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SELF-EFFICACY AND PSYCHOLOGICAL WELL-BEING OF FEMALE ENTREPRENEURS: A STUDY ON THE BRAZIL-ARGENTINA BORDER

Autoeficácia e bem-estar psicológico de empreendedoras: Um estudo na fronteira Brasil-Argentina

Autoeficacia y bienestar psicológico de mujeres emprendedoras: Un estudio en la frontera Brasil-Argentina

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ABSTRACT

The study aimed to compare entrepreneurial self-efficacy and psychological well-being as well as the relationships between these constructs in Brazilian and Argentinean female entrepreneurs. A total of 404 women participated in a survey during a development program at two universities located on the border. The results point to several similarities, which can promote rapprochement and development, and differences, which, if not managed assertively, can lead to conflicts. The results demonstrate associations between entrepreneurial self-efficacy and psychological well-being, thereby expanding the entrepreneurship literature. This study develops the understanding of motivation in entrepreneurial cognition, redefines entrepreneurial success, broadens the scope of women's entrepreneurial role in this border region, and identifies elements to promote cooperation between female entrepreneurs in both countries. From a managerial point of view, the research shows the need for managers to be aware of cultural differences in everyday actions and negotiations within these territories.

Keywords: women entrepreneurs, Latin America, entrepreneurial self-efficacy, psychological well-being, entrepreneurial cognition.

RESUMO

O objetivo do estudo foi comparar os níveis de autoeficácia empreendedora e bem-estar psicológico e as relações entre ambos os constructos em empreendedoras brasileiras e argentinas. No total, participaram de um estudo survey 404 mulheres durante um programa de desenvolvimento de duas universidades fronteiriças. Os resultados apontam diversas semelhanças, que podem promover aproximação e desenvolvimento, e também diferenças, que se não forem geridas de forma assertiva podem gerar conflitos. As evidências demonstram associações entre autoeficácia empreendedora e bem-estar psicológico que ampliam a literatura de empreendedorismo. A contribuição desenvolve o entendimento da motivação na cognição empreendedora, ressignifica o sucesso empreendedor, expande os limites do papel empreendedor da mulher nessa região fronteiriça, e ainda, identifica elementos para promover a cooperação entre as empreendedoras nos dois países. Do ponto de vista gerencial, a pesquisa mostra aos dirigentes a necessidade de ter presentes as diferenças culturais no cotidiano das ações e negociações nesses territórios.

Palavras-chave: mulheres empreendedoras, América Latina, autoeficácia empreendedora, bem-estar psicológico, cognição empreendedora.

RESUMEN

El estudio se propuso comparar los niveles de autoeficacia empresarial y bienestar psicológico y las relaciones entre ambos constructos en emprendedoras brasileñas y argentinas. En total, 404 mujeres participaron en una encuesta durante un programa de desarrollo en dos universidades fronterizas. Los resultados apuntan similitudes que pueden promover el acercamiento y desarrollo, y también diferencias, que, si no fueran gestionadas asertivamente, podrían generar conflictos. La evidencia demuestra asociaciones entre la autoeficacia empresarial y el bienestar psicológico que amplían la literatura sobre emprendimiento. La contribución desarrolla la comprensión de la motivación en la cognición emprendedora, ofrece un nuevo significado al éxito empresarial, amplía los límites del rol emprendedor de las mujeres en esta región fronteriza e identifica elementos para promover la cooperación entre ambos países. Desde el punto de vista empresarial, la investigación muestra la necesidad de que los directivos sean conscientes de las diferencias culturales en las acciones y negociaciones cotidianas en estos territorios.

Palabras clave: mujeres emprendedoras, América Latina, autoeficacia emprendedora, bienestar psicológico, cognición emprendedora.

INTRODUCTION

The economic and social development of border regions depends on fostering closer ties that help overcome the challenges imposed by the diverse cultural context converged by the countries that integrate these territories (Barros & Samurio, 2019; Carneiro, 2019; Lopes et al., 2023; Miyazaki, 2023; Pessoa & Souza, 2021).

This study offers knowledge about the similarities and differences between female entrepreneurs from Brazil and Argentina to serve as a basis for the development of interaction processes since they imply opportunities for building alliances and identities (Carneiro, 2019).

Studies with female entrepreneurs in Latin America are limited (Amorós et al., 2019). It is known that female entrepreneurship in this region occurs mostly out of necessity but nevertheless leads to empowerment and emancipation compared to other occupational choices (Ibáñez & Guerrero, 2022). In the case of Brazil and Argentina, the participation of female entrepreneurs in the economy is relevant (Bosma & Kelley, 2019). As border integration expresses a political, economic, and social process of deepening cooperative relations with the aim of development (Pessoa & Souza, 2021), research into the elements that constitute these borders as spaces for forming demands and experimenting with solutions in which regional decisions have intense repercussions is gaining momentum (Desiderá & Penha, 2016). The cognition of female entrepreneurs is one of the elements that determine these decisions.

With regard to the broad spectrum that entrepreneurial cognition represents, in this research, the relationship between entrepreneurial self-efficacy (ESE) and psychological well-being (PWB) was chosen as the theoretical object of study. Previously, scholars have shown evidence of an association between ESE and PWB (Bandura, 2010; Liu et al., 2010; Singh et al., 2019), but few studies have been carried out with female entrepreneurs (Ryff, 2018, 2023). Shir and Ryff (2022) point out that there is a need for additional studies to explain well-being in light of the dynamic nature of the entrepreneurial process. In addition, studies focusing on the relationship between ESE and PWB among female entrepreneurs are needed (Bianchi et al., 2016; Castellano et al., 2017) because they face different barriers to entrepreneurship, such as difficulty in balancing work and family due to having a greater degree of responsibility in domestic activities, less access and reach to the network and opportunities, less access to granting financing, and also, personal barriers to professional life coming from sociocultural beliefs (Adikaram & Razik, 2022; Lemos et al., 2020; Naguib, 2022; Ribes-Giner et al., 2018; Wu et al., 2019).

Therefore, the problem lies in knowing whether ESE is sufficient to produce well-being in order to mitigate such barriers (Ribes-Giner et al., 2018). In addition, knowing this relationship in two contexts in which entrepreneurship because of necessity for women predominates (Puente et al., 2019), an area with a recommendation for studies associated with well-being (Ryff, 2018), may be even more promising because it uncovers necessary policies in this field.

Self-efficacy is the judgment of one's ability to act (Rosique-Blasco et al., 2018). As a sense of "personal agency" or "entrepreneurs' agency," self-efficacy influences the individual choice of activities and business performance (Bandura, 1994, 2001; Zhao et al., 2005), influencing openness to entrepreneurial learning (Markowska & Wiklund, 2020). ESE serves as fuel for psychological well-being (PWB), specifically for female entrepreneurs (Ribes-Giner et al., 2018). For female entrepreneurs (Mozahem, 2021), self-efficacy contributes to greater work engagement (Newman et al., 2019) and business performance (Kazumi & Kawai, 2017).

In turn, PWB consists of the full functioning of a person's potential (Ryan & Deci, 2001), which influences the commitment and motivation of female entrepreneurs (Ribes-Giner et al., 2018; Shir et al., 2019; Stephan, 2018; Wiklund et al., 2019). Self-efficacy is related to female entrepreneurs' beliefs in their abilities to perform tasks (Bandura, 1986, 2000; Bandura & Wood, 1989; Stephan, 2018; Wiklund et al., 2019) and well-being to their sense of developing individual potential (Ryan & Deci, 2001).

The description of the levels and relationship between these theoretical constructs in the two groups of female entrepreneurs may indicate that there is no homogeneity among women, and thus, elements related to national culture may be observed and confirmed (Bullough et al., 2022; Naidu & Chand, 2017). Therefore, this research aimed to evaluate the differences and similarities between ESE and PWB in Brazilian and Argentinean female entrepreneurs. Thus, the constructs were first validated using multigroup confirmatory factor analysis. Second, significant differences were tested between the levels obtained in the standardized scores. Third, the constructs were correlated in each group and compared again to determine significant differences between the correlations.

The results revealed evidence of both differences and similarities. This indicates that female entrepreneurs are not homogeneous, reinforcing that culture influences gender roles and identities (Bullough et al., 2022; Ladge et al., 2019).

Contributions to the literature on female entrepreneurship are seen. The association of PWB with ESE showed that the constructs could broaden the understanding of motivation in entrepreneurial cognition (Shepherd & Patzelt, 2018). Higher levels of self-efficacy, when combined with higher levels of entrepreneurial well-being, associate the effectiveness and persistence of female entrepreneurs (Bandura, 1977, 1986) with better levels of well-being, which in turn are associated with positive feelings and may produce higher levels of optimism and motivation.

This research shows that studying the relationship between ESE and PWB allows us to rethink the meaning of the term entrepreneurial success (Shir & Ryff, 2022) and also the performance of the entrepreneurial role by women in the two countries. It highlights the importance of considering these elements when formulating policies to promote and strengthen female entrepreneurship. It points to various elements that promote cooperation between female entrepreneurs in the two countries. Finally, the research contributes to the need for leaders in border regions to consider cultural differences, such as those observed in the day-to-day actions and negotiations in these territories.

THEORETICAL BACKGROUND

Entrepreneurship and psychological well-being

The definition of well-being presents two main perspectives: eudaimonic and hedonic (Hahn et al., 2012; Ryan & Deci, 2001). The hedonic perspective focuses on subjective well-being, which consists of positive emotions and satisfaction with life, having more weight than negative emotions. This approach focuses on people's evaluation of their lives, encompassing personal values, needs, beliefs, and expectations. The eudaimonic perspective focuses on personal fulfillment and development, self-realization, individuation, and self-determination. Hedonic well-being refers to happiness, in terms of obtaining pleasure; eudaimonic well-being evaluates self-realization and having a meaningful purpose in life (Ryan & Deci, 2001).

The eudaimonic approach to well-being attributes content to human nature, seeks to discover that content, and understands the conditions that enhance or reduce it (Deci & Ryan, 2008). Moreover, it considers that well-being consists of more than just happiness (Deci & Ryan, 2008). This perspective holds that well-being refers to realizing one's true nature and promotes virtuous potential through a satisfying life (Deci & Ryan, 2008). Waterman et al. (2008) point out that eudaimonic pleasure is associated with feelings when the individual moves toward self-realization, seeking the development of individual potential and promoting individual life purposes.

In defining the structure of PWB, Ryff (1989) and Ryff and Keyes (1995) suggested six dimensions of the construct: 1) self-acceptance: the ability to have a positive attitude toward oneself and accept multiple aspects of one's personality and feel comfortable with one's past; 2) positive relationship with others: having satisfactory and confident relationship with other people, ability to develop empathy, intimacy, and affection, understanding what the relationship between people is like; 3) autonomy: being able to resist social pressures, being self-determined and independent, as well as evaluating and analyzing one's experiences according to personal criteria; 4) environmental mastery: having a sense of mastery and competence in managing the environment, controlling complex activities, being able to choose and create appropriate contexts to meet personal needs and values; 5) purpose in life: having goals and objectives in life and a sense of direction, holding beliefs and purposes, realizing that there is meaning in life; 6) personal growth: being open to new experiences, realizing one's potential, seeking improvements in oneself and one's behavior over time, realizing one's growth and expansion. The dimensions of PWB cover life conditions, relationships, personal accomplishments, past experiences, and future expectations (Keyes & Ryff, 1998; Ryff & Keyes, 1995).

Female entrepreneurs' well-being is the experience of satisfaction, positive affect, infrequent negative affect, and psychological functioning related to the development, initiation, growth, and management of an entrepreneurial venture (Wiklund et al., 2019). According to this concept, well-being is relevant at all stages of the entrepreneurial process. It can influence action (Hahn et al., 2012) and contribute to the long-term flourishing of some business ventures (Ryff, 2018).

Ryff (2018) highlighted the critical role of eudaimonic well-being at different stages of the entrepreneurial process. She considered that there are five main spaces for studies with eudaimonic approach in entrepreneurship: a) autonomy and eudaimonic well-being; b) entrepreneurship influenced by opportunity and need and eudaimonic well-being; c) eudaimonia throughout the process; d) entrepreneurs' well-being and health; and e) entrepreneurs and the eudaimonia of others. Recently, Ryff (2023) addressed perspectives for future PWB studies and reinforced the need to examine the intersection of entrepreneurial studies with eudaimonic well-being. Ryff (2023) argues that conventional conceptions of entrepreneurial success focus on business profits. However, the entrepreneur's PWB is another measure of success that raises issues of virtue, morality and ethics in the business world.

For Shir and Ryff (2022), it is necessary to consider the dynamics of the entrepreneurial process when studying entrepreneurs' well-being. Factors such as self-responsibility, attention to many factors, and commitment are probably critical to carrying out the entrepreneurial process. For the authors, entrepreneurs who are guided by a sense of vocation, aligned with the core meanings of eudaimonia, may be more likely to prevail and persist in the challenges ahead.

Entrepreneurship and self-efficacy

Self-efficacy is a personality trait that affects motivation to perform tasks or a degree of tolerance for facing adverse situations, including individual perception of risk (Bandura, 1977). It also represents the belief in the personal ability to perform a task (Bandura, 2000; Bandura & Wood, 1989; Brown et al., 2001).

Self-efficacy is one of the central concepts of the Social Cognitive Theory (SCT) proposed by Bandura (1977). It assumes that people are intentional, able to self-regulate their actions, and command themselves in the learning process, consciously seeking experiences that can promote their own goals (Bandura, 1986). In this sense, individuals focus on contexts in which they believe they will succeed, and thus, self-efficacy influences evaluations and decisions (Bandura, 1977). People with higher self-efficacy tend to be more persistent and work harder to accomplish a task. In addition, people with higher self-efficacy overcome security-threatening situations that might exert control over them. This may help reduce stress (Bandura, 1977).

Entrepreneurial self-efficacy (ESE) is an application of Bandura's concept of self-efficacy to the field of entrepreneurship. It refers to the confidence an individual has in performing the role of an entrepreneur and the tasks associated with it (Chen et al., 1998). For female entrepreneurs, self-efficacy is as important as self-esteem and self-confidence (Bandura, 1993). Self-efficacy plays an important role in the self-regulation of the entrepreneur's motivation (Bandura, 1994; Salanova et al., 2001), the entrepreneur's persistence and the ability to cope with uncertainty and failure (Bandura, 2000; Salanova et al., 2001), as well as in the creative and innovative capacity (Law & Breznik, 2017). Even before venture creation, self-efficacy influences entrepreneurial intentions (Tiwari et al., 2017; Zhao et al., 2005). ESE explains the belief that female entrepreneurs have in their ability to perform work or create new ventures (Sánchez et al., 2011). In addition, ESE moderates the

relationship between perceived uncertainty and opportunity identification (Markowska & Wiklund, 2020; Schmidtt et al., 2018), influencing the identification and exploitation of opportunities.

Noble et al. (1999) suggested six dimensions to measure ESE: 1) development of new products and market opportunities: the skill sets that allow for the recognition of opportunities – personal belief in the creative ability to find market opportunities to develop new products and services, adapting to change; 2) building an innovative environment: a personal belief in the ability to create a risky environment that favors innovation; 3) initiating relationships with investors: the ability of female entrepreneurs to use their networks, seeking to attract new resources that will assist in the creation of their business; 4) defining the core objective of the business: dimension that explains that the more the individual focuses on a goal, the greater their motivation for the venture; 5) dealing with unexpected changes: ability to work under uncertainty, be tolerant to problems and adapt to changes; 6) developing key human resources: represents the belief in the ability to attract and retain talent for the company.

Self-efficacy, well-being, and female entrepreneurs The growth of companies created by women is the focus of research, especially when the companies are created out of necessity, such as in the countries where this research was carried out. One predictor of the growth of female entrepreneurs' businesses is self-efficacy (Ladge et al., 2019). According to these authors, self-efficacy contributes to women feeling more confident in strategizing and pursuing growth.

In addition, Ladge et al. (2019) point out that social identity affects the self-efficacy of female entrepreneurs, and thus, social norms associated with gender influence the self-efficacy of female entrepreneurs. This may explain variations between the levels of ESE in female entrepreneurs from different countries (Minniti, 2009; Newman et al., 2019). At the same time, this relationship between ESE and culture suggests the possibility of variations in the self-efficacy of Brazilian and Argentinean female entrepreneurs.

Considering that self-efficacy influences well-being (Ribes-Giner et al., 2018; Sánchez et al., 2011), this relationship may occur in the case of female entrepreneurs. If this is the case, well-being may provide female entrepreneurs with a satisfying experience with positive effects related to the entrepreneurial role at all stages of entrepreneurship (Wiklund et al., 2019). Assuming the association between self-efficacy and well-being (Bandura, 2010; Liu et al., 2010; Singh et al., 2019), there may be similarities in this relationship when evaluating the context of different countries. In order to clarify possible similarities or differences in the relationship between ESE and PWB, an exploratory study was carried out, as explained below.

METHODOLOGY

Research design and data collection

This study is a quantitative, descriptive, and cross-sectional research based on a non-probabilistic convenience sample. Access to the participants occurred during a program developed by two universities - one Brazilian and one Argentinean.

Data collection occurred from September to November 2019. Three strategies were adopted in this stage. Participants were contacted during the meetings of the program held in the two universities. Those who accepted to participate were given access to the instruments (online or during the meeting). Participants were contacted via membership associations (researchers asked associations to send the invitation and the instruments to their members online to collect the contributions of those who accepted to participate). Furthermore, the researchers sent the invitation and instruments online to female entrepreneurs with whom they have a relationship. A total of 404 female entrepreneurs participated in the survey. The sociodemographic characteristics surveyed, in addition to nationality, were age, city of residence, and level of education matched by the equivalence table defined by the Brazilian Government (Decreto no 6.729, 2009).

As instruments to assess the theoretical constructs of the study, first, the entrepreneurial self-efficacy (ESE) scale (Noble et al., 1999) was applied. The version employed consists of twenty-three items on a seven-point Likert scale from “totally unable” (1) to “totally able” (7). The dimensions are 1) product development and market opportunities (PO); 2) building an innovative environment (EN); 3) defining the main business objective (BO); 4) developing key human resources for the company (HR); 5) establishing potential investors relationship (IR), and 6) being able to handle unforeseen changes (UC). This instrument has been validated in previous studies in Spain by Moriano et al. (2006), in Argentina by Mayoral and Ferrer (2014), and in Brazil by Camozzato et al. (2017).

Second, the psychological well-being scale (Ryff & Keyes, 1995) was applied. This instrument is validated in Brazil by Machado et al. (2013) and in Argentina by Rodriguez et al. (2012). This instrument used a six-point Likert format, from “strongly disagree” (1) to “strongly agree” (6). The even number of options adopted for this scale results from the need to assess either positive or negative affect, and a median response is not possible. The instrument’s correction followed the protocol defined by the authors, which resulted in six dimensions for its evaluation: 1) positive relationship (PR); 2) autonomy (AU); 3) environmental mastery (EM); 4) personal growth (PG); 5) purpose in life (PL), and 6) self-acceptance (SA). Once data collection was completed, the database was transcribed, and the data analysis step began.

Data analysis

With data collection completed, Harman’s single factor test (Kimura, 2015) checked the basis quality by controlling for common method bias, and the result showed a 24.23% cumulative variance. Cronbach’s (1951) alpha test assessed reliability and showed a result of $\alpha=0.94$ for the ESE scale and $\alpha=0.86$ for the PWB scale. McDonald’s (1970) omega test checked the composite reliability, and the result for ESE scale was $\omega=0.95$ and for PWB scale was $\omega=0.90$. Multivariately, Mardia’s (1970) test was implemented, and univariately, the Shapiro-Wilk test (Razali & Wah, 2011), which verified the non-normality of the distributions ($p < 0.05$).

The instruments were validated by multigroup confirmatory factor analysis (MGCFAs) (Bialosiewicz et al., 2013; Milfont & Fischer, 2010). Due to the non-normality of the distributions,

robust confirmatory factor analysis (Li, 2016) was used with the estimates extracted by the MLM method with Satorra-Bentler's scale correction. The following indicators inspected the adjustment of the model: root mean square error of approximation (RMSEA) (Steiger, 1990) index and confidence interval at 90%, standardized residual mean square root (SRMR) (Pavlov et al., 2021), comparative adjustment index (CFI), Tucker-Lewis index (TLI), and chi-square (χ^2) with their degrees of freedom and significance level (p). The description of the adjusted model used the factor covariance (ϕ) of the dimensions, the factor loadings (λ) and the residual covariance (δ) of the items. The post hoc threshold value of 0.10 (Shi et al., 2018) demonstrated the correlation matrix among the observed residuals. To check for configuration, metric, and scalar invariance across nationalities, the Δ SRMR, Δ RMSEA, and Δ CFI indicators were observed (Chen, 2007; Putnick & Borsntein, 2016).

Comparisons were performed with the standardized scores. First, the Mann-Whitney U-test (McKnight & Najab, 2010) compared the female entrepreneurs in both nations of the latent variables that represented the dimensions of the constructs. Second, the correlations between the dimensions of both constructs were compared. After composing the results matrix through Spearman's rho (ρ) test (Clef, 2013), when the coefficients for both nationalities proved significant, Fischer's r -to- z transformation test (Colman, 2009) verified the difference between the correlation strengths.

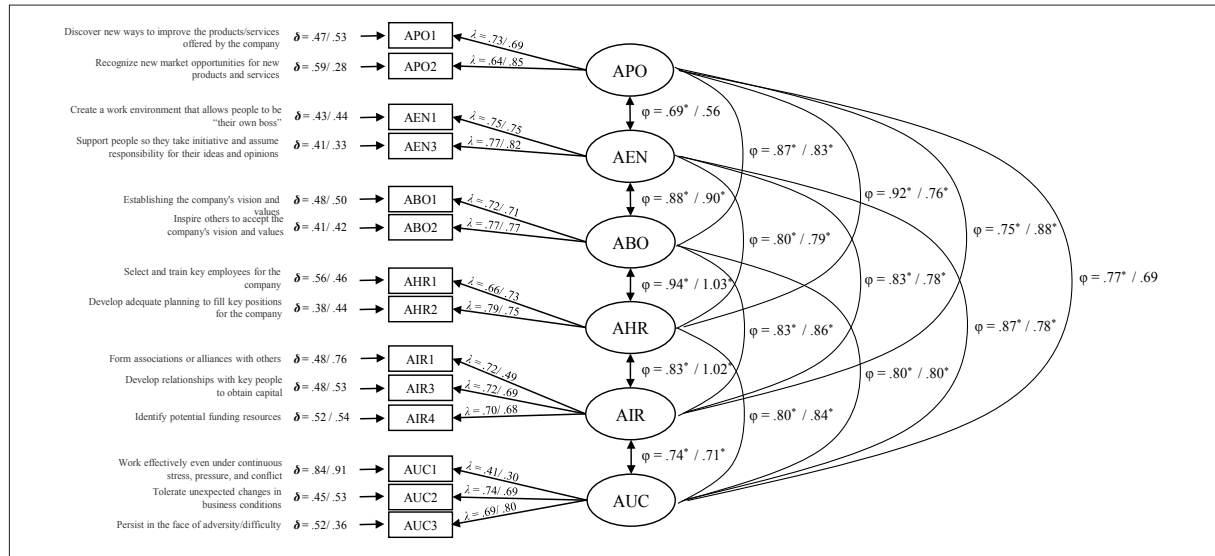
The significance level adopted in all tests was 0.05. The R language (R Core Team, 2022) with the aid of RStudio (Posit Team, 2022), jamovi (The Jamovi Project, 2022), lavaan (Rosseel, 2012), MVN (Korkmaz et al., 2014), and psych (Revelle, 2022) software performed the calculation procedures.

RESULTS

The sample comprised 404 Brazilian ($n=252$) and Argentinean ($n=152$) female entrepreneurs. They had a mean age of 35.59 years ($md=34.25$, $dp=10.14$, $min=17.87$, $max=77.39$) and came from 37 different cities in both countries. Regarding education, 1 (0.25%) Brazilian and 6 (1.49%) Argentineans declared having completed elementary school; 16 (4%) Brazilians and 36 (9%) Argentineans had completed high school; 81 (20%) Brazilian and 102 (25%) Argentineans were at the undergraduate level; and 153 (38%) Brazilians and 8 (2%) Argentineans were at the graduate level.

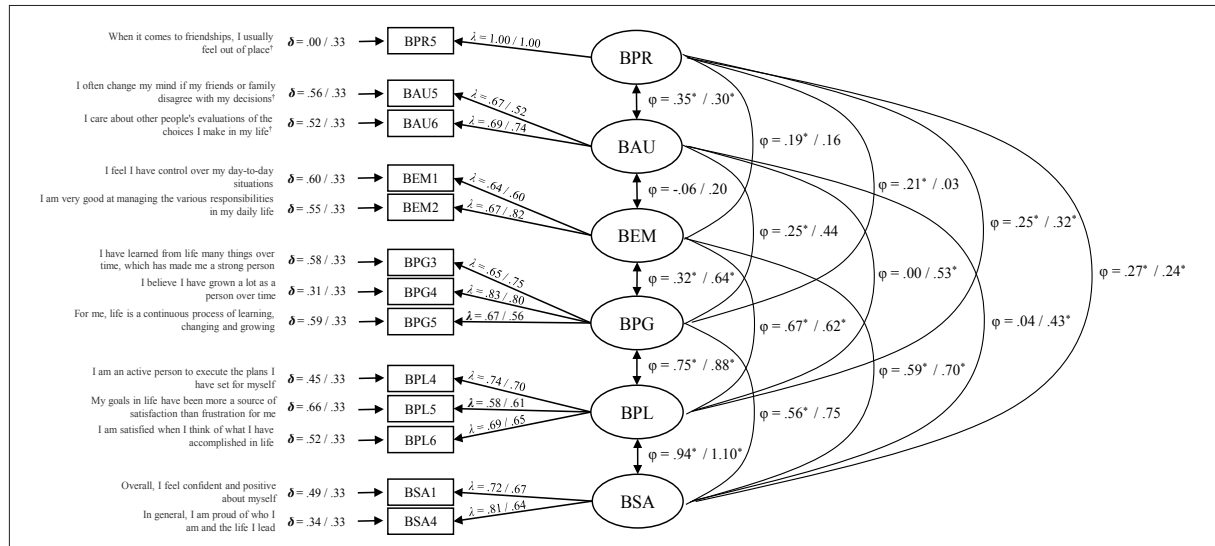
Figure 1 shows the result of the validation of the SES construct in both nations (Brazil/Argentina). The indicators of the quality of adjustment of the model found by the robust MGCFA showed values of RMSEA=0.045 (CI90%: 0.030-0.057), SRMR=0.039, CFI=0.968, TLI=0.953, $\chi^2_{bra}=72.788$, $\chi^2_{arg}=101.108$ ($df=124$, $p=0.002$, $SB=1.375$). The correlation matrix among observed residuals used as post hoc showed values < 0.10 . MGCFA showed configuration, metric and scalar invariance (Δ SRMR=-0.009/-0.002, Δ RMSEA=0.000/-0.005, Δ CFI=0.001/0.009).

Figure 1. Validation of Entrepreneurial Self-efficacy



Notes. * $p < 0.05$ for covariances. All residuals and loadings showed a significance level. δ : residual. λ : load. ϕ : factor covariance. APO: Developing new products or market opportunities. AEN: Developing an innovative environment. ABO: Defining the main business objective. AHR: Managing key human resources. AIR: Initiating investor relations. AUC: Ability to face unforeseen changes. The Brazilian 'female entrepreneurs' values are presented first, followed by the Argentine 'female entrepreneurs' values separated by a slash (Brazilian / Argentinean).

Figure 2. Validation of Psychological Well-being



Notes. † items with inverted scale. * $p < 0.05$ for covariances. All residuals and loadings showed significance level. δ : residual. λ : load. ϕ : factor covariance. BPR: Positive relationship. BAU: Autonomy. BEM: environmental mastery. BPG: Personal growth. BPL: Purpose in life. BSA: Self-acceptance. The Brazilian 'female entrepreneurs' values are presented first, followed by the Argentinean 'female entrepreneurs' values, separated by a slash (Brazilian / Argentinean).

The result of the validation of the PWB construct in both nations (Brazil/Argentina) is presented in Figure 2. The quality of adjustment of the model found by MGCFA showed values

of RMSEA=0.046 (CI90%: 0.022-0.065), SRMR=0.043, CFI=0.966, TLI=0.948, $\chi^2_{bra} = 64.456$, $\chi^2_{arg} = 72.226$ (df = 102, p=0.012, stc=1.263). The correlation matrix between observed residuals used post hoc also resulted in values < 0.10. MGCFA pointed out configuration, metric, and scalar invariance ($\Delta SRMR = -0.004/-0.002$, $\Delta RMSEA = 0.005/-0.006$, $\Delta CFI = 0.005/0.012$).

With the positive validation of the instruments in both groups, the outcomes were first analyzed using a comparison of the medians of the standardized scores obtained in the MGCFA. Argentinean women show significantly higher values than Brazilian women in all ESE dimensions and in PWB dimensions of positive relationship and autonomy. Moreover, similarities were found in the dimensions of environmental mastery, personal growth, purpose in life, and self-acceptance of the PWB construct. Table 1 presents the outcomes of this first comparison.

Table 1. Comparison of the Constructs' Dimensions

Dimension	Acro	Nac.	m	md	dp	p	Outcome
Autoeficácia empreendedora							
Develop new products or market opportunities	APO	Arg	0.19	0.30	0.90	< 0.01'	Difference
		Bra	-0.11	0.00	0.91		
Develop an innovative environment	AEN	Arg	0.15	0.30	0.93	0.001'	Difference
		Bra	-0.09	-0.05	0.92		
Definition of the main business objective	ABO	Arg	0.12	0.30	0.97	0.010'	Difference
		Bra	-0.07	0.03	0.91		
Manage key human resources	AHR	Arg	0.10	0.27	0.98	0.023'	Difference
		Bra	-0.06	0.07	0.92		
Initiate investors relationship	AIR	Arg	0.13	0.21	0.91	0.007'	Difference
		Bra	-0.08	0.01	0.91		
Ability to cope with unforeseen changes	AUC	Arg	0.10	0.25	0.93	0.025'	Difference
		Bra	-0.06	-0.04	0.88		
Psychological well-being							
Positive relationship	BPR	Arg	0.15	0.34	0.95	0.018'	Difference
		Bra	-0.09	0.34	1.02		
Autonomy	BAU	Arg	0.25	0.27	0.72	< 0.01'	Difference
		Bra	-0.15	-0.15	0.83		
Environmental mastery	BEM	Arg	0.02	0.11	0.85	0.816	Similarity
		Bra	-0.01	0.14	0.82		
Personal Growth	BPG	Arg	0.03	0.32	0.97	0.205	Similarity
		Bra	-0.02	0.28	0.85		
Purpose in life	BPL	Arg	0.03	0.20	0.97	0.716	Similarity
		Bra	-0.02	0.23	0.93		
Self-acceptance	BSA	Arg	0.04	0.13	0.91	0.601	Similarity
		Bra	-0.02	0.17	0.91		

Notes.* p < 0.05. Nac.: nationality. m: mean. md: median. dp: standard deviation. p: significance level.

The second comparison was made between the ESE-PWB correlations obtained for Brazilian and Argentinean women. Three types of evidence were found. The first piece of evidence pointed out the difference between the correlations of Brazilian and Argentinean women simply because one group was unable to show significant correlations (*Diff^a*). The second piece of evidence statistically verified the significant difference in the strength of the correlation of both nationalities when they showed a significant correlation (*Diff^b*). The third piece of evidence showed similarity when there was no significant difference between the strength of two significant correlations between the nationalities (*Sim^c*). Table 2 presents the outcomes of the second comparison.

Table 2. Comparison Between Correlations of the Constructs' Dimensions

		APO	AEN	ABO	AHR	AIR	AUC
BPR	Brazilian	0.02	0.03	0.02	0.02	0.04	0.03
	Argentinean	0.21 [†]	0.25 ^{**}	0.30 ^{***}	0.29 ^{***}	0.26 ^{**}	0.20 [†]
	Outcome	Diff ^a	Diff ^a	Diff ^a	Diff ^a	Diff ^a	Diff ^a
BAU	Brazilian	0.08	0.07	0.08	0.07	0.03	0.08
	Argentinean	0.32 ^{***}	0.33 ^{***}	0.37 ^{***}	0.36 ^{***}	0.32 ^{***}	0.34 ^{***}
	Outcome	Diff ^a	Diff ^a	Diff ^a	Diff ^a	Diff ^a	Diff ^a
BEM	Brazilian	0.30 ^{***}	0.32 ^{***}	0.31 ^{***}	0.32 ^{***}	0.30 ^{***}	0.35 ^{***}
	Argentinean	0.47 ^{***}	0.51 ^{***}	0.57 ^{***}	0.57 ^{***}	0.50 ^{***}	0.56 ^{***}
	Outcome	Diff ^b	Diff ^b	Diff ^b	Diff ^b	Diff ^b	Diff ^b
BPG	Brazilian	0.30 ^{***}	0.34 ^{***}	0.32 ^{***}	0.32 ^{***}	0.30 ^{***}	0.35 ^{***}
	Argentinean	0.54 ^{***}	0.52 ^{***}	0.58 ^{***}	0.58 ^{***}	0.54 ^{***}	0.56 ^{***}
	Outcome	Diff ^b	Diff ^b	Diff ^b	Diff ^b	Diff ^b	Diff ^b
BPL	Brazilian	0.34 ^{***}	0.37 ^{***}	0.35 ^{***}	0.35 ^{***}	0.34 ^{***}	0.38 ^{***}
	Argentinean	0.51 ^{***}	0.50 ^{***}	0.56 ^{***}	0.56 ^{***}	0.51 ^{***}	0.52 ^{***}
	Outcome	Diff ^b	Sim ^c	Diff ^b	Diff ^b	Diff ^b	Diff ^b
BSA	Brazilian	0.34 ^{***}	0.36 ^{***}	0.35 ^{***}	0.35 ^{***}	0.34 ^{***}	0.38 ^{***}
	Argentinean	0.46 ^{***}	0.46 ^{***}	0.51 ^{***}	0.51 ^{***}	0.47 ^{***}	0.47 ^{***}
	Outcome	Sim ^c	Sim ^c	Diff ^b	Diff ^b	Sim ^c	Sim ^c

Notes. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$. AEN: Developing an innovative environment. ABO: Defining the main business objective. AHR: Managing key human resources. AIR: Initiate investors relationship. AUC: Ability to cope with unanticipated changes. BPR: Positive relationship. BAU: Autonomy. BEM: environmental mastery. BPG: Personal growth. BPL: Purpose in life. BSA: Self-acceptance. *Diff*: Difference. *Sim*: Similarity. a: no significant correlation in both nationalities. b: correlations have significant differences by Fischer's *r-to-z* transformation. c: no significant differences between the correlations.

The correlations of BPR and BAU with all dimensions of self-efficacy show a difference because the correlation is significant in Argentinean women, and in Brazilian women, it is not (*Dif^a*). Argentinean women showed higher correlation strength than Brazilian women in the correlation pairs between BEM and BPG with all self-efficacy dimensions (*Dif^b*). In the same sense, in BPL, greater strength was found in Argentinean women in correlation with the dimensions APO, ABO, AHR, AIR, and AUC (*Dif^b*). Also, BSA showed higher strength in Argentinean women with the ABO and AHR dimensions (*Dif^b*). Finally, a similarity was found between the results of Brazilian and Argentinean women, as there was no significant difference between the correlations in the pairs BPL-AEN, BSA-APO, BSA-AEN, BSA-AIR and BSA-AUC (*Sim^c*).

DISCUSSION

In the comparison between medians regarding ESE in all dimensions, Argentinean female entrepreneurs showed a higher perception than Brazilian female entrepreneurs with a significant difference. Compared to Brazilian women, Argentinean women showed a greater sense of ability to act (Rosique-Blasco et al., 2018), achieve goals (Bandura, 1994, 2001), and engage (Newman et al., 2019).

This result corroborates the findings of Ladge et al. (2019), Minniti (2009), and Newman et al. (2019), who identified variations in the self-efficacy of female entrepreneurs. Self-efficacy plays a crucial role in the self-regulation of entrepreneur motivation and persistence (Bandura, 1994, 2000; Salanova et al., 2001), creative and innovative ability (Law & Breznik, 2017), self-confidence, ease of networking, and risk tolerance (Wu et al., 2019). In this research, ESE showed variations between female entrepreneurs in two different cultures, reinforcing the premise that social identity affects the self-efficacy of female entrepreneurs and social norms associated with gender influence ESE, as found by Ladge et al. (2019). At the same time, this result points to the need for Brazil to pay attention to gender and ESE issues in the context of 'female entrepreneurship since gender barriers can reduce the ESE of female entrepreneurs (Mozahem, 2021). It is worth remembering that Argentina implemented gender policies earlier than Brazil (Schwether & Pagliari, 2018), and that female entrepreneurs are more valued in Argentine culture than in Brazilian culture (Bosma & Kelley, 2019).

In the comparison between medians regarding PWB, the positive relationship dimension showed similar values between both cultures. However, it presented different dispersions with a lower mean for Brazilians than Argentines. The positive relationship refers to the ability to understand and establish satisfactory and trusting relationships and develop empathy, intimacy, and affection (Ryff, 1989; Ryff & Keyes, 1995). This factor is essential for establishing and advancing negotiations. Positive relationship skills may contribute to bilateral agreements (Carneiro, 2019) and joint searches for solutions in border regions (Desiderá & Penha, 2016), especially those poorly integrated into the center of development dynamics (Barros & Samurio, 2019), just like the

regions that were the subject of this study. In the autonomy dimension, there is also a significant difference pointing to a higher median for Argentinean women. Autonomy emphasizes that “a person is self-determined and independent, as well as able to evaluate him or herself by personal standards and, if necessary, resist social pressures to think or act in certain ways” (Ryff, 2018, p. 4). Argentinean female entrepreneurs show greater levels of autonomy and as such are inserted in an environment that provides better links between the individuals and their living conditions, their relationships, personal achievements, and the relationship between the past and expectations for the future (Keyes & Ryff, 1998; Ryff & Keyes, 1995). It is possible that the lower level of autonomy of Brazilian female entrepreneurs is associated with the increased distance from power in Brazilian society compared to Argentinean culture (Hofstede, 2015).

On the other hand, in the areas of “environmental mastery,” “personal growth,” “purpose in life,” and “self-acceptance,” the results showed no significant difference in the group. In other words, they proved to be similar. Similar characteristics have the potential to promote identification and, therefore, rapprochement. These aspects are forces to promote the rapprochement between the groups of both nations and, therefore, may generate integration (Barros & Samurio, 2019), cooperation and development (Pessoa & Souza, 2021), and contribute to overcoming difficulties in the entrepreneurial role (Lopes et al., 2023).

Among the differences between both groups, the correlations between positive relationship and autonomy with all dimensions of ESE show a difference, given that for the Argentinean women, the correlation is significant, and for the Brazilian women, it is not. In addition, Argentinean women showed a higher correlation than Brazilian women in the correlation pairs associated with the dimensions of PWB “environmental mastery” and “personal growth” with all dimensions of ESE. Similarly, in the dimension “purpose in life,” associated with PWB, a higher correlation was found in Argentinean female entrepreneurs with all dimensions of self-efficacy, except for the dimension “developing an innovative environment.” Also, the dimension “self-acceptance” showed higher strength for the Argentinean female entrepreneurs with the dimensions “defining business purpose” and “managing key human resources.” These differences highlight the different ways in which Brazilian and Argentinean female entrepreneurs manage their ventures.

Concerning the similarities identified between the groups, it is observed that there is no significant difference between the correlations in the following dimension pairs: “life purpose” with “developing an innovative environment”; “self-acceptance” with “developing new products or market opportunities”; “self-acceptance” with “developing an innovative environment”; “self-acceptance” with “initiating investors relationship”; and “self-acceptance” with “ability to face unforeseen changes.” As the eudaimonic approach to well-being has principles rooted in positive psychology, which values enhancing the positive aspects of people (Ryff, 2023), the results of the research show that female entrepreneurs value self-acceptance as a strategy for developing products, markets, and innovation, as well as obtaining external resources.

Self-efficacy is a way to consciously seek experiences that may favor one’s own goals (Bandura, 1986), as well as to face situations that threaten security (Bandura, 1977). Moreover, self-efficacy is important for strengthening female entrepreneurs’ ventures (Ladge et al., 2019), in border regions,

exposed to dilemmas typical of this context (Lopes et al., 2023). As an example, one can mention the effect of ESE on emotional self-regulation (Bandura, 1994; Salanova et al., 2001), the ability to cope with uncertainty and failure (Bandura, 2000; Salanova et al., 2001), as well as the expansion of innovative and creative capacity (Law & Breznik, 2017). However, it is important that ESE is related to PWB (Ryff, 2018, 2023) to combine the ability to face the situations inherent in the entrepreneurial role with life satisfaction and the desire for self-fulfillment associated with PWB.

In sum, both differences and similarities in the relationship between ESE and PWB identified between the groups may contribute to identifying ways of integrating businesses across borders, which can also strengthen the businesses of female entrepreneurs in both countries. Ribes-Giner et al. (2018) suggest that self-efficacy is like fuel for well-being, specifically for female entrepreneurs. Thus, ESE may promote PWB for female entrepreneurs, especially Argentinean female entrepreneurs, who showed high or medium magnitude correlations in more dimensions. While differences between the groups can result in conflict if they are not seen as opportunities for development and learning, similarities between the groups can contribute to building new alliances and identities (Carneiro, 2019), and increasing PWB. It is already known that well-being is relevant at all stages of the entrepreneurial process and can contribute to the survival of women's businesses (Ryff, 2018, 2023).

CONCLUSIONS

This study aimed to compare self-efficacy and psychological well-being and the relationships between these constructs between Brazilian and Argentinean entrepreneurs. The results showed similarities and differences between them. The main differences in terms of ESE, in all dimensions, were that Argentinian female entrepreneurs had a higher perception than Brazilian female entrepreneurs. As for the PWB, the “positive relationship” dimension showed similar values between the two cultures but showed different dispersions, with a lower average for Brazilian than Argentinean female entrepreneurs. There was also a significant difference in the “autonomy” dimension, with a higher median for Argentinean female entrepreneurs. As for the differences in the correlations observed, the highest correlations occurred in the group of Argentinean female entrepreneurs (positive relationships and autonomy; mastery of the environment and personal growth and defining business objectives and managing key human resources, among others).

The similarities identified were in the dimensions “mastery of the environment,” “personal growth,” “life purpose,” and “self-acceptance.” No positive correlation was identified in the following pairs of dimensions: “life purpose” with “developing an innovative environment”; “self-acceptance” with “developing new products or market opportunities”; “self-acceptance” with “developing an innovative environment”; “self-acceptance” with “initiating contacts with investors”; and “self-acceptance” with “ability to cope with unforeseen changes.”

The results contribute to the literature on entrepreneurship because they broaden the understanding of the self-efficacy of female entrepreneurs by examining its relationship with PWB (Ryff, 2023). Several studies have been carried out on the self-efficacy of entrepreneurs. However, they have not related self-efficacy to well-being, which can contribute to reducing the stress levels of female entrepreneurs. This research also broadens the understanding of the performance of the entrepreneurial role by women in two Latin American countries, where studies with female entrepreneurs are still limited (Amorós et al., 2019).

Finally, this research addresses differences associated with the performance of female entrepreneurs in border regions, which is important for fostering rapprochement and contributing to overcoming challenges related to the economic and social development of these territories (Barros & Samurio, 2019; Carneiro, 2019; Lopes et al., 2023; Miyazaki, 2023; Pessoa & Souza, 2021).

As practical contributions, the research provides elements for the formulation of policies aimed at strengthening female entrepreneurship and possibilities for promoting cooperation between female entrepreneurs in the two countries. In addition, the research findings contribute to the need for leaders in border regions to consider cultural differences, such as those observed in managing these territories. It is suggested to encourage networks of female entrepreneurs to exchange experiences and seek support that involves expanding ESE and PWB, and in addition, programs on the part of municipalities aimed at eliminating barriers encountered by female entrepreneurs that affect ESE and PWB.

The study's limitations include the typical aspects of cross-sectional quantitative studies. Therefore, future, longitudinal studies are suggested, which would assess changes in the ESE and PWB, and its relationships. Future studies also could include additional control variables, such as family (as suggested by Ryff, 2023), business size, and success, for example. Furthermore, comparisons can be made with countries on other continents with similar economic development, and the potential historical impact of European influences on the colonization of Latin America can be evaluated since Brazil was colonized by the Portuguese and Argentina by the Spanish.

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CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

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