyter, Caers, Vigna, & Berings, 2012; Jones & McMichael, 2015).

In the same way, this Growth-minded individual can develop his Conscientiousness and analytical thinking only if he plans and persists in his goals, seeking to orient himself toward the success of the goals he has set for himself. Thus, the elemental trait of Conscientiousness predates the Growth Mindset, a relationship confirmed by

the studies of Matzler and Mueller (2011), Furnham, Chamorro-Premuzice McDougall (2003), and Jones and McMichael (2015). This conscious individual will realize that their team and the people they live with can act as pieces to achieve their goals within the organization, also possessing the essential trait of Amiability (Dweck, 1999, 2017; Komarraju & Karua, 2005), proven by studies of Defeyter, Caers, Vigna e Berings (2012) and Hazrati-Viari, Rad e Torabi (2012). In turn, an individual with a Growth Mindset will be negatively linked to Neuroticism and Negative Extroversion. Since he is generally proactive and learning-driven, focused and persistent, and consciously seeking to control their emotions in the organizational environment to grow systemically within the organization in which they operate (Dweck, 1999; Judge et al. 1999). Therefore, we arrive at the first hypothesis of this study.

H01a - The Openness personality trait significantly affects the Growth Mindset.

H01b - The Conscientiousness personality trait significantly affects the Growth Mindset.

H01c - The Amiability personality trait significantly affects the Growth Mindset.

H01d - The Extroversion personality trait significantly affects the Growth Mindset.

H01e - The Neuroticism personality trait significantly affects the Growth Mindset.

Matzler and Mueller (2011) also indicate a relationship between the Fixed

Mindset with the inverse of the Openness trait, the Competitiveness trait, and the inverse of the Sharing Knowledge trait. The Fixed Performance Mindset leads the individual to become stuck in his work, thus not participating in events and opportunities around him, having a limited awareness, and focusing on his particular skills. His ability to socialize is affected by the competitiveness assumed with his peers, given the need to promote himself before his organization. Individuals such as these are more prone to stress and anxiety symptoms (Schroder *et al.*, 2017), which may lead to greater emotional instability (Neuroticism) and greater competitiveness in seeking to maintain established routines. This stage is named by Vandewalle (1997) as a Proving goal orientation – Fixed Performance Mindset. Subsequently, this individual will take a blocking stance and avoid any activity and opportunity that disturbs their status quo (negative Openness). It is expected to enhance further the strength of the proposed relationship between elemental traits and the Fixed Mindset (Dweck, 1999, 2017; Matzler & Mueller, 2011; Mowen, 2000). This stage is named by Vandewalle (1997) as an Avoiding Goal Orientation – Fixed Blocking Mindset.

Some works link the Fixed Mindset to the trait of Neuroticism and the inverse of Extroversion (Furnham, 2014; Jones & McMichael, 2015), but in these research, the Fixed Mindset was considered as a construct encompassing both the Fixed Performance Mindset and the

Fixed Blocking Mindset. As this article suggests the division between the two, we propose a negative relationship between the elemental traits and the Fixed Blocker and Performance Mindset and a positive relationship between the elemental trait of Neuroticism.

H_{02a} – The Opening personality trait has a negative effect on the Fixed Performance Mindset.

H_{02b} – The Conscientiousness personality trait has a negative effect on the Fixed Performance Mindset.

H_{02c} – The Amiability personality trait has a negative effect on the Fixed Performance Mindset.

H_{02d} – The Extroversion personality trait has a negative effect on the Fixed Performance Mindset.

H_{02e} – The Neuroticism personality trait positively affects the Fixed Performance Mindset.

H_{03a} – The Opening personality trait has a negative effect on the Fixed Blocking Mindset.

H_{03b} – The Conscientiousness personality trait has a negative effect on the Fixed Blocking Mindset.

H_{03c} – The Amiability personality trait has a negative effect on the Fixed Blocking Mindset.

H_{03d} – The Extroversion personality trait has a negative effect on the Fixed Blocking Mindset.

H_{03e} – The Neuroticism personality trait positively affects the Fixed Blocking Mindset.

A subject with Growth Mindset

increases his self-efficacy as he persists in his goals, even if his rewards are not immediate, staying in the predisposed ways, always directing himself to learn and continuous development (Keating & Heslin, 2015; Bower & Konwerski, 2017). This individual tends to adopt a passive stance and absorb as much knowledge as he or she can, and may also try to assimilate it by putting his or her organization's goals into congruence. Therefore, an individual with the Growth Mindset will be susceptible to developing an Entrepreneurial Potential when stimulated. Knowing that entrepreneurial potential is a behavior, it can be developed and enhanced. When an individual has a Growth Mindset, he or she will be open to learning that guides him/her to take entrepreneurial attitudes within the organization (Krueger, 1993; Krueger Jr., 2007; Hisrich, 1990). An empirical study suggested a positive relationship between the Growth Mindset and Entrepreneurial Potential (Ferreira et al., 2020). However, it focused on a cross-sectional study and a sample of students. Thus, Hypothesis 4 of this article is presented.

H₀₄ – The Growth Mindset has a significant effect on Entrepreneurial Potential.

It is intended to analyze the role of the Fixed Mindset in Entrepreneurial Potential. The Fixed Performance Mindset, while a mindset that

makes the individual become focused on their own performance, binds positively to the EP in both competencies as he will do his best to perform to the best of his ability, using analytical thinking, being observant and aware of what is necessary for his current objectives to be achieved (Gonçalves-Filho, Veit, & Monteiro, 2013; Vandewalle, 1997; Dweck, 1999). However, this individual will then adopt a blocking stance, avoiding new knowledge and experiences and risks and tasks involving innovations (Vandewalle, 1997; Dweck, 2017, 1999; Gonçalves-Filho, Veit, & Monteiro, 2013). He will tend to avoid friendly relationships as he considers his peers to be risk-takers of the role he currently plays and, in a systemic way, will tend to block the internal entrepreneurial profile from emerging in the individuals that make up his organization (Vandewalle, 1997; Gonçalves-Filho, Veit, & Monteiro, 2013). Thus, the following hypothesis is presented.

H₀₅ – Fixed Performance Mindset significantly affects the Entrepreneurial Potential (EP).

H₀₆ – The Fixed Blocking Mindset has a negative effect on the Entrepreneurial Potential (EP).

Consequently, we arrive at the hypothesis model proposed in this article, testing the relationships between personality traits, Growth Mindset, Fixed

Mindset, and Entrepreneurial Potential
(Figure 1).

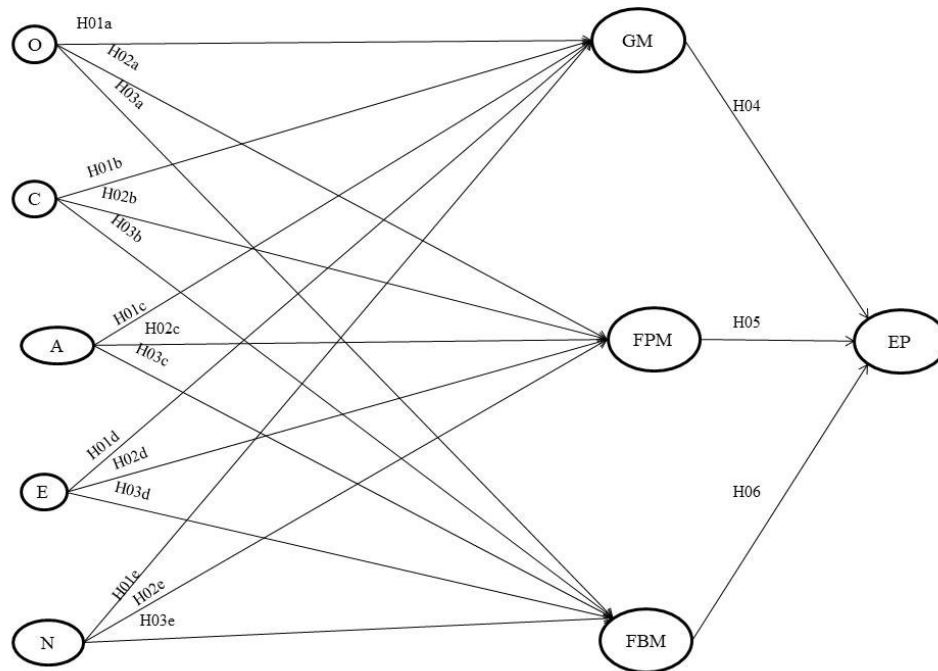


Figure 1. A proposed conceptual model.
Source: Data from research (2020).

Methodology

This research fits as an exploratory type with a quantitative approach, measured by an experimental *design* (Malhotra, 2001). To this end, the treatments by Blackwell, Trzesniewski e Dweck (2007) and Luthans et al. (2006) were applied as treatment of the test units, aiming to infer a supposed modification in the EP levels in an organization.

An experiment occurs when a variable is manipulated by observing its effect on the test units, measured by the dependent variable (Malhotra, 2001; Barros & Lehfeld, 2007). This research adopted an experiment with post-test

control. In this type of experiment, there is the Control Group and the experimental group. Results between these groups are compared at the end to verify the experiment's effectiveness (Malhotra, 2001).

The sample consisted of individuals linked to Startups because this type of audience is surrounded by a dynamic culture that favors learning and continuous development (Ismail, Vang-ees, & Malone, 2015). The studied startups belong to the San Pedro Valley Group, a complex of startups and exponential growth companies in Belo Horizonte, Brazil. The sample of this study was non-probabilistic for convenience (Malhotra, 2001), as the companies were chosen as they accepted to give up

their time and their collaborators in the requested times, establishing the partnership between Startup and the research university. By accepting to participate in the experiment, the individuals in this sample were randomized to define who would participate in the control group and who would participate in the experimental group.

The research universe referred to all Startups belonging to the San Pedro Valley group of Belo Horizonte. Only 158 Startups were active, from 420 registered on the group's website. The invitation to participate in the treatment was extended to all members of the startups, including 180 registered individuals. Of these, 108 participated in the experiment, 51 in the experimental group, and 57 in the control group. We chose to work with startups because their culture focuses on the development and exponential growth of their individuals and the organization as a whole (Ismail, Vangees, & Malone, 2015). Most respondents are between 18 and 38 years old (90%), have higher education, are in progress or completed (94%), are located mainly at the tactical and strategic levels of the organization (76%), and are proportionally distributed between males and females.

The experiment was carried out in a laboratory with high internal and low external validity. A survey was performed to measure the experiment's results, applied to the Control Group and the Experimental Group (post-experiment), and analyzed by structural equation modeling using Structural Equation Modeling analysis. According to Hair, Hult, Ringle e Sarstedt (2017), structural equation modeling is a multivariate technique that aims to analyze multiple relationships between dependent and independent variables, with the singular characteristic of representing unobservable concepts, called "latent variables", that can only be approximated by observable or manifest variables. The model used was the Partial Least Square (PLS-SEM).

The study consisted only of latent (unobservable) variables: (i) "Work Domain Goal Orientation Instrument", a scale with 13 items, initially measured by the proposed Vandewalle (1997), who adapts the theory proposed by Dweck to an organizational context; (ii) the Internal Entrepreneurial Potential, as measured by Gonçalves-Filho, Veit e Monteiro (2013), through a scale of 52 items; and (iii) the five major elementary personality traits, measured by the Mowen (2000) model with 17 items.

The proposed experiment, adapted from Blackwell, Trzesniewski e Dweck (2007) and Luthans et al. (2006), was assessed through a questionnaire applied after the intervention, which was named "Training your Mindset". The questionnaire, containing 82 questions, addressed questions about Mindset, EP, the five major traits measured by the Mowen (2000) questionnaire, and questions about socioeconomic and demographic profiles, such as gender, employment status, education, and age.

The experiment was compressed into a section of approximately 3 hours, as they were Startups that have as a limitation the shortage of time to assign their employees, removing them from their duties and interrupting the organization's activity. The results of both groups were compared after applying the questionnaires to the Control Group, which did not undergo any intervention. The comparison was necessary since randomization occurred to define the test units, which avoided the external selection bias variable. History, maturation, and mortality variables were controlled, as they are common in multi-section experiments and long passages between sections. Finally, the interactive effect of testing and instrumentation was also controlled since questionnaires were applied after treatment, not biasing responses.

The control group (CG) received no treatment but answered all questionnaires. The Experimental Group (EG) underwent the proposed interventions, aiming to enhance the Growth Mindset and the EP. Then all the questions in the questionnaires were answered. The variation from the strength comparison between the relationships of the above groups confirmed the efficacy of the treatment. The relationship between the constructs was assessed using Structural Equation Modeling. The structural results were compared, aiming to infer the influence of treatment on these relationships.

All steps provided by Luthans et al. (2006) were kept. Regarding the design

proposed by Blackwell, Trzesniewski e Dweck (2007), some changes were made, such as focusing interventions on Mindset-related steps and excluding the sections in which the control group and Blackwell's experimental group interacted. In the experimental design proposed by this article, the control group did not undergo any intervention other than the application of the questionnaires.

Findings

Measurement and Structural Model - Control Group

The model was estimated using Smart-PLS software. The parameters recommended by Hair et al. (2017) were followed for configuring the PLS algorithm before running it, including the algorithm stopping when the maximum number of 300 interactions or the stopping criterion $1.0E-5$ was reached. After running PLS, the algorithm was converted into 12 interactions, generating the measurement model.

The measurement model explains how well the theory fits the data. The criteria applied to analyze the measurement model of the reflexive constructs are external loads, composite reliability, Cronbach's Alpha, average variance extracted (AVE), and discriminant validity (crossloads, Fornell-Larcker and HTMT).

Indicators with external loads below 0.700 as reference value were excluded, including MC5, MFB3, TA2,

TC3, and TNE1. Internal reliability indexes were between 0.70 and 0.90, values recommended by Hair et al. (2017), being the only exception of the Extroversion construct, with reliability of 0.915, because it is very close to the

limit. All constructs had an AVE higher than the suggested minimum of 0.50. Discriminant validity, Fornell-Larcker, and HTMT criteria were also satisfactory.

	Cronbach's Alpha > 0,70	Composite reliability (0.70)	(AVE) >0,50	Fornell-Larckerr– Control Group										EP Média	
				O	A	C	E	FBM	FPM	GM	N				
O	0,829	0,912	0,839	O	0,916										
A	0,819	0,889	0,727	A	0,424	0,853									
C	0,751	0,819	0,606	C	0,221	0,232	0,778								
E	0,915	0,946	0,855	E	-0,05	0,062	-0,32	0,925							
FBM	0,766	0,865	0,682	FBM	-0,21	-0,12	-0,26	0,209	0,826						
FPM	0,854	0,901	0,696	FPM	-0,18	-0,06	0,045	0,18	0,299	0,834					
GM	0,844	0,895	0,681	GM	0,351	0,325	0,423	-0,29	-0,57	-0,15	0,83				
N	0,77	0,866	0,684	N	-0,13	-0,22	-0,03	0,156	0,108	0,276	0,29	0,827			
EP	1	1	1	EPMean	0,483	0,252	0,25	-0,07	-0,39	0,087	0,46	0,183	1		

Table 1. Internal consistency, convergent and discriminant validity – Control Group

Notes: O (Openness); C (Conscientiousness); A (Amability); E (Extroversion); N (Neuroticism); GM (Growth Mindset); FPM (Fixed Performance Mindset); FBM (Fixed Blocking Mindset); EP (Entrepreneurial Potential)

Source: Data from research (2020).

Thus, it is inferred that the reflexive measurement model has internal consistency and convergent and discriminant validity. It is possible to evaluate

the structural model, which examines the predictive capacity of the model and the relationships between the constructs (Hair et al. 2017).

Hypotheses	Original Sample	Sample Mean	Standard deviation	t stat.	P-values
C > GM	0,288	0,288	0,151	1,907	0,057
GM > EP	0,35	0,337	0,137	2,549	0,011
N > FMP	0,235	0,235	0,123	1,904	0,057
N > GM	-0,2	-0,199	0,12	1,673	0,094

Table 2. Confirmed Hypotheses in the Control Group.

Notes: C (Conscientiousness); N (Neuroticism); GM (Growth Mindset); FPM (Fixed Performance Mindset); EP (Entrepreneurial Potential)

Source: Data from research (2020).

All model constructs did not present collinearity problems according to the tolerance and VIF values reached. After treating the measurement model, it is in the structural model evaluation that the research hypotheses are verified, according to the guidelines of Hair et al. (2017). To identify the significance of a coefficient, the value of the T-test was employed, which should be equal to or greater than 2.58, 1.96, and 1.57 for the significance level of 1%, 5%, and

10%. Respectively (Hair et al. 2017). The accepted hypotheses are described in Table 2.

The R^2 , known as the "Determination Coefficient", is the measure of the model's predictive power, representing the combined effects of latent variables on the endogenous variable (Hair et al. 2017). R^2 is evaluated by the values of 0.19, 0.33, and 0.67, respectively weak, moderate, and substantial (Hair et al. 2017).

Construct	R2 Square	R2 Square Adjusted	Result
Fixed Blocking Mindset	0,116	0,031	Weak
Fixed Mindset of Performance	0,135	0,052	Weak
Growth Mindset	0,341	0,277	Moderate
Entrepreneurial Potential	0,276	0,235	Weak

Table 3. Determination Coefficient R^2 – Control Group

Source: Data from research (2020).

The coefficient of determination of the Fixed Blocking Mindset (0.116) and Fixed Mindset of Performance (0.115) constructs is below the weak value. The Potential Entrepreneurial construct (0.276) is considered weak, while the Growth Mindset (0.341) is moderate. This result means that the variables preceding the Fixed Blocking Mindset, Fixed Mindset of Performance, and Growth Mindset construct explain 11.6%, 13.5%, and 34.1%, respectively, of the variance of the constructs. The variables preceding the Potential Entrepreneurial explain 27.6% of the construct's variance.

The effect size is achieved by the inclusion and deletion of constructs. This proceeding allows us to evaluate each construct's "usefulness" for the model.

The parameters used were: $f^2 = 0.02$ indicates a weak effect; 0.15, a moderate effect; and 0.35, a strong effect (Hair et al. 2017). The effects of the constructs were weak and unimpressive in this model.

The omission distance D is equal to 7, which, when divided by the number of valid observations in this research - that is, 58 - does not result in an integer, as suggested by Hair *et al.* (2017). The values calculated by the Blindfolding (Q^2) procedure of the Fixed Blocking Mindset (0.036), Fixed Performance Mindset (0.062), Growth Mindset (0.186), and Entrepreneurial Potential (0.218) constructs are just above zero. These results demonstrate a low predictive relevance of the model concerning endogenous variables.

	Cronbach's Alpha > 0,70	Composite reliability (0.70)	(AVE) > 0,50	Fornell-Larcker – Experimental Group									
				O	A	C	E	FBM	FPM	GM	N	EPM	
O	0,833	0,9	0,752	O	0,867								
A	0,834	0,894	0,739	A	-0,14	0,86							
C	0,817	0,892	0,736	C	-0,01	0,247	0,858						
E	0,843	0,9	0,751	E	-0,3	0,234	0,18	0,867					
FBM	0,621	0,798	0,569	FBM	-0,28	-0,2	-0,26	0,238	0,754				
FPM	0,919	0,942	0,803	FPM	-0	0,136	0,272	-0,08	0,124	0,896			
GM	0,873	0,913	0,725	GM	0,454	0,159	0,206	-0,23	-0,4	-0,04	0,851		
N	0,775	0,889	0,801	N	0,067	-0,45	-0,23	-0,12	0,468	0,184	-0,11	0,9	
EPMean	1	1	1	EP-Mean	0,516	0,047	0,416	-0,13	-0,23	0,386	0,558	0,08	1

Table 5. Internal consistency, convergent and discriminant validity – Experimental group

Notes : O (Openness); C (Conscientiousness); A (Amability); E (Extroversion); N (Neuroticism); GM (Growth Mindset); FPM (Fixed Performance Mindset); FBM (Fixed Blocking Mindset); EP (Entrepreneurial Potential)

Source: Data from research (2020).

Hypotheses	Original Sample	Sample Mean	Standard Deviation	t statis.	P-values
O > FBM	-0,235	-0,227	0,146	1,615	0,1
O > GM	0,428	0,431	0,127	3,376	0,001
C > FPM	0,323	0,325	0,144	2,244	0,025
E > FBM	0,267	0,254	0,16	1,673	0,094
FPM > EP	0,418	0,416	0,1	4,169	0
GM > EP	0,55	0,545	0,138	3,98	0
N > FBM	0,449	0,43	0,142	3,169	0,002
N > FPM	0,354	0,342	0,186	1,903	0,057

Table 6. Hypotheses confirmed in the Experimental Group

Notes: O (Openness); C (Conscientiousness); E (Extroversion); N (Neuroticism); GM (Growth Mindset); FPM (Fixed Performance Mindset); FBM (Fixed Blocking Mindset); EP (Entrepreneurial Potential)

Source: Data from research (2020).

Construct	R2 Square	R2 Square Adjusted	Result
Fixed Blocking Mindset	0,398	0,330	Moderate
Fixed Performance Mindset	0,200	0,109	weak
Growth Mindset	0,312	0,234	weak
Entrepreneurial Potential	0,483	0,449	moderate

Table 7. Determination Coefficient R2– Control Group

Source: Data from research (2020).

Measurement and Structural model - Experimental Group

Regarding the sample that underwent the interventions proposed by the “Training Your Mindset”, called “Experimental Group”, the indicators MC4, MFB3, TC4, TNE1, and TNE4 were excluded because they had external loads below 0.700.

Regarding simple and compound reliability, the Fixed Mindset of Performance and Fixed Blocking Mindset constructs obtained values that did not fall within the limits suggested by Hair et al. (2017). However, to maintain the model's parsimony, and considering that the constructs almost reached the proposed limit, the constructs remained in the model.

All constructs presented an AVE above the minimum required. The Fornell-Larcker and HTMT criteria were also met. The evaluation of the reflexive measurement model shows that it has internal consistency, convergent validity, and discriminant validity. Thus, it becomes possible to proceed with the evaluation of the structural model. In the structural model, all constructs did not present collinearity problems, according to the tolerance and VIF values reached. The statistical collinearity between the predictor is not a critical issue in the structural model. The accepted research hypotheses are shown in Table 6. The R^2 value of the Fixed Blocking Mindset construct (0.398) and the Entrepreneurial Potential (0.483) is considered moderate, while the R^2 in Fixed

Performance Mindset (0.200) and Growth Mindset (0.312) is considered weak. This result means that the variables preceding the Fixed Blocking Mindset, Fixed Performance Mindset, and Growth Mindset constructs explain 39.8%, 20%, and 31.2%, respectively, of the variance of the constructs and that the variables preceding the construct Entrepreneurial Potential explain 48.3% of the variance of the construct.

According to Table 7, the effects of the Openness Trait on the Growth Mindset, the Neuroticism Trait on the Fixed Blocking Mindset, and the Fixed Performance Mindset on the Entrepreneurial Potential are all moderate. In turn, the effect of the Growth Mindset on Entrepreneurial Potential is strong.

The Q^2 value of the Mindset Fixed Blocker (0.156), Fixed Performance Mindset (0.125), Growth Mindset (0.175), and Entrepreneurial Potential (0.353) constructs are just over 1. These results demonstrate the model's moderate predictive relevance to endogenous variables. Parsimonious Relations Structural Model can be viewed in Figure 2.

Discussion

Personality Traits

As determinants of Mindset, the clipping focused on the five major personality traits enumerated by McCrae and Costa (1987) and used by Mowen

(2000) for the analysis of consumer behaviors and other topics in the management sciences.

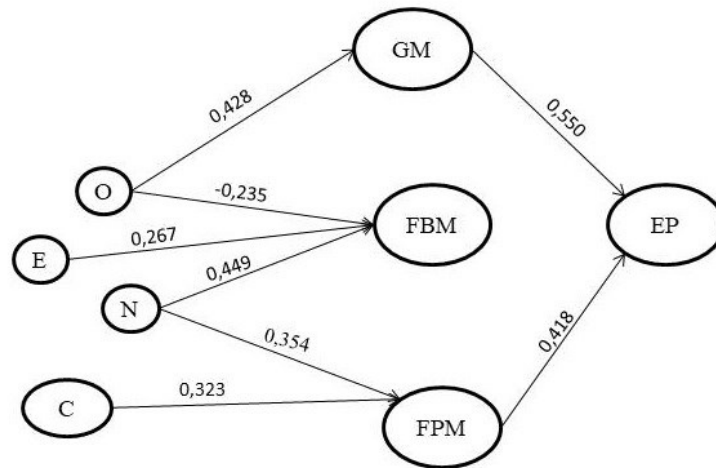


Figure 2. Parsimonious Relations Structural Model

Source: Data from research (2020).

The relationship between the Amiability and Extroversion traits and the Growth Mindset construct has no strong statistical relevance in any group (control or experimental), contrary to previous studies (Defeyter et al. 2012; Hazrati-Viari, Rad, & Torabi, 2012; Komarraju & Karua, 2005; Zweig & Webster, 2003). Openness, Amiability, and Extroversion and the Fixed Performance Mindset construct also did not show a statistically relevant relationship in any group, contrary to previous articles using cross-sectional descriptive methodologies that negatively linked Extroversion and Fixed Mindset (Furnham, 2014). Openness, Conscientiousness, and Amiability have not been tied to Fixed Blocking Mindset. It is justifiable since an individual who adopts a Fixed Mindset stance tends to avoid challenges, planning, organizing,

and striving for a performance that he deems appropriate; he adopts a perspective of competition and comparison (Matzler & Mueller, 2011; Judge et al. 1999; Komarraju & Karua, 2005; Dweck, 2017, 1999).

The Control Group displayed a relationship between the Growth Mindset with Conscientiousness and Neuroticism trait, which is supported by previous studies (Matzler & Mueller, 2011; Jones & McMichael, 2015; Schroder et al. 2017). A person with Conscientiousness is organized, has apparent purposes and goals, and is persistent and dedicated to achieving them. These characteristics are similar to those presented by those with a Growth Mindset (Dweck, 1999, 2017), which is a driver of emotional balance and life satisfaction, negatively linked to Neuroticism

(Schroder *et al.*, 2017). Another confirmed relationship was the trait of Neuroticism and the Fixed Performance Mindset (Jones & McMichael, 2015; Furnham, 2014), which characterizes possibly anxious, hostile, impulsive, and competitive individuals (Judge *et al.* 1999; Dweck, 1999, 2017; Schroder *et al.* 2017; Matzler & Mueller, 2011)

After the intervention, some changes were noted. Conscientiousness was not linked to the Growth Mindset but to the Fixed Performance Mindset, backed by Furnham (2014), Matzler and Mueller (2011), and Zweig and Webster (2003). Furnham, Matzler, and Mueller used the Dweck (1999) scale that does not subdivide the Fixed Mindset construct. The high-minded individual has traits of ordering, planning, and achievement, as well as an individual with a Fixed Performance Mindset, seeking mastery in their routinely performed tasks.

The relationship between Openness and Growth Mindset, in turn, was statistically relevant, as well as the studies by Furnham (2014), Defeyter *et al.* (2012), Hazvarati-Viari, Rad e Torabi (2012), and Jones and McMichael (2015). An individual with the Openness trait is imaginative and entrepreneurial, does not conform to his status quo, and is adept at change and growth (Mowen, 2000; Judge *et al.* 1999), which are characteristics that permeate the Growth Mindset (Dweck, 1999, 2017).

Finally, the Fixed Blocking Mindset was positively linked to Neuroticism

and negatively linked to Openness and Extroversion, as well to Furnham (2014), Jones and McMichael (2015), and Matzler and Mueller (2011). This individual is supposed to have a mental blocking configuration, preventing change and growth. To maintain their status quo, as they consider their skills and abilities to be somewhat limited, these individuals will assume a defensive, anxious, suspicious, and competitive stance and can create a hostile environment around them (Matzler & Mueller, 2011; Dweck, 1999, 2017; Judge *et al.* 1999).

Growth Mindset

The relationship between the Growth Mindset and Entrepreneurial Potential was positive in both groups, but the most vital relationship was after the treatment. Some works defend the existence of entrepreneurial Mindset individuals who have a growth-oriented perspective, adept at continuous changes and innovations, praising renewal and flexible environments. They have characteristics such as the propensity to detect entrepreneurial opportunities and to have insights that drive entrepreneurial activities, the ability to deal with risky situations that require urgent problem-solving, and the ease of performing their functions within an entrepreneurial framework (Ireland, Hitt, & Sirmon, 2003).

In addition, the concepts of Growth Mindset and Entrepreneurial Mindset come together, as both bring with them the trait of openness to new experiences

and the pursuit of learning-oriented toward growth. The first is linked to learning new things and intellectual and practical growth for systemic contribution to the organization. The second is linked to entrepreneurial activity per se (Ireland, Hitt, & Sirmon, 2003; Dweck, 1999, 2017; Fagundes, Luce, & Espinar, 2014; Fernandes, Raposo, & Fernandes, 2012). Studies relating to Growth Mindset with Entrepreneurial Potential were not found.

Fixed Mindset

The Fixed Performance Mindset has a relationship with the Entrepreneurial Potential in the Control Group, but a statistically non-relevant relationship. In the Experimental Group, the hypothesis was confirmed. An individual focusing on his performance and that of his team can result in a momentary effect of effectiveness, which for an exponential organization - which carries out short-term planning - may be interesting (Ismail; Vangees, & Malone, 2015). However, this attitude becomes problematic when avoiding challenges and new learning.

SEBRAE (Brazilian Micro and Small Business Support Service) argues that a high rate of micro and small businesses close down early in their first two years (SEBRAE, 2016). It is often due to a lack of strategic planning and management (Ferreira, Ferreira, Reis, & Santos, 2020; Baggio & Baggio, 2015). The results indicate that one reason would be to block challenges, accommodating to false stability that is not

characteristic of a dynamic and competitive market. An organization that does not innovate and, therefore, does not learn ceases to have a sustainable competitive advantage (Hana, 2013; Ahmad, Seman, Awang, & Sulaiman, 2014).

A Fixed Blocking Mindset inhibits creativity and innovation, causing the individual to lack entrepreneurial competence and dedication and the ability to deal with risky situations (Bower & Kowerski, 2017; Dweck, 1999, 2017). In his initial concept, this individual with Fixed Blocking Mindset will avoid all tasks that jeopardize his skills and status quo. Therefore, their EP was expected to be low or the relationship between the constructs negative. However, the Fixed Blocking Mindset is not associated with Entrepreneurial Potential at all, either negatively or positively, showing that this construct does not bring development to Entrepreneurial Potential.

The effectiveness of this treatment in a one-shot design (one section) has been verified in other studies, focusing on students and their academic performance (Schleider & Weisz, 2018; Debacker et al. 2018), as well as the application of methodologies that enhance entrepreneurial Mindset in undergraduate students (Morselli, 2018; Lindberg, Bohman, & Hultén, 2017). Studies such as Yeager *et al.* (2016) also show the sustainability of treatment to increase Growth Mindset in one-shot sections, testing it in longitudinal character. Education influences the development of

Entrepreneurial Potential, and, as a result, a Growth Mindset will help it to persist on the desired path, striving toward learning and growth (Ousios & Kittler, 2018).

Conclusions

The treatment performed in this paper proved to be efficient in inferring a relationship between personality traits, Mindset, and Entrepreneurial Potential. The relationship between Conscientiousness and the Growth Mindset occurred in the Control Group, which goes against the existing theory. However, the Experimental Group had an Openness Mindset related to Growth. In contrast, Conscientiousness did not have a significant relationship, thus contributing to the theory of traits and giving an experimental perspective to its results. The results also infer a relationship between Conscientiousness and a Fixed Performance Mindset and a negative relationship between the Extroversion and Openness trait and the Fixed Blocking Mindset. The first relationship puts, with experimental proof, Conscientiousness as a determinant of the Fixed Performance of Mindset, not the Growth Mindset. With this result, future research may refute or support this hypothesis for future confirmatory purposes. The relationship between the Growth Mindset and the Fixed Performance Mindset with the Entrepreneurial Potential contributes to the Mindset Management theory (Bower & Konwerski, 2017; Keating & Heslin, 2015) since

the individual, incited to development and Continuous learning is predisposed to adopt entrepreneurial practices within a culture that encourages these practices. Grant's theory (1991) also benefits from the results of this paper since the individual, open to learning, encode valuable knowledge that contributes systemically to the organization's development. Entrepreneurial Mindset theory can also benefit from the results of this paper. It is possible to add the Growth Mindset variable through the proposed treatment to its teaching methodology on entrepreneurship and Entrepreneurial Mindset. To study precisely where Growth Mindset differs from the entrepreneurial Mindset and how the two methodologies would increase the students' entrepreneurial potential (Daniel, 2016; Lindberg, Bohman, & Hultén, 2017).

Leaders can adopt the proposed experimental design to incite in their team a Growth Mindset. It is considered a tool still under construction and should be tested in other contexts and for samples in considerably more substantial sizes to generalize the results. However, the Growth Mindset can be fostered daily through a culture that encourages the power of individual cognitive creation and enhancement, which has innovation as part of organizational culture and encourages its individuals to learn and pursue development. Leadership style and organizational culture are supposed determinants of Mindset in an organization,

both Growth Mindset and Fixed Mindset. The manager should seek to develop and encourage their employees, seeking to meet their development needs, because the results obtained may not be sustained in a culture where a Growth Mindset is not encouraged in their staff. Human beings within an organization form its foundation, the most powerful existing software, with emotions, experiences, and a host of valuable tacit knowledge, which bring the organization a competitive advantage (Nagano, 2020). Treatments (i) that develop in the individual questions related to their motivation and individual determination; (ii) enhance the individual in the notion that knowledge has value, and that knowledge can evolve through effort and dedication; (iii) training creativity and efficiency in finding solutions to problems and obstacles, all these aspects prepare this individual at the micro-level, so that, together with his colleagues, contribute to the organization in a macro way.

The study, as all scientific work, has certain limitations, among them: (i) the small sample size that compromises the generalization and comprehensiveness of the results; (ii) the design change of Blackwell, Trzesniewski e Dweck (2007), compressing it into a single one-shot section, which compromises the assessment of treatment sustainability, limiting the assessment of results in a short period; and (iii) the focus of the study focusing on Startups, so its generalization into other designs might not achieve the same results. This paper

proposes some suggestions for future research, working on the above limitations. First, it is suggested to perform the treatment with more representative samples and in other contexts, such as the public sector and the traditional business and industrial sector, which are inserted in different cultures. Second, it is suggested to apply the treatment longitudinally, aiming to verify the sustainability of the treatment, which is verified in other studies, however, in different cultures from the Brazilian (Yeager et al. 2016). It is also counseled to apply the treatment of Blackwell, Trzesniewski e (2007) without compression of the steps and without drying the time between sections, verifying the assimilation and application of treatment in the routine of the sample, even for comparison between the different methodological designs. Third, further qualitative and quantitative research is advised to verify Mindset's relationship with consequences that contribute to management science, such as increased performance, engagement, and creativity. Experimental studies are also suggested in order to infer a cause-and-effect relationship between the variables.

References

Ahmad, A. R., Seman, A. A., Awang, M. M., & Sulaiman, F. (2015). Application of multiple intelligence theory to increase student motivation in learning history. *Asian Culture and History*, 7(1), 210-220.

Antoncic, B., & Hisrich, R. D. (2003). Clarifying the intrapreneurship concept. *Journal of small business and enterprise development*, 10(1), 7-24.

Antoncic, B., & Hisrich, R. D. (2001). Intrapreneurship: Construct refinement and cross-cultural validation. *Journal of business venturing*, 16(5), 495-527.

Antoncic, J. A., & Antoncic, B. (2011). Employee satisfaction, intrapreneurship and firm growth: a model. *Industrial Management & Data Systems*, 111(4), 589-607.

Baggio, A. F., & Baggio, D. K. (2015). Empreendedorismo: Conceitos e definições. *Revista de empreendedorismo, inovação e tecnologia*, 1(1), 25-38.

Barros, A.J.S., & Lehfeld, N.A.S. Fundamentos da metodologia científica. 3.ed. São Paulo: Pearson Prentice Hall, 2007.

Bedford, S. (2017). Growth mindset and motivation: A study into secondary school science learning. *Research papers in education*, 32(4), 424-443.

Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child development*, 78(1), 246-263.

Bower, M., & Konwerski, P. (2017). A mindset for career curiosity: Emerging leaders working in the digital space. *New directions for student leadership*, 2017(153), 89-101.

Caniëls, M. C., Semeijn, J. H., & Renders, I. H. (2018). Mind the mindset!

The interaction of proactive personality, transformational leadership and growth mindset for engagement at work. *Career development international*, 23(1), 48-66.

Carnevale, M., Yucel-Aybat, O., & Kachersky, L. (2018). Meaningful stories and attitudes toward the brand: The moderating role of consumers' implicit mindsets. *Journal of Consumer Behaviour*, 17(1), e78-e89.

Claro, S., Paunesku, D., & Dweck, C. S. (2016). Growth mindset tempers the effects of poverty on academic achievement. *Proceedings of the National Academy of Sciences*, 113(31), 8664-8668.

Cloninger, C. R. (Ed.). (1999). *Personality and psychopathology*. American Psychiatric Pub.

Cobb-Clark, D. A., & Schurer, S. (2012). The stability of big-five personality traits. *Economics Letters*, 115(1), 11-15.

Daniel, A. D. (2016). Fostering an entrepreneurial mindset by using a design thinking approach in entrepreneurship education. *Industry and Higher Education*, 30(3), 215-223.

DeBacker, T. K., Heddy, B. C., Kershen, J. L., Crowson, H. M., Looney, K., & Goldman, J. A. (2018). Effects of a one-shot growth mindset intervention on beliefs about intelligence and achievement goals. *Educational Psychology*, 38(6), 711-733.

DeFeyter, T., Caers, R., Vigna, C., & Berings, D. (2012). Unraveling the impact

of the Big Five personality traits on academic performance: The moderating and mediating effects of self-efficacy and academic motivation. *Learning and Individual Differences*, 22(4), 439-448.

Dweck, C. S. (1986). Motivational processes affecting learning. *American psychologist*, 41(10), 1040-1048.

Dweck, C. (2017). *Mindset: a nova psicologia do sucesso*. Objetiva.

Dweck, C. S. (1999). *Self-theories: Their role in motivation, personality, and development*. Psychology press.

Fagundes, C. V., Luce, M. B., & Rodriguez Espinar, S. (2014). O desempenho acadêmico como indicador de qualidade da transição Ensino Médio-Educação Superior. *Ensaio: avaliação e políticas públicas em educação*, 22(84), 635-669.

Felício, J. A., Rodrigues, R., & Caldeirinha, V. R. (2012). The effect of intrapreneurship on corporate performance. *Management Decision*, 50(10), 1717-1738.

Fernandes, M. G., Vasconcelos-Raposo, J., & Fernandes, H. M. (2012). Relação entre orientações motivacionais, ansiedade e autoconfiança, e bem-estar subjetivo em atletas brasileiros. *Motricidade*, 8(3), 4-18.

Ferreira, F. L., Bandeira, P. O., & Gonçalves, C. A. (2019). Mindset, dificuldades em se empreender e o Potencial Empreendedor: Uma abordagem confirmatória com estudantes graduandos em administração. *Revista de Ciências*

da Administração, 21(55), 51-68.

Ferreira, F. L., Benfenatti, J. C., Reis, K. E. G., & dos Santos, P. A. (2020). Perfil estratégico de gestores em pequenas e médias empresas nascentes no centro oeste mineiro: uma análise multivariada. *Revista da Micro e Pequena Empresa*, 14(2), 44-60.

Ferreira, F. L., Pinho, Á. D., Gonçalves, C. A., & Christino, J. M. M. (2020). O Mindset de Crescimento e a Administração: uma revisão bibliométrica e sistemática dos últimos 15 anos de publicação no Web of Science. *Gestão & Planejamento-G&P*, 21.

Furnham, A. (2014). Increasing your intelligence: Entity and incremental beliefs about the multiple "intelligences". *Learning and Individual Differences*, 32, 163-167.

Furnham, A., Chamorro-Premuzic, T., & McDougall, F. (2003). Personality, cognitive ability, and beliefs about intelligence as predictors of academic performance. *Learning and individual Differences*, 14(1), 47-64.

Gardner, H. (1983). *Frames of Mind*. New York: Basic Book. Zimbardo, Psychologie.

Gonçalves Filho, C., Veit, M. R., & Monteiro, P. R. R. (2013). Inovação, estratégia, orientação para o mercado e empreendedorismo: identificação de clusters de empresas e teste de modelo de predição do desempenho nos negócios. *RAI Revista de Administração e Inovação*, 10(2), 81-101.

- Hair Jr, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2017). *Advanced issues in partial least squares structural equation modeling*. Sage Publications.
- Hazrati-Viari, A., Rad, A. T., & Torabi, S. S. (2012). The effect of personality traits on academic performance: The mediating role of academic motivation. *Procedia-Social and Behavioral Sciences*, 32(1), 367-371.
- Hisrich, R. D. (1990). Entrepreneurship/intrapreneurship. *American psychologist*, 45(2), 209-222.
- Huang, L., & Luthans, F. (2015). Toward better understanding of the learning goal orientation–creativity relationship: The role of positive psychological capital. *Applied Psychology*, 64(2), 444-472.
- Ireland, R. D., Hitt, M. A., & Sirmon, D. G. (2003). A model of strategic entrepreneurship: The construct and its dimensions. *Journal of management*, 29(6), 963-989.
- Ismail, S., Malone, M. S., & Geest, Y. V. (2015). *Organizações exponenciais*. Alta Books Editora.
- Japutra, A., Loureiro, S. M. C., Molinillo, S., & Ekinci, Y. (2019). Travellers' mindsets and theory of planned behaviour. *Tourism Management Perspectives*, 30(1), 193-196.
- Jones, M. H., & McMichael, S. N. (2015). Personality and Motivation: Replication, Extension, and Replication. *International Journal of Educational Psychology*, 4(2), 170-197.
- Judge, T. A., Higgins, C. A., Thoresen, C. J., & Barrick, M. R. (1999). The big five personality traits, general mental ability, and career success across the life span. *Personnel psychology*, 52(3), 621-652.
- Keating, L. A., & Heslin, P. A. (2015). The potential role of mindsets in unleashing employee engagement. *Human resource management review*, 25(4), 329-341.
- Komarraju, M., & Karau, S. J. (2005). The relationship between the big five personality traits and academic motivation. *Personality and individual differences*, 39(3), 557-567.
- Krueger Jr, N. F. (2007). What lies beneath? The experiential essence of entrepreneurial thinking. *Entrepreneurship theory and practice*, 31(1), 123-138.
- Krueger, N. (1993). The impact of prior entrepreneurial exposure on perceptions of new venture feasibility and desirability. *Entrepreneurship theory and practice*, 18(1), 5-21.
- Lindberg, E., Bohman, H., & Hultén, P. (2017). Methods to enhance students' entrepreneurial mindset: A Swedish example. *European Journal of Training and Development*, 41(5), 450-466.
- Luthans, F., Avey, J. B., Avolio, B. J., Norman, S. M., & Combs, G. M. (2006). Psychological capital development: toward a micro-intervention. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 27(3), 387-393.

- Luthans, F., & Youssef-Morgan, C. M. (2017). Psychological capital: An evidence-based positive approach. *Annual review of organizational psychology and organizational behavior*, 4(1), 339-366.
- Maier, V., & Zenovia, C. P. (2011). Entrepreneurship versus intrapreneurship. *Journal Review of International Comparative Management*, 12(5), 971-980.
- Malhotra, N. K. (2001). *Pesquisa de marketing-: uma orientação aplicada*. Bookman Editora.
- Matzler, K., & Mueller, J. (2011). Antecedents of knowledge sharing—Examining the influence of learning and performance orientation. *Journal of Economic Psychology*, 32(3), 317-329.
- McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of personality and social psychology*, 52(1), 81.
- Morselli, D. (2018). Teaching a sense of initiative and entrepreneurship with constructive alignment in tertiary non-business contexts. *Education+ Training*, 60(2), 122-138.
- Mowen, J. C. (2000). *The 3M model of motivation and personality: Theory and empirical applications to consumer behavior*. Springer Science & Business Media.
- Nagano, H. (2019). The growth of knowledge through the resource-based view. *Management Decision*, 58(1), 98-111.
- Outsios, G., & Kittler, M. (2018). The mindset of UK environmental entrepreneurs: A habitus perspective. *International Small Business Journal*, 36(3), 285-306.
- Özduran, A., & Tanova, C. (2017). Manager mindsets and employee organizational citizenship behaviours. *International Journal of Contemporary Hospitality Management*, 29(1), 589-606.
- Puente-Díaz, R., & Cavazos-Arroyo, J. (2019). That is disgusting! Should I trust you?: The role of mindsets in brand trust after a negative incident. *Revista Brasileira de Gestão de Negócios*, 21, 254-273.
- Rattan, A., & Dweck, C. S. (2018). What happens after prejudice is confronted in the workplace? How mindsets affect minorities' and women's outlook on future social relations. *Journal of Applied Psychology*, 103(6), 676.
- Roccas, S., Sagiv, L., Schwartz, S. H., & Knafo, A. (2002). The big five personality factors and personal values. *Personality and social psychology bulletin*, 28(6), 789-801.
- Schleider, J., & Weisz, J. (2018). A single-session growth mindset intervention for adolescent anxiety and depression: 9-month outcomes of a randomized trial. *Journal of Child Psychology and Psychiatry*, 59(2), 160-170.
- Schroder, H. S., Yalch, M. M., Dawood, S., Callahan, C. P., Donnellan, M. B., & Moser, J. S. (2017). Growth mindset of

anxiety buffers the link between stressful life events and psychological distress and coping strategies. *Personality and individual differences*, 110, 23-26.

SEBRAE. (2016). "Sobrevivência das empresas no Brasil".

Song, Y. A., Lee, S. Y., & Kim, Y. (2019). Does mindset matter for using social networking sites?: Understanding motivations for and uses of Instagram with growth versus fixed mindset. *International Journal of Advertising*, 38(6), 886-904.

Tang, J. H., Chen, M. C., Yang, C. Y., Chung, T. Y., & Lee, Y. A. (2016). Personality traits, interpersonal relationships, online social support, and Facebook addiction. *Telematics and Informatics*, 33(1), 102-108.

Hana, U. (2013). Competitive advantage achievement through innovation and knowledge. *Journal of competitiveness*, 5(1), 82-96.

VandeWalle, D. (1997). Development and validation of a work domain goal orientation instrument. *Educational and psychological measurement*, 57(6), 995-1015.

Wang, L., Owens, B. P., Li, J. J., & Shi, L. (2018). Exploring the affective impact,

boundary conditions, and antecedents of leader humility. *Journal of Applied Psychology*, 103(9), 1019.

Wheeler, S. C., & Omair, A. (2016). Potential growth areas for implicit theories research. *Journal of consumer psychology*, 26(1), 137-141.

Yeager, D. S., Romero, C., Paunesku, D., Hulleman, C. S., Schneider, B., Hinojosa, C., ... & Dweck, C. S. (2016). Using design thinking to improve psychological interventions: The case of the growth mindset during the transition to high school. *Journal of educational psychology*, 108(3), 374.

Zeng, G., Hou, H., & Peng, K. (2016). Effect of growth mindset on school engagement and psychological well-being of Chinese primary and middle school students: The mediating role of resilience. *Frontiers in psychology*, 7, 1873.

Zingoni, M., & Byron, K. (2017). How beliefs about the self-influence perceptions of negative feedback and subsequent effort and learning. *Organizational Behavior and Human Decision Processes*, 139, 50-62.

Zweig, D., & Webster, J. (2003). Personality as a moderator of monitoring acceptance. *Computers in Human Behavior*, 19(4), 479-493.

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