



Character Strengths and Emotion Self-Regulation in Brazilian Workers

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Título: Fortalezas del carácter y autorregulación emocional en trabajadores brasileños.

Resumen: Las fortalezas del carácter y la autorregulación de las emociones son recursos psicológicos relevantes para ayudar a los trabajadores a hacer frente a las demandas actuales en trabajo. La presente investigación tuvo como objetivo probar la asociación y el poder predictivo de las fortalezas del carácter con respecto a la autorregulación emocional. Un total de 203 participantes con edades entre 18 y 68 años respondieron el cuestionario sociodemográfico, la Escala de Fortaleza del Carácter - Breve (EFC-Breve) y la Escala de Autorregulación Emocional - Adulto (EARE-AD). Los resultados indicaron asociaciones de débiles a fuertes entre los factores CSS-Brief y ESRS-AD. La fortaleza intrapersonal y las fortalezas intelectuales e interpersonales predijeron las estrategias de autorregulación emocional susceptibles de ser adoptadas por los trabajadores. La evidencia recopilada sugirió diferencias significativas en ESRS-AD y CSS-Brief con respecto a las características sociodemográficas de los participantes. Estos resultados se han producido independientemente del nivel jerárquico y del departamento de trabajo de los trabajadores.

Palabras clave: Recursos personales. Emociones en el trabajo. Psicología organizacional positiva. Salud ocupacional.

Abstract: Character strengths and emotion self-regulation are relevant psychological resources to help workers cope with current demands in the workplace. The present investigation aimed to test the association with and the predictive power of the character strengths regarding emotion self-regulation. A total of 203 participants aged 18 to 68 years answered the sociodemographic questionnaire, Character Strength Scale – Brief (CSS-Brief), and the Emotion Self-Regulation Scale – Adult (ESRS-AD). The findings indicated weak to strong associations between the CSS-Brief and ESRS-AD factors. The intrapersonal strength and the intellectual and interpersonal strengths predicted the emotion self-regulation strategies likely to be adopted by the workers. The gathered evidence suggested significant differences in the ESRS-AD and CSS-Brief regarding the participants' sociodemographic features. These results have occurred regardless of the workers' hierarchical level and job department.

Keywords: Personal resources. Emotions at work. Positive organizational psychology. Occupational health.

Introduction

In 2021, 37 civil servants from the *Instituto Nacional de Estudos e Pesquisas Anísio Teixeira* (INEP) asked to be removed from their positions just before the holding of nationally relevant school tests - such as the *Exame Nacional do Ensino Médio* (ENEM, National High School Exam) and the *Exame Nacional de Desempenho dos Estudantes* (ENADE, National Students Performance Exam). The justification given by the resigning officials was the technical and administrative fragility of INEP's top management (Luiz, 2021). Similarly, several secretaries of the Ministry of Economy resigned due to their disagreement with the aid policy proposed by the minister or by the manager of the government department (Nunes, 2021). Although such moves were tinted with political bias, they offer indications about the importance of managers' personal resources and their potential effects on individual or team decisions, as well as on organizational and social impacts. Regarding individual resources, we were especially interested in investigating the relationships between workers' character strengths and emotion self-regulation.

The understanding of the personal resources by Positive Psychology (PP) is expressed from the scientific study of how people seek well-being, thrive and deal with challenging situations (Csikszentmihalyi & Seligman, 2000; Seligman, 1998). PP emerged as a scrutiny movement about the historical tendency of psychological science to privilege the patho-

logical study of the human being (Paludo & Koller, 2007; Seligman, 2019). In connection with work, Positive Organizational Psychology (PPO) seeks to investigate positive subjective traits and experiences, and evaluate personal resources that can be developed at the individual or team level (Donaldson et al., 2019).

One of the most prominent topics of Positive Psychology, including its application to organizations, is character strengths. These are morally valued positive psychological traits that contribute to promoting the individuals and the communities' emotional health (Peterson & Seligman, 2004). The strengths are expressed through thoughts, feelings and behaviors, and linked to the search for meaning in life (Seligman, 2019). In addition, the use of strengths is identified as a protective factor for depression, suicidal ideation and substance abuse (Petkari & Ortiz-Tallo, 2016), associated with well-being and job satisfaction (Littman-Ovadia et al., 2017) and with personality factors such as extroversion, agreeableness and openness to change (Noronha & Campos, 2018). As a protective factor, the study of strengths applied to the work context is of current relevance since the phenomena of psychological illness are considered one of the main factors of work impairment in Brazil (Hirschle & Gondim, 2019).

With regard to the operationalization of character strengths, the Values in Action (VIA) classification was originally developed by Peterson and Seligman (2004) with the aim of favoring empirical strengths studies in different contexts. For this purpose, 24-character strengths composed the VIA, divided into six virtues (wisdom, courage, humanity, justice, temperance and transcendence). This strengths classi-

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fication has not been fully supported by investigators in different cultures (Littman-Ovadia & Lavy, 2012; Martínez-Martí & Ruch, 2016; McGrath, 2014), including in Brazilian culture (Noronha & Barbosa, 2016; Noronha & Batista, 2020b).

The VIA classification provided support for the construction of psychological assessment instruments. The Character Strengths Scale-Brief (CSS-Brief; Batista & Noronha, 2021) indicated the existence of a structure composed of two dimensions. The first factor refers to intrapersonal strengths which include experiences marked by a positive vision of the future, personal energy, appreciation for beauty and learning. Intrapersonal strengths include gratitude, vitality, hope and love for learning. On the other hand, the second factor corresponds to intellectual and interpersonal strengths, contemplating cognitive resources capable of helping the individual to deal with difficulties, solve problems and relate to other people in a healthy way. This last dimension encompasses strengths such as: teamwork, leadership, emotional intelligence, prudence, humor, fairness, among others.

Emotion self-regulation can be understood as a specific type of character strength that reflects the individual's control over his/her own responses (impulses and emotions) in order to achieve morally valued goals or patterns of actions (Noronha & Barbosa, 2016; Noronha & Batista, 2020b; Peterson & Seligman, 2004;). Similarly, the broader concept of emotion self-regulation corresponds to a dynamic and motivational system linked to the definition and implementation of personal, social or work goals and objectives (Gratz & Roemer, 2004; Nelis et al., 2011; Weiss et al., 2015). In the work context, in particular, self-regulation can further be understood as a process of managing feelings and emotions in order to match the function or position held (Silva & Gondim, 2019).

Emotion self-regulation strategies at work can be considered adaptive, maladaptive, functional or dysfunctional – classified according to contributions or losses to the performance of work activities or the mental health of the worker (Hirschle & Gondim, 2019). In addition, professions may require specific strategies and different levels of emotion self-regulation, as shown in the case of psychologists (Carlotto & Câmara, 2017), show artists (Silva & Gondim, 2019) and industrial workers (Hirschle & Gondim, 2019). In the service providers, for example, emotional planning and control are particularly relevant as emotions can benefit or hinder the goals with clients (Carlotto & Câmara, 2017).

In general, national studies on self-regulation have focused on the adaptation, construction and validation of instruments (e.g., Cremasco et al., 2020; Cruvinel & Boruchovitch, 2010; Gondim et al., 2015; Hirschle & Gondim, 2019; Noronha et al., 2019; Silva & Gondim, 2019) or in their relationship with variables related to work, interpersonal or subjective aspects. Emotion self-regulation demonstrated associations and predictive power regarding behavior variables at work in psychology professionals, such as burnout

syndrome (Carlotto & Câmara, 2017). Other Brazilian investigations further highlight that the ability to self-regulate one's emotions can contribute to engaging in healthier behaviors (Noronha et al., 2019), more harmonious interpersonal relationships (Batista & Noronha, 2018), associating with psychological and subjective well-being (Santana & Gondim, 2016) and with character strengths (Noronha & Batista, 2020a; Batista & Noronha, 2021).

More specifically, the relationships between emotion self-regulation and character strengths have been investigated in samples of college students and in the general population. In this connection, Noronha and Batista (2020a) reviewed the associations and the predictive power of character strengths on emotion self-regulation. Strengths most endorsed by participants included gratitude, persistence, and hope; while self-regulation, creativity and wisdom exhibited lower averages. In addition, all emotion self-regulation factors correlated significantly (weak and moderate magnitudes) with the strengths of self-regulation, vitality, and hope. Finally, the multiple linear regression model signaled that common sense, prudence, critical thinking, persistence and vitality were among the strengths with the greatest predictive power regarding emotional self-regulation strategies.

Similarly, the study proposed by Batista and Noronha (2021) aimed to seek evidence of validity of the Character Strengths Scale CSS-Brief, based on the relationship with other variables (emotion self-regulation). Intrapersonal strengths showed higher averages when compared to intellectual and interpersonal strengths. Both dimensions of character strengths were significantly related to emotion self-regulation strategies, with magnitudes ranging from weak to moderate. In addition, the two CSS-Brief factors predicted three of the four emotion self-regulation strategies. Despite the advances that the studies by Noronha and Batista (2020a) and Batista and Noronha (2021) have provided on the relationship between character strengths and emotion self-regulation, this research topic remains unexplored in the Brazilian literature in samples of professionals, including managers.

In light of the above, our investigation stems out of the following question: How are character strengths and emotion self-regulation related in a sample composed of professionals? We understand the relevance of this study because identifying character strengths and levels of emotion self-regulation is an important first step for the development of organizational policies based on the development of personal resources, as proposed by Positive Psychology (Donaldson et al., 2019). In addition, professionals encouraged to acknowledge and apply their character strengths are more apt to deal with greater demands, besides contributing to a reduction in absenteeism rates at work (Moore et al., 2022).

Thus, we developed this research with the objective of assessing: a) the associations between character strengths and regulation; b) the prediction of character strengths on emotion self-regulation and c) the differences in means in the variables factors of interest in relation to the professionals

sociodemographic characteristics (e.g. gender and working time). As a result, we propose the hypotheses that: H1) The correlations between character strengths and emotion self-regulation will be positive (coping strategies factor and total score) and negative (pessimism, paralysis and externalization of aggressiveness factors), ranging from weak to moderate (Noronha & Batista, 2020a); H2) Intrapersonal strengths, intellectual and interpersonal strengths will be able to predict emotion self-regulation strategies (Batista & Noronha, 2021) and H3) there will be significant differences in the use of emotion self-regulation strategies and character strength as a function of sociodemographic variables (e.g. gender, hierarchical level, marital status, sector of activity).

Methods

Design

According to the research classification proposed by Ato et al. (2013), we carried out an empirical research which adopted the associative strategy. More specifically, it was a cross-sectional predictive design whose main purpose was to explore a functional relationship through prediction of a criterion variable (emotion self-regulation) from one or more predictors (character strengths).

Participants

The sample consisted of 203 professionals, aged between 18 and 68 years ($M = 41.76$; $SD = 10.75$; 50.74% male), predominantly married (63.05%) and post-graduates (61.08%). Regarding the business field, 84.23% ($n = 171$) of the participants worked in industry in national companies (71.42%). Participants indicated having between one and 50 years of experience in management ($M = 23.06$; $SD = 10.40$), between less than one year and 46 years in a job as manager ($M = 23.06$; $SD = 9.70$) and reported working between four and 85 hours per week ($M = 10.32$; $SD = 6.63$).

Instruments

Sociodemographic questionnaire. It was developed in the present study to characterize the participants. It includes 12 items with information on age, gender, marital status, education level, number of hours worked per day, hierarchical level, years of professional experience, years of leadership experience, worker's field of activity, number of workers in the current or last employing company, company's field of activity and origin of the organization.

Character Strengths Scale – Brief (CSS-Brief; Batista & Noronha, 2020). The scale investigates character strengths through 18 items, arranged in two factors, namely: intrapersonal strengths (6 items; $\alpha = .83$) and intellectual and interpersonal strengths (12 items; $\alpha = .83$). The response format is a Likert-type scale, ranging from 0 (nothing to do with me) to 4

(everything to do with me). “I feel full of life” and “I face dangers to do good” are examples of the items.

Emotion Self-Regulation Scale-Adult (ESRS-AD; Noronha et al., 2019). This scale measures the emotion self-regulation of adults in the face of events that cause sadness. The instrument includes 34 items, split into four factors: adequate coping strategies (15 items; $\alpha = .98$), externalization of aggressiveness (7 items; $\alpha = .69$), pessimism (6 items; $\alpha = .88$) and paralysis (6 items; $\alpha = .92$). Participants must answer the items on a five-point Likert scale (0= “Never/Not at all” and 5= “Always”). The scores for the factors externalizing aggressiveness, pessimism and paralysis need to be inverted when considering the total score of the scale. The respondent must consider the statement “When I'm sad” to respond. “I think about other things” and “I feel like spanking others” are examples of ESRS-AD items.

Procedure

The investigation was submitted and approved by the Research Ethics Committee of Universidade São Francisco (CAEE: 53659716.8.0000.5514). Data collection was performed in 2019 to 2020, using a Google Form. The researchers used their social networks (LinkedIn, Facebook, WhatsApp and emails) to invite potential participants. The inclusion criteria were to have work experience and to agree with the research goals. Participants had to signed the Free and Informed Consent Form. Besides this consent, the Google Form comprised the sociodemographic questionnaire, the CSS-Brief and the ESRS-AD. Respondents took approximately 20 minutes to fill out the questionnaires.

Statistical Analysis

SPSS 25 software was used to review the data collected. Descriptive statistics (means and standard deviations) were used for the CSS-Brief and ESRS-AD factors. The correlation magnitudes between the factors of the CSS- Brief, the ESRS-AD, age, time as a manager were identified using Pearson's correlation test. The interpretation by Levin and Fox (2004) was chosen for the classification of magnitudes, being perfect ($r = 1.00$), strong (r between .60 and .99), moderate (r between .30 and .59) and weak ($r < .30$). Multiple linear regression (Enter method) was used to identify whether character strengths (CSS-Brief factors – independent variables) could predict emotion self-regulation (ESRS-AD factors – dependent variables). Finally, Student's t test and ANOVA were used to compare possible mean differences in the ESRS-AD and CSS- Brief factors ($p < .05$) in relation to the sociodemographic characteristics of the participants (gender, education, marital status, hierarchical level, field of activity, size, segment and origin of the company). Additionally, Cohen's d was used to calculate the effect size of the differences observed. Hence, a value equal to $d = .2$ was considered small effect size, $d = .5$ medium and $d = .8$ large (Cohen, 1992).

Results

Initially, descriptive analyses were conducted to identify means and standard deviations in the CSS-Brief and ESRS-AD factors participants. The scores of the factors externalizing aggressiveness, pessimism and paralysis of the ESRS-AD were inverted in order to compare the mean of these factors with the coping strategies factor. Intrapersonal strengths

were the most endorsed by participants in the CSS- Brief. On the other hand, the externalization of aggressiveness and paralysis factors were, respectively, the ones that had the highest and lowest averages in the ESRS-AD. Pearson's Correlation test indicated that all the factors of the ESRS-AD were significantly associated, with magnitudes varying between weak and strong (r .26 and .65). The results are shown in Table 1.

Table 1
Descriptive Statistics and Correlations between the CSS-Brief, ESRS-AD factors, age and time as a leader

		Mean	SD	1	2	3	4	5	6	7	8	9	10
Socio-demographic	1. Age	41.75	10.74	1									
	2. Time as leader	11.26	9.69	.74**	1								
CSS-Brief	3. Intrapersonal Strengths	3.24	0.61	.12	.09	1							
	4. Intellectual and Interpersonal Strengths	3.10	0.46	.09	.19**	.44***	1						
	5. Total Score	3.14	0.44	.12	.17**	.77***	-	1					
ESRS-AD	6. Coping strategies	2.98	0.63	.13	.10	.62**	.48**	.63**	1				
	7. Aggressiveness externalization	3.62	0.42	-.29**	-.24**	-.26**	-.28**	-.32**	-.31***	1			
	8. Pessimism	2.80	0.83	-.29**	-.26**	-.51**	-.29**	-.44**	-.47***	.31***	1		
	9. Paralysis	3.45	0.74	-.37**	-.35**	-.45**	-.29**	-.41**	-.43***	.37***	.71***	1	
	10. Total Score	3.17	0.50	.30**	.26**	.65**	.48**	.64**	-	-	-	-	1

Note: *** $p < .001$; ** $p < .01$; * $p < .05$.

Age was negatively associated with the externalization of aggressiveness, pessimism, paralysis (r between $-.29$ and $-.37$, $p < .01$) and positively with the total ESRS-AD score ($r = .30$; $p < .01$). These relationships were also observed between the time as a leading variable and the ESRS-AD factors, except for the coping strategies (r between $-.24$ and $-.35$) and with the overall ESRS-AD score ($r = .26$; $p < .01$). Furthermore, time as a leader showed a positive association with the factor intellectual and interpersonal strengths ($r = .19$; $p < .01$) and the total score ($r = .18$; $p < .05$) of the CSS-Brief. The magnitudes of the associations between ESRS-AD and CSS-Brief with the sociodemographic variables were weak. It is worth noting that the correlations between the total scores of the scales were omitted as they violate local independence.

Multiple linear regression analyses (Table 2) were applied

in order to verify whether the factors of character strengths (independent variables) would present predictive capacity in connection with emotion self-regulation factors (dependent variables). Thus, the two CSS-Brief factors were able to predict the factors of coping strategies and externalization of aggressiveness. The intrapersonal strengths factor showed greater predictive power in relation to the coping strategies factor, while the intellectual and interpersonal strengths factor showed greater predictive power in relation to the externalization of aggressiveness. Regarding pessimism and paralysis factors, only the intellectual and interpersonal strengths showed predictive capacity in relation to these factors. It is also noteworthy that the values identified in Durbin-Watson were adequate for residue independence (between 1.5 and 2.5).

Table 2
*Multiple linear regression analyses between CSS-Brief and ESRS-AD factors**

ESRS-AD (DV) Factors	CSS-Brief (IV) Factors	Non-standardized coefficients		Standardized coefficients	R ² Adjusted	t	p
		B	Standard Error	Beta			
Coping Strategies	Constant	0.22	.24			0.90	.37
	Intrapersonal Strengths	0.51	.06	.50	.43	8.42	<.01
	Intellectual and Interpersonal Strengths	0.35	.08	.26		4.38	<.01
Paralysis	Constant	3.57	.38			9.42	<.01
	Intrapersonal Strengths	-0.54	.09	-.40	.20	-5.72	<.01
	Intellectual and Interpersonal Strengths	-0.19	.13	-.11		-1.55	.12
Pessimism	Constant	2.82	.33			8.61	<.01
	Intrapersonal Strengths	-0.57	.08	-.47	.26	-6.99	<.01
	Intellectual and Interpersonal Strengths	-0.13	.11	-.08		-1.23	.22
Aggressiveness externalization	Constant	1.33	.20			6.53	<.01
	Intrapersonal Strengths	-0.12	.05	-.17	.09	-2.30	.02
	Intellectual and Interpersonal Strengths	-0.18	.07	-.20		-2.70	<.01

Note: DV – Dependent variables; IV- Independent variables; *The collinearity statistics showed the same values in the regressions: Tolerance (0.805) and VIF (1.243); **Reference value between 1.5 and 2.5.

Student's *t* test (Table 3) was applied to identify differences in the means associated with the gender of the participants, their origin (national or multinational) and the field where the company operated. Regarding the company's field of operation, there was only one participant whose company was in the services field; therefore, the *t* test was chosen, which did not indicate statistically significant differences. In relation to gender, statistically significant results were found for the factor intellectual and interpersonal strengths of the

CSS-Brief ($t[198.678] = -2.125; p = .035$). As for the ESRS-AD, statistically significant differences were identified in the externalization of aggressiveness factors, pessimism, paralysis and total score. It is noteworthy that men exhibited higher averages in the aforementioned factors. Finally, a statistically significant difference was identified regarding the origin of the participants' company in the paralysis factor ($t[117.527] = -1.965; p = .052$) of the ESRS-AD. Individuals working for multinational companies exhibited higher averages.

Table 3
Student's *t* Test Statistics

		Gender							Origin of the company						
		Women		Men		<i>t</i> (201)	<i>p</i>	Cohen's <i>d</i>	National		Multinational		<i>t</i> (201)	<i>p</i>	Cohen's <i>d</i>
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
CSS-Brief	Intrapersonal Strengths	3.21	.63	3.27	.59	-0.64	.52	-0.09	3.22	.60	3.29	.62	-0.69	.50	-0.11
	Intellectual and Interpersonal Strengths	3.02	.47	3.16	.43	-2.13	.03	-0.30	3.08	.42	3.12	.53	-0.51	.61	-0.08
	Total score	3.08	.44	3.19	.42	-1.79	.07	-0.25	3.12	.41	3.17	.50	-0.68	.50	-0.11
ESRS-AD	Coping Strategies	2.98	.64	3.02	.60	-1.08	.28	-0.15	2.93	.63	3.07	.60	-1.48	.14	-0.23
	Aggressiveness externalization	0.45	.48	0.31	.32	2.46	.01	0.34	0.38	.39	0.36	.47	0.30	.76	0.05
	Pessimism	0.71	.83	0.39	.59	3.09	.02	0.43	0.57	.74	0.49	.73	0.68	.50	0.10
	Paralysis	1.41	.88	1.00	.71	3.69	<.01	0.52	1.27	.84	1.03	.75	1.86	.06	0.29
	Total score	3.07	.52	3.26	.44	-2.83	<.01	-0.40	3.13	.48	3.25	.51	-1.56	.12	-0.24

ANOVA was applied to identify mean differences in the CSS-Brief and ESRS-AD factors according to the variables education, company size, marital status, hierarchical level of respondents (e.g. analyst, supervisor, among others) and the Department in which the participants worked (operational, administrative, among others). No statistically significant differences were found in the variables education and company size.

With regard to marital status, ANOVA indicated statistically significant differences in the factors intellectual and interpersonal strengths and total score of the CSS-Brief, and in the factors of coping strategies, paralysis and total score of the ESRS-AD. The *post-hoc* test did not indicate subgroups in the CSS-Brief factors, with divorced participants exhibiting the highest averages (Total Score = 3.24; Intellectual and Interpersonal Strengths = 3.20) and single participants (Total Score = 3.01; Intellectual and Interpersonal Strengths = 2.97) the smallest. As for the ESRS-AD, the *post-hoc* indicated two subgroups for the total score and coping strategies (single and married X divorced) and did not indicate subgroups

for the paralysis factor. Divorced individuals also exhibited higher averages (Total Score = 3.36; Coping Strategies = 3.29; Paralysis = 3.00) and single individuals the lowest (Total Score = 3.03; Coping Strategies = 2.85; Paralysis = 2.57).

As for the hierarchical level, statistically significant differences were identified in the factors intellectual and interpersonal strengths and total score of the CSS-Brief and in the factors coping strategies, externalization of aggressiveness, pessimism, paralysis and total score of the ESRS-AD. Respondents who were in presidency positions (Total score = 3.26; Interpersonal Intellectual Strengths = 3.28) had the highest averages both in the CSS-Brief factors and in the ESRS-AD factors (Total score = 3.43; Coping strategies = 3.18; Externalization of aggressiveness = 3.76; Paralysis = 3.20; Pessimism = 3.89), with a division of two subgroups being identified in the factors paralysis, pessimism and coping strategies (Analyst X Presidency). It is also noteworthy that the participants who are analysts had the lowest averages in the aforementioned factors. The ANOVA results can be seen in Table 4.

Table 4
ANOVA Results

	Marital Status									Hierarchical Level												
	Single		Married		Divorced		<i>F</i> (1,200)	η^2	Analist		Supervisor		Coordinator		Manager		Director		President			
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i> (1,200)	η^2
CSS-Brief																						
Intrapersonal Strengths	3.08	.73	3.30	.54	3.32	.60	2.709	.03	2.99	.68	3.12	.70	3.32	.52	3.34	.48	3.28	.77	3.22	.75	1.840	.04
Intellectual and Interpersonal Strengths	2.97	.49	3.13	.42	3.19	.53	3.041	.03	2.82	.53	2.97	.45	3.08	.43	3.21	.39	3.23	.41	3.27	.63	4.518	.10
Total Score	3.01	.46	3.19	.40	3.24	.49	3.983	.04	2.87	.50	3.02	.46	3.16	.37	3.25	.36	3.25	.44	3.25	.66	4.41	.10

	Marital Status								Hierarchical Level														
	Single		Married		Divorced		$F(1,200)$	η^2	Analyst		Supervisor		Coordinator		Manager		Director		President		$F(1,200)$	η^2	
	M	SD	M	SD	M	SD			M	SD	M	SD	M	SD	M	SD	M	SD	M	SD			
ESRS-AD																							
Coping Strategies	2.85	.71	2.98	.54	3.29	.76	3.567	.03	2.58	.82	3.06	.55	2.94	.56	3.11	.51	3.01	.65	3.17	.71	3.618	.08	
Aggressiveness externalization	0.44	.48	0.36	.38	.33	.43	0.799	.01	0.57	.41	0.43	.50	0.39	.46	0.30	.33	0.28	.36	0.23	.29	2.282	.05	
Pessimism	0.73	.96	0.46	.57	.55	.89	2.586	.02	1.15	.07	0.77	.87	0.39	.48	0.37	.51	0.34	.57	0.11	.19	7.547	.16	
Paralysis	1.43	.97	1.13	.71	1.00	.98	3.341	.03	1.81	.98	1.45	.84	1.12	.65	0.97	.76	0.95	.76	0.80	.60	6.34	.14	
Total Score	3.03	.59	3.20	.41	3.35	.62	3.895	.04	2.74	.61	3.12	.49	3.19	.43	3.31	.37	3.28	.45	3.43	.44	7.19	.15	

Finally, for the variable sector of activity, a statistically significant difference was identified in the externalization of aggressiveness factor ($F[196] = 2.300$; $p = .036$) of the ESRS-AD. No subgroups were identified in the *post-hoc* test. Participants from the administrative sector ($M = 3.17$), Human Resources and IT (both with $M = 3.66$) exhibited the highest averages, while participants from the commercial sector ($M = 3.39$) exhibited the lowest average. Finally, no significant differences were found between company size, field of activity and origin and gender of the participants.

Discussion and Conclusion

In this study, we tested the associations between character strengths and emotion regulation, the prediction of character strengths regarding emotion self-regulation, and the mean differences in the factors of the variables of interest in relation to the sociodemographic characteristics of the participants. Thus, we found that the associations between the strengths and emotion self-regulation factors were negative with externalization of aggressiveness, pessimism and paralysis, and positive with coping strategies. In addition, the relationship between the total scores of the CSS-Brief and the ESRS-AD was positive, since the externalizing factors of aggressiveness, pessimism and paralysis need to be inverted when considering the total score. This result partially supports hypothesis H1. H2 concerned the predictive power of strengths on emotion self-regulation strategies and was confirmed. Similarly, the hypothesis about significant differences between strengths and the use of self-regulation strategies as a function of sociodemographic variables (H3) was also corroborated. We observed differences according to gender, company field, marital status, hierarchical level and department of activity of the participating professionals.

The positive association between the scores of the CSS-Brief and ESRS-AD scales enhance the scientific evidence that indicate strengths as a protective factor for the variables related to mental health (Littman-Ovadia & Lavy, 2012; Petkari & Ortiz-Tallo, 2016). In this connection, the relationships between character strengths and emotion self-regulation were previously tested in university students and in the general population (Batista & Noronha, 2021; Noronha & Batista, 2020a). Batista and Noronha (2021) found weak to strong correlations between the CSS-Brief and the ESRS-AD in a sample of 623 people. Male participants had

higher means in the CSS-Brief and ESRS-AD. Furthermore, the authors indicated that both factors of character strengths predicted emotion self-regulation strategies – with the exception of externalizing aggressiveness. More specifically, intrapersonal strengths had greater predictive power over paralysis and pessimism strategies.

The results of our study showed similarities and differences when compared to the studies carried out by Batista and Noronha (2021). Similarly, correlations ranged from weak to strong in our sample of professionals. In addition, male workers also exhibited higher averages in the CSS-Brief and ESRS-AD factors. However, our findings indicated the predictive power of the two factors of character strengths on coping strategies and the externalization of aggressiveness. Only the intellectual and interpersonal strengths were predictive of pessimism and paralysis factors of the ESRS-AD.

In contextual terms, our investigation showed a difference in the factors of the CSS-Brief and the ESRS-AD in terms of sociodemographic aspects, with emphasis on the hierarchical level and field of activity of the participants. Respondents in presidency positions exhibited higher averages and analysts the lowest in the factors of the adopted scales. Participants from the administrative, human resources and IT departments had higher averages in the aggressiveness externalization factor of ESRS-AD. These results do not find support in the national literature. The study by Wolff et al. (2021) sought to investigate character strengths in a sample of 60 IT professionals. However, the authors did not indicate significant differences due to sociodemographic aspects. Despite this, they corroborated for the importance of studying strengths, including emotion self-regulation, as necessary variables to promote healthier work settings.

In our investigation, we adopted instruments with satisfactory psychometric characteristics for the investigation of character strengths and emotion self-regulation in Brazilian samples. Despite of this, our investigation had some limitations. The first one was the research design (cross-sectional predictive design). It relayed on a single sample of participants not randomly selected which may impact the results interpretation. Additionally, another limitation was the sample size which might have not represented the richness of Brazilian culture. A third limitation was that our study did not investigate potential outcomes related to the workplace (e.g. job satisfaction, job performance, etc.) which can be difficult to suggest practical implications for human resources professionals, including psychologists.

We sought to expand the sample to working participants in this study, considering the importance of further studies on positive organizational psychology. We still recognize the need for future studies to test the relationships between character strengths and emotion self-regulation with typical variables of organizational behavior. We also suggest carrying out experimental studies that propose interventions for the training of character strengths and emotion self-regulation in the workplace.

Our findings help to indicate that professionals who are encouraged to recognize and apply their character strengths are more apt to deal with greater demands at work (Moore et

al., 2022). In addition, it encourages investigating how emotion self-regulation is expressed at work which can contribute to interventions aimed at positively affecting the engagement of professionals towards healthier behaviors (Noronha et al., 2019) and in more harmonious interpersonal relationships (Batista & Noronha, 2018).

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