

PERCEIVED ORGANIZATIONAL SUPPORT AMONG JUNIOR ENTERPRISE MEMBERS: GENDER AND REGIONAL DIFFERENCES OF BRAZIL**SUORTE ORGANIZACIONAL PERCEBIDO ENTRE MEMBROS DE EMPRESAS JUNIORES: DIFERENÇAS DE GÊNERO E REGIONAIS NO BRASIL****APOYO ORGANIZACIONAL PERCIBIDO ENTRE MIEMBROS DE EMPRESAS JUNIOR: DIFERENCIAS DE GÉNERO Y REGIONALES EN BRASIL**

10.56238/revgeov17n2-057

Heila Magali Silva Veiga¹, Silvia Miranda Amorim², Michelle Morelo Pereira³, Renata Silva de Carvalho Chinelato⁴, Laila Leite Carneiro⁵, Isadora Borges Squilassi⁶, Hiago Luan Rolla Martins⁷

ABSTRACT

Junior Enterprises (JEs), or Student-Led Entrepreneurial Organizations (SLEOs), bridge the gap between academic knowledge and practical business experience. Originating in France in the 1960s and introduced in Brazil in the 1980s, the country now hosts the world's largest JE network. JEs play a crucial role in undergraduate education, fostering skill development and easing students' transition into the workforce. This study evaluated Perceived Organizational Support (POS) - individuals' perception of how much their organization values their contributions and well-being - among JE members (N=1,348), and the possible differences between gender and region of the country. Participants represent all Brazilian regions and various academic areas. The sample includes mainly cisgender men (n=646) and cisgender women (n=680). The mean POS score (M=5.48; SD=0.71) was above the midpoint. It was observed that regional disparities were significant, with higher POS in the South. Findings highlight structural inequalities in Brazil's education system. JEs effectively connects academic learning with professional practice, fostering belonging, confidence, and adaptability in students.

Keywords: Junior Enterprise. Perceived Organizational Support. Brazil.

¹ Dr. in Social Psychology of Work and Organizations. Universidade Federal de Uberlândia (UFU).

E-mail: heila.veiga@ufu.br

² Dr. of Psychology. Universidade Federal de Minas Gerais (UFMG). E-mail:

silvia.miranda.amorim@gmail.com

³ Dr. of Psychology. Universidade do Estado de Minas Gerais (UFTM). E-mail: michelle.pereira@uemg.br

⁴ Dr. of Psychology. Universidade Salgado de Oliveira. Universitário de Lisboa (ISCTE - IUL).

E-mail: resilvajf@gmail.com

⁵ Dr. of Psychology. Universidade Federal da Bahia (UFBA). E-mail: laila_carneiro@hotmail.com

⁶ Master's student in Organizational Processes. Universidade Federal de Uberlândia (UFU).

E-mail: isadorasquilassi@ufu.br

⁷ Master's degree in Psychology. Universidade Federal de Minas Gerais (UFMG).

E-mail: hiago.rolllamartins@gmail.com



RESUMO

As Empresas Juniores (EJs), ou Organizações Empreendedoras Lideradas por Estudantes (SLEOs), fazem a ponte entre o conhecimento acadêmico e a experiência prática em negócios. Originadas na França na década de 1960 e introduzidas no Brasil na década de 1980, o país atualmente abriga a maior rede de EJs do mundo. As EJs desempenham papel fundamental na formação de graduação, promovendo o desenvolvimento de habilidades e facilitando a transição dos estudantes para o mercado de trabalho. Este estudo avaliou o Suporte Organizacional Percebido (SOP) — a percepção dos indivíduos sobre o quanto sua organização valoriza suas contribuições e seu bem-estar — entre membros de EJs (N=1.348), bem como possíveis diferenças entre gênero e região do país. Os participantes representam todas as regiões brasileiras e diversas áreas acadêmicas. A amostra inclui principalmente homens cisgênero (n=646) e mulheres cisgênero (n=680). A média de SOP (M=5,48; DP=0,71) foi superior ao ponto médio da escala. Observou-se que as disparidades regionais foram significativas, com maior SOP na região Sul. Os achados evidenciam desigualdades estruturais no sistema educacional brasileiro. As EJs conectam de forma eficaz a aprendizagem acadêmica à prática profissional, promovendo senso de pertencimento, confiança e adaptabilidade nos estudantes.

Palavras-chave: Empresa Júnior. Suporte Organizacional Percebido. Brasil.

RESUMEN

Las Empresas Junior (EJs), o Organizaciones Emprendedoras Lideradas por Estudiantes (SLEOs), tienden un puente entre el conocimiento académico y la experiencia práctica en negocios. Originadas en Francia en la década de 1960 e introducidas en Brasil en la década de 1980, el país alberga actualmente la mayor red de EJs del mundo. Las EJs desempeñan un papel fundamental en la formación de pregrado, fomentando el desarrollo de habilidades y facilitando la transición de los estudiantes al mercado laboral. Este estudio evaluó el Apoyo Organizacional Percibido (AOP) —la percepción de los individuos sobre cuánto su organización valora sus contribuciones y su bienestar— entre miembros de EJs (N=1.348), así como posibles diferencias según género y región del país. Los participantes representan todas las regiones de Brasil y diversas áreas académicas. La muestra incluye principalmente hombres cisgénero (n=646) y mujeres cisgénero (n=680). La media de AOP (M=5,48; DE=0,71) fue superior al punto medio de la escala. Se observó que las disparidades regionales fueron significativas, con mayor AOP en la región Sur. Los hallazgos evidencian desigualdades estructurales en el sistema educativo brasileño. Las EJs conectan eficazmente el aprendizaje académico con la práctica profesional, fomentando el sentido de pertenencia, la confianza y la adaptabilidad en los estudiantes.

Palabras clave: Empresa Junior. Apoyo Organizacional Percibido. Brasil.



1 INTRODUCTION

The concept of Junior Enterprise (JE) was introduced in France in 1967, aiming to integrate practical experience with academic pursuits. This model involved students engaging in real-world business consulting projects while continuing their studies, enriching their educational experience, and setting a standard that would be adopted globally (Brasil Júnior, 2024). The first JE in Brazil emerged in the 1980s (Bervanger & Visentini, 2016). Several decades later, federal legislation officially regulated these entities. Brazilian Law No. 13.267/2016 defines a JE as a student-run civil association at higher education institutions, established to undertake projects that enhance members' academic and professional development, thereby preparing them for the job market (Brazil, 2016, Art. 2). Today, Brazil is the country with the highest number of Junior Enterprises, reflecting the significant impact and popularity of this model within higher education (JEG, 2024)

Members of JEs must be enrolled students who voluntarily participate in activities directly related to their studies and overseen by faculty or qualified professionals. JEs' goals include providing practical experience for their members, enhancing education, fostering entrepreneurship, and strengthening ties with businesses (Daniel & Almeida, 2021). JEs cannot generate profits for members; any earnings must be reinvested in their activities. The Law also establishes a recognition process by educational institutions to ensure compliance with academic standards and a contribution to students' educational experiences (Brazil, 2016).

In 2006, the European Commission acknowledged JE as a best practice for promoting entrepreneurship in higher education. This recognition emphasized their vital role in fostering entrepreneurial mindsets among youth and contributing to a more entrepreneurial society. Since that time, the JE movement has proliferated across Europe, culminating in the establishment of the European Confederation of Junior Enterprises (ECJE). This organization represents and supports JEs throughout the continent, creating a network that connects these initiatives (Junior Enterprises Europe, 2024).

Currently, there are JEs in over 45 countries worldwide (Junior Enterprises Global, 2024). In Brazil, there is a national entity representing JEs (Brasil Júnior, 2024), with various organizations supporting these initiatives globally. The widespread diffusion of this type of organization underscores the relevance of studying Junior Enterprises, as they play a crucial role in promoting practical experience and entrepreneurship among students across diverse educational contexts. Understanding their impact and effectiveness can provide valuable insights into how these entities contribute to the development of future leaders and innovators. Table 1 presents a selection of these representative entities.



As shown in Table 1, Brazil has the highest number of JEs in the world. This situation reflects, among others, the encouragement to build activities of this nature explicitly stated in Federal Law No. 13,267/2016, that mentions “scientific initiation projects, multidisciplinary and transdisciplinary projects, technical visits, teamwork, prototype development, tutoring, participation in Junior Enterprises, and other entrepreneurial activities. Additionally, the guidelines set forth by the National Education Council (linked to the Ministry of Education) emphasize the importance of encouraging academic activities that synthesize content, integrate knowledge, and develop skills. This dual framework underscores the significance of Junior Enterprises within the broader context of academic and entrepreneurial development in Brazil.

This formal status provides JEs with a structured framework that not only enhances their legitimacy and accountability but also embeds them within the educational process. By engaging in real-world projects under the college’s mentorship, JEs equip students with critical entrepreneurial experience as well as essential professional competencies necessary for a successful transition into the workforce. Therefore, JEs are situated within a regulated academic environment, thereby offering a more robust foundation to prepare students for the complexities of their future careers.

Although in practical terms the numbers reflect the high number of students involved with this kind of activity, the research on JEs is limited, with only a few studies available. However, the existing papers indicate that participation in these organizations contributes to the development of entrepreneurial skills and other competencies recognized by employers, such as personal skills (e.g. coping and self-knowledge) and interpersonal skills (leadership and communication) (Brasil Júnior, 2021; Paiva et al., 2024). Involvement in JEs significantly enhances students' intentions to pursue entrepreneurship (Almeida et al., 2019; Daniel & Almeida, 2021; Sansone et al., 2021). Besides that, extracurricular activities, particularly within the university context, are essential for developing students' managerial skills and should be viewed as a valuable complement to social entrepreneurial education, as this environment enables students to develop essential soft skills, including teamwork, creativity, intercultural competence, and practical work experience, which significantly benefit their career progression (Bodolica, et al., 2021; Daniel & Almeida, 2021).

Recognizing the impact of participation in Junior Enterprises (JEs) on the educational trajectories of university students, it is essential to acknowledge that such experiences are particularly enriching, often representing their initial foray into the job market. That is why these organizations must promote a healthy environment for the development of their members. Within this framework, an examination of the construct of organizational support



yields critical insights. Perceived Organizational Support (POS) encompasses employees' overarching beliefs regarding the extent to which the organization acknowledges their contributions and prioritizes their well-being. This perception cultivates a sense of reciprocity, thereby motivating individuals to align their efforts with organizational objectives while anticipating recognition or rewards for their contributions (Eisenberger et al., 1986).

The Perceived Organizational Support (POS) is linked to employees responding positively by developing various constructive work attitudes and behaviors, as well as experiencing higher levels of subjective well-being. High levels of POS encourage employees to engage more fully in their roles, fostering commitment, job satisfaction, and overall engagement. This supportive environment contributes not only to enhanced performance but also to improved mental health and well-being among employees, reinforcing the importance of POS in creating a positive workplace culture (Baran, Shanock, & Miller, 2012; Eisenberger et al., 2020; Kurtessis, et al., 2015; Ng & Sorensen, 2008).

This dynamic enhances positive orientation toward the organization and work (e.g. commitment, engagement), positive behavioral outcomes (e.g. in-role and extra-role performance) and employee well-being (e.g. more positive affect, less strain) (Eisenberger et al., 2020; Baran, Shanock & Miller, 2012). Moreover, their research underscores the imperative to investigate additional factors that may impact perceived support and its subsequent influence on employee relationships within organizational contexts. Similarly, Slemp et al. (2024) emphasize the pivotal role of support in fostering individual well-being and performance.

The extant literature posits a robust relationship between Perceived Organizational Support (POS) and Social Identity Theory (SIT) within organizational contexts (Hogg & Terry, 2000; Tyler & Blader, 2003). By analyzing the perceived organizational support of JE members through the lens of SIT, we can understand how an individual's identity is shaped by their affiliations with social groups, influencing their behavior and interactions (Tajfel & Turner, 1985). In JEs, which often bring together university students, organizational support plays a crucial role in strengthening members' social identity. JEs, which often bring together university students, organizational support may play a crucial role in strengthening members' social identity. When collaborators perceive that the organization values their contributions and cares for their well-being, this recognition can not only boost members' motivation and commitment, but also possibly deepen their alignment with the enterprise's mission and the collective identity of the team.

Social identity theory explains that individuals construct their social identities based on the group categories with which they identify, internalizing shared values and norms. In



the context of JEs, where members often share similar life stages and interests, perceived organizational support can strengthen members' connection to the organization, fostering a sense of belonging and ultimately enhancing their organizational commitment (Tajfel & Turner, 1979; Ashforth & Mael, 1989). Specifically, this process involves dynamics such as the alignment of members' identities with organizational goals, the strengthening of bonds through shared support, and the enhancement of self-esteem as members feel valued and supported by the organization (Colquitt et al., 2007). With perceived organizational support acting as a mediator, these dynamics — including fostering a sense of belonging and addressing challenges such as balancing academic and organizational responsibilities — contribute to creating a more cohesive and motivating environment (Ng & Sorensen, 2021).

Additionally, Social Identity Theory (SIT) suggests that individuals seek to associate with groups perceived positively. Thus, JEs that cultivate a supportive and appreciative environment become more attractive to new members, facilitating talent recruitment and retention. This synergy between organizational support and SIT not only contributes to students' professional identity development but also enhances the effectiveness and sustainability of JEs, generating a positive impact on collective performance (Brown, 2020) and contributing to individual well-being (Greenaway et al., 2016). As a result, perceived organizational support and SIT are fundamental in fostering not only performance and satisfaction but also a strong, collaborative organizational culture that is essential for the professional growth of future professionals in JEs.

However, empirical research specifically investigating these constructs within the unique context of Junior Enterprises (JEs) is scarce. The broader literature suggests that stronger organizational identification, fostered by the recognition of valued individual contributions, can enhance employee engagement, performance, and job satisfaction (Moraes et al., 2022). This assertion is grounded in the theoretical underpinnings of social identity theory, which posits that individuals derive self-worth and belonging from their group memberships. Consequently, when members perceive that their organization values their contributions, they are more likely to identify with it, leading to a cohesive and positive organizational culture and greater overall success within the JE framework.

This is especially relevant considering the involvement of women in STEM (Science, Technology, Engineering, and Mathematics) fields. While JEs may not directly influence women's entry into STEM, they provide a crucial platform for those already in these fields, equipping them with vital experiences necessary for navigating the challenges inherent in STEM careers. Moreover, fostering an inclusive culture within these enterprises is crucial for promoting gender diversity in these disciplines, ultimately contributing to a more equitable



and dynamic workforce, especially because these gaps are related to cultural factors (Bennette & Toffoletti, 2024; Santos et al., 2023). Moreover, exploring gender-related differences in POS within these academic areas is vital, particularly in the context of JEs, which play a key role in shaping career trajectories.

However, the structural challenges influencing student experience are not confined to academic or gender dynamics. The uneven distribution of resources and educational opportunities across Brazil constitutes a significant factor influencing perceptions of organizational support within Higher Education Institutions (HEI), introducing a critical layer of regional disparity alongside the issues previously discussed. This regional disparity profoundly impacts the quality of higher education. Access to and completion of higher education disproportionately benefits those from more affluent socioeconomic backgrounds, particularly in the Southeast and South regions where a concentration of institutions prevails (Santos et al., 2023; Alves, 2017). This entrenched systemic duality manifests in privileged access to high-quality, predominantly public universities for students from more advantaged backgrounds, with the regional concentration of institutions in the Southeast and South regions amplifying this effect and, consequently, reinforcing social stratification (IPEA, 2023).

H1. There is a difference in perceived organizational support based on gender.

H2. There is a difference in perceived organizational support based on academic areas.

H3. There is a difference in perceived organizational support based on the region of the country.

2 MATERIALS AND METHODS

2.1 SAMPLE

The sample for this study comprised 1,348 participants from various JEs across Brazil. These individuals hold different positions within the JEs and represent an age range from 18 to 59 years, but most participants were between 18 and 24 years old, with an average age of approximately 21 years ($M = 21.37$; $SD = 2.978$), reflecting the youthful nature of the JE movement.

In terms of gender, the sample was quite balanced, with 50.4% of participants identifying as cisgender women and 47.9% as cisgender men (Table 2). The study also includes a small representation of transgender men and other gender identities, providing a more inclusive perspective that reflects the diversity present in JEs. Additionally, the data collected includes information on the length of involvement in the Junior Enterprises (JEs), the university major of the participants, and the region of the country where the JEs are



located. These data provide a comprehensive view of participants' characteristics, including the distribution of involvement duration, the most represented university majors (e.g., Business Administration, Engineering, and Economics), and their regional distribution across Brazil.

The data collection also included information on the participant response rate, ensuring the representativeness of the sample. This sample encompasses a wide range of university majors, including Business Administration, Engineering, and Economics, as well as various regions of Brazil, and leadership positions held.

2.2 INSTRUMENTS

To assess organizational support, the Perceived Organizational Support Scale (POSS) developed by Eisenberger et al. (1986) and adapted to the Brazilian context by Siqueira and Gomide Júnior (2008) ($\alpha = 0.86$) was used. The POSS consists of nine items that evaluate the support perceived by workers from the organization, reflecting the appreciation and well-being promoted. It is rated on a seven-point Likert scale, ranging from strongly disagree (1) to strongly agree (7). An example item is: "This company truly cares about my well-being."

2.3 DATA COLLECTION AND ANALYSIS PROCEDURES

The research followed all ethical criteria for research with human beings and was approved by an Ethics Committee CAAE: 65708722.00000.5149). Data collection was carried out through an online questionnaire, with prior agreement to participate in the research, by filling out the Free and Informed Consent Form (TCLE).

For data analysis, initial tests to check normality assumptions were conducted in SPSS using the Kolmogorov-Smirnov and Shapiro-Wilk tests. Next, a Confirmatory Factor Analysis of the Perceived Organizational Support Scale was performed through Structural Equation Modeling using Mplus v.8, with parameters estimated by the WLSMV (Weighted Least Square Mean and Variance Adjusted) estimator. This approach aimed to verify the structure of each scale for the collected sample, as WLSMV is a robust estimator that does not assume normally distributed variables and provides the best option for modeling categorical or ordinal data (Brown, 2015).

To evaluate the model fit to the data, the following indicators were considered: Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Root-Mean-Square Error of Approximation (RMSEA) (Byrne, 2001). Good fit indices were defined as RMSEA values below 0.06 and CFI and TLI values above 0.95 (Brown, 2015). Finally, the instrument's



internal consistency was analyzed using the Composite Reliability Coefficient (Omega) and Cronbach's Alpha.

For analysis between groups, the Kruskal-Wallis test (sometimes referred to as the Kruskal-Wallis H test) was used as the non-parametric alternative for a between-group analysis (ANOVA) as an alternative when the assumptions required by the F test of the Analysis of Variance are not met. This test, therefore, allows the comparison of scores for three or more independent groups (Oliveira de Souza et al., 2022). This analysis was carried out using the software Jamovi (v.2.3.28.0).

3 RESULTS

The statistical assumptions for normality assessment were not met. Therefore, non-parametric methods were used for the analysis. The results of the Confirmatory Factor Analysis of the Perceived Organizational Support Scale indicated a unidimensional model with 9 items and adequate fit indices (χ^2 [df] = 1382.57 [27]; CFI = 0.91; TLI = 0.88; and RMSEA = 0.19). Additionally, to better align with the expected fit indices, model adjustments were proposed (correlating items 1 and 2 and items 6 and 8). Items 1 and 2 present conceptual similarity, as they represent aspects related to the company not considering employees' perceptions and opinions. Items 6 and 8 showed high correlation, as was also observed in the validation of the instrument by Siqueira and Gomide Júnior (2008). Thus, the findings indicated good fit indices (χ^2 [df] = 250.86 [25]; CFI = 0.99; TLI = 0.98; and RMSEA = 0.08), and the scale demonstrated good internal consistency indices.

Furthermore, analyses were conducted to verify differences in responses between groups for the organizational support variable. The results for the gender group (Cis woman, Cis man, Trans man, non-binary, and I prefer not to answer) indicated that there were no significant differences between the groups. In this sense, it is observed that for the sample of members of junior companies, organizational support is uniform for the different genders (Table 4).

The results showed that although overall levels of perceived organizational support were high, significant regional differences were observed. Participants from Junior Enterprises in the South of Brazil reported higher levels of organizational support compared to other regions (North, Northeast, Central-West and Southeast), indicating potential structural advantages in educational and entrepreneurial ecosystems in this region (Table 4). This result indicates that members of junior companies in southern Brazil have higher levels of organizational support than those in other regions of Brazil (Table 5).



Given the elevated overall mean of Perceived Organizational Support (POS), item-level analysis provides more nuanced insights into which dimensions of support are most salient among JE members. Non-parametric ANOVA (Kruskal-Wallis) revealed statistically significant differences in items such as “It is possible to get help from this organization when I have a problem.” (Item 3), “This organization really cares about my well-being.” (Item 4), and “This organization tries to make my work as interesting as possible.” (Item 9), particularly in the second dataset. These items reflect relational and emotional dimensions of organizational support. Notably, Item 7 (“This organization cares about my satisfaction at work”) and Item 5 (“This organization would be willing to expand its facilities to help me use my best skills at work”) were also among the most highly rated, suggesting the relevance of symbolic and practical support mechanisms in the JE context.

Table 6 ranks all POS items by their mean score across the full sample. The results show that items related to symbolic recognition and emotional connection were rated the highest, reinforcing the central role of relational support within Junior Enterprises.

When comparing the two datasets separately, Item 8 (“This organization cares more about its profits than about me”) showed the highest statistical significance in the second dataset ($\chi^2 = 21.38$, $p = .001$, $\varepsilon^2 = 0.01587$), followed by Item 9 (“This organization tries to make my work as interesting as possible”) in the first dataset ($\chi^2 = 14.22$, $p = .007$, $\varepsilon^2 = 0.01055$). These findings suggest that both symbolic and instrumental dimensions of perceived organizational support are relevant, but their prominence may vary depending on the sample context. Specifically, concerns about organizational priorities and recognition (Item 8) appear particularly salient in one dataset, while the effort to create meaningful and engaging work (Item 9) is highlighted in the other. These results are summarized in Table 7.

The initial analysis of H2, utilizing a broader academic area division, did not reveal significant differences. **To further deepen the analysis of H2**, descriptive analyses were specifically conducted to compare perceptions of organizational support among students from STEM and non-STEM academic fields. While no inferential tests were applied to this comparison, the mean scores shown in Table 8 provide an overview of how perceived support may vary according to academic background.

4 DISCUSSION

Overall, the results indicate high levels of perceived organizational support (POS) among Junior Enterprise (JE) members, with relevant differences across regions and item-level variations by gender and academic area, fully supporting H3 and partially supporting H1 and H2. These findings provide a foundation for deeper theoretical reflection. Social



Identity Theory (SIT) offers insight into this phenomenon by explaining that individuals construct their social identities based on the groups with which they identify, internalizing shared values and norms (Tajfel & Turner, 1979; Ashforth & Mael, 1989). Specifically, the emphasis on affective and symbolic support resonates with the values shared in JEs, where peer recognition, shared purpose, and a strong sense of belonging reinforce this identification and foster commitment (Eisenberger et al., 1986; Eisenberger et al., 2020). Although no statistically significant differences were found in total POS scores between cisgender men and women (partially supporting H1), item-level analysis revealed relevant nuances. Specifically, women reported slightly higher perceived support on items associated with symbolic recognition and relational assistance—notably Item 5 ("This organization would be willing to expand its facilities to help me use my best skills at work") and Item 9 ("This organization tries to make my work as interesting as possible"). These differences, while small, are consistent with research suggesting women attribute greater importance to relational and symbolic dimensions of organizational life (Greer & Greene, 2003; Slemp et al., 2024). From a SIT perspective (Tajfel & Turner, 1979; Ashforth & Mael, 1989), symbolic affirmation within a group reinforces identification and commitment, particularly for individuals navigating historically unequal environments, while gender socialization towards care-oriented and cooperative roles may influence how women interpret and value support (Kesebir et al., 2019). This absence of overall gender differences suggests that JEs may offer a distinct, more equitable organizational culture that fosters inclusion and peer collaboration, mitigating the gender biases often found elsewhere.

To further explore the structural dynamics relevant to H2 (academic area), it is critical to note the gendered distribution across fields: men significantly dominate STEM areas, while women are more prevalent in Social Sciences and Health (IBGE, 2023; UNESCO, 2019a, 2019b). This unequal distribution, where women globally represent only about 35% of STEM students, suggests structural factors influencing trajectories (UNESCO, 2019a; UNESCO, 2019b). Feminist perspectives emphasize that traditional entrepreneurship frameworks often overlook women's experiences shaped by these constraints (Greer & Greene, 2003). The lack of a significant overall difference in POS based on academic area may suggest JEs provide a platform that mitigates structural disadvantages for those already enrolled, equipping them with vital experiences for future careers.

The finding that participants from the South and Southeast regions reported significantly higher POS scores than those in the North, Northeast, and Central-West fully supports H3 and is consistent with broader patterns of social and educational inequality in Brazil. This pattern was particularly evident in the item "This organization helps me when I



have a problem" (Item 9). The Southeast, and large urban centers in the South, concentrate a higher number of well-resourced universities, structured departments, and stronger institutional support and infrastructure (IPEA, 2023; Santos et al., 2023; Brasil Júnior, 2024). These regional disparities reflect structural challenges deeply embedded in Brazil's uneven development. Since the POS scale includes items addressing infrastructure and problem-solving assistance, JEs in historically underserved regions are more likely to struggle with resource scarcity and limited faculty engagement, thereby diminishing perceived support. Therefore, while JEs aim to democratize access to entrepreneurial experience, their effectiveness is mediated by these regional and institutional disparities, perpetuating a cycle of inequality. Consequently, research on variables within the Brazilian work context must fully consider this complex interplay of political, economic, and social factors. Efforts to promote organizational support must account for these disparities by strengthening localized resources and pursuing national policies that reduce inequality in higher education infrastructure and access.

The diverse composition of the sample, spanning various academic fields, regions, and durations of involvement, offers a valuable and contextualized basis for interpreting these findings. This heterogeneity reflects the multi-layered nature of the JE ecosystem in Brazil. Overall, while JEs appear to mitigate certain gender disparities in support perception, they also reflect and are limited by macro-structural inequalities—particularly those related to regional infrastructure and resource allocation—that influence individual perceptions and developmental outcomes. The non-finding of gender differences may suggest that female students involved in JEs possess higher self-efficacy than their peers, highlighting an area for further investigation. Furthermore, the findings that students who are multilingual and studying in Science and Technology fields are more likely to develop entrepreneurial intentions (Sansone et al., 2021) emphasize the need for integrated educational policies. Future studies may further explore how specific profiles (e.g., discipline, leadership experience) shape engagement and development within JEs and the resulting impact of JEs on reducing educational inequalities in the labor market.

ACKNOWLEDGEMENTS

A positive perception of organizational support suggests that respondents feel valued and recognized by their organization. This acknowledgment enhances their identification with the organization, fostering a sense of belonging and shared purpose. Analyzing these findings through the lens of Social Identity Theory emphasizes the critical role that perceived



organizational support plays in shaping individuals' social identities within their respective groups.

This understanding is particularly important when considering that JEs is a preparatory platform for students transitioning into the job market after graduation. In this context, a strong sense of belonging and support can bolster students' confidence and engagement, equipping them with the entrepreneurial skills and collaborative mindset essential for their future careers. By fostering a positive organizational culture, JEs not only enhance the educational experience but also prepare students to navigate the complexities of the professional world effectively (Barba-Sánchez & Atienza-Sahuquillo, 2018).

Engagement in JEs has emerged as a highly effective extracurricular practice for fostering a range of competencies and enhancing entrepreneurial intentions, thereby preparing university students for the complexities of the job market. This framework acts as a significant catalyst in bridging the gap between academic training and professional realities. Moreover, the presence of organizational support within junior enterprises plays a crucial role in this transitional process, enabling students to navigate future challenges with greater resilience and adaptability.

While this study did not directly investigate participants' academic fields or STEM-specific trajectories, the absence of significant gender-based differences in perceived organizational support suggests that JEs may offer a relatively inclusive and equitable organizational climate. This opens up valuable directions for future research: examining whether JEs provide a favorable environment for female engagement and retention in traditionally male-dominated fields. Investigating the influence of mentorship, collaborative culture, and peer support within JEs may help clarify how these organizations contribute to reducing gender disparities — particularly in areas such as science, technology, engineering, and mathematics (Bennette & Toffoletti, 2024).

In conclusion, this research confirms that the Junior Enterprise environment successfully cultivates high levels of Perceived Organizational Support, acting as a vital bridge between the academic and professional worlds. While the JEs' internal culture appears resilient to gender disparities in overall support, suggesting an instrument for inclusion, our findings simultaneously provide a sobering reflection of macro-structural reality. The clear regional disparities in perceived support underscore a critical need for targeted policy interventions to bolster institutional infrastructure and resources in historically underserved regions of Brazil. Ultimately, the true transformative potential of the JE movement lies not only in fostering entrepreneurial skill, but in actively championing organizational equity against the backdrop of persistent socioeconomic and geographic



inequality. This study thus serves as a call to action: to leverage the success of these student organizations to drive both institutional reform and national policies that ensure equitable access to supportive and empowering educational experiences for all.

DECLARATION OF INTEREST STATEMENT

The authors report there are no competing interests to declare.

REFERENCES

- Almeida, J., Daniel, A. D., & Figueiredo, C. (2019). The future of management education: The role of entrepreneurship education and junior enterprises. *The International Journal of Management Education*, 19(1), 100318. <https://doi.org/10.1016/j.ijme.2019.100318>
- Alves de Brito, M. M. (2017). Novas tendências ou velhas persistências? Modernização e expansão educacional no Brasil. *Cadernos de Pesquisa*, 47(163), 224-263. <https://doi.org/10.1590/198053143789>
- Ashforth, B., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review*, 14(1), 20–39. <https://doi.org/10.2307/258189>
- Baran, B. E., Shanock, L. R., & Miller, L. R. (2012). Advancing organizational support theory into the twenty-first century world of work. *Journal of Business and Psychology*, 27(2), 123–147. <https://doi.org/10.1007/s10869-011-9236-3>
- Barba-Sánchez, V., & Atienza-Sahuquillo, A. (2018). Junior enterprises as an entrepreneurial learning platform: A study of the perceptions of student members. *International Journal of Entrepreneurial Behavior & Research*, 24(1), 2-16. <https://doi.org/10.1108/IJEBR-05-2017-0183>
- Benkhoff, B. (1997). Better performance through organizational identification: A test of outcomes and antecedents based on social identity theory. In *The Search for Competitiveness and Its Implications for Employment* (pp. 159-179). Dublin: Oak Tree Press.
- Bennette, A., & Toffoletti, K. (2024). STEMist sensibilities in the promotion of STEM and tech participation to women and girls. *Journal of Gender Studies*. <https://doi.org/10.1080/09589236.2024.2385387>
- Bervanger, E., & Visentini, M. (2016). Publicações científicas brasileiras sobre empresas juniores na área de administração: Um estudo bibliométrico. *REGE Revista De Gestão*, 23(3), 211-221. <https://doi.org/10.1016/j.rege.2016.06.002>
- Bodolica, V., Spraggon, M., & Badi, H. (2021). Extracurricular activities and social entrepreneurial leadership of graduating youth in universities from the Middle East. *The International Journal of Management Education*, 19(2), 100489. <https://doi.org/10.1016/j.ijme.2021.100489>
- Brasil. (2019). Ministério da Educação. Diretrizes Curriculares Nacionais dos Cursos Superiores. http://portal.mec.gov.br/index.php?option=com_docman&view=download&alias=119811-pces334-19&category_slug=agosto-2019-pdf&Itemid=30192



- Brasil Júnior. (2021). Planejamento Estratégico da Rede 2022-2024. <https://brasiljunior.org.br/portal-da-transparencia>
- Brasil Júnior. (2024). <https://brasiljunior.org.br/>
- Brazil. (2016). Law No. 13,267, of April 6, 2016. Provides for the creation and organization of Junior Enterprises within higher education institutions and other provisions. Official Gazette of the Federal Government, Brasília, DF. http://www.planalto.gov.br/ccivil_03/_ato2015-2018/2016/lei/L13267.htm
- Brown, R. (2020). The social identity approach: Appraising the Tajfellian legacy. *British Journal of Social Psychology*, 59(1), 5–25. <https://doi.org/10.1111/bjso.12349>
- Brown, T. A. (2015). *Confirmatory factor analysis for applied research* (2nd ed.). Guilford Press.
- Byrne, B. M. (2001). *Structural equation modeling with AMOS: Basic concepts, applications and programming*. Erlbaum.
- Colquitt, J. A., Scott, B. A., & LePine, J. A. (2007). Trust, trustworthiness, and trust propensity: A meta-analytic test of their unique relationships with risk taking and job performance. *Journal of Applied Psychology*, 92(4), 909–927. <https://doi.org/10.1037/0021-9010.92.4.909>
- Daniel, A. D., & Almeida, J. (2021). The role of junior enterprises in the development of students' entrepreneurial skills. *Education + Training*, 63(3), 360-376. <https://doi.org/10.1108/ET-03-2019-0049>
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71(3), 500–507. <https://doi.org/10.1037/0021-9010.71.3.500>
- Eisenberger, R., Shanock, L. R., & Wen, X. (2020). Perceived organizational support: Why caring about employees counts. *Annual Review of Organizational Psychology and Organizational Behavior*, 7, 101–124. <https://doi.org/10.1146/annurev-orgpsych-012119-044917>
- Greer, M. J., & Greene, P. G. (2003). Feminist theory and the study of entrepreneurship. In J. Butler (Ed.), *Women Entrepreneurs* (pp. 1-24). Information Age Publishing.
- Greenaway, K. H., Cruwys, T., Haslam, S. A., & Jetten, J. (2016). Social identities promote well-being because they satisfy global psychological needs. *European Journal of Social Psychology*, 46(3), 294-307. <https://doi.org/10.1002/ejsp.2169>
- Hogg, M. A., & Terry, D. J. (2000). Social identity and self-categorization processes in organizational contexts. *Academy of Management Review*, 25, 121–140. <https://doi.org/10.2307/259266>
- IPEA, Instituto de Pesquisa Econômica Aplicada. (2023). Políticas sociais: Acompanhamento e análise. Educação (BPS, n. 30). <https://repositorio.ipea.gov.br/handle/11058/12167>
- Junior Enterprises Europe, JEE. (2024). <https://junioenterprises.eu/>
- Junior Enterprises Global. (2024). <https://www.junioenterprises.org/>
- Kesebir, S., Lee, S. Y., Elliot, A. J., & Pillutla, M. M. (2019). Lay beliefs about competition: Scale development and gender differences. *Motivation and Emotion*, 43(5), 719–739. <https://doi.org/10.1007/s11031-019-09779-5>



- Kurtessis, J., Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., & Adis, C. S. (2015). Perceived organizational support: A meta-analytic evaluation of organizational support theory. *Journal of Management*, 43(6). <https://doi.org/10.1177/0149206315575554>
- Moraes, G. H. S., Iizuka, E. S., Rocha, A. K. L. da, & Diaféria, A. M. (2022). Junior enterprise and entrepreneurial behavior in Brazil. *Innovation & Management Review*, 19(2), 156-172. <https://doi.org/10.1108/INMR-09-2020-0119>
- Ng, T. W. H., & Sorensen, K. L. (2008). Toward a further understanding of the relationships between perceptions of support and work attitudes: A meta-analysis. *Group & Organization Management*, 33, 243-268. <https://doi.org/10.1177/1059601107313307>
- Oliveira de Souza, S. R. de, Gemal, K., Goethen, P. R. da S., & Provenza, M. M. (2022). Aplicações de testes estatísticos não paramétricos para análise de hipertensos nas regiões de saúde do Rio de Janeiro. *Cadernos Do IME - Série Estatística*, 51, 24. <https://doi.org/10.12957/cadest.2021.67352>
- Paiva, G., Almeida, D., Coelho, L., Pereira, S., & Costa, B. (2024). Competencies developed by students while working in nutrition junior enterprises. *DEMETERA: Alimentação, Nutrição & Saúde*, 19(1). <https://doi.org/10.12957/demetra.2024.69914>
- Sansone, G., Ughetto, E., & Landoni, P. (2021). Entrepreneurial intention: An analysis of the role of student-led entrepreneurial organizations. *Journal of International Entrepreneurship*, 19(3), 399-418. <https://doi.org/10.1007/s11301-021-00187-y>
- Schmidt, C. M., & Jones, P. (2020). The intersectionality of gender, race, and class in leadership in junior enterprises. *Leadership & Organization Development Journal*, 41(2), 287-299. <https://doi.org/10.1108/LODJ-06-2019-0292>
- Wright, P. M., & Boswell, W. R. (2002). Desegregating HRM: A review and synthesis of the literature on the strategic impact of human resource management practices. *Journal of Management*, 28(3), 247-276. <https://doi.org/10.1177/014920630202800302>



APPENDIX

Table 1

Overview of Junior Enterprises Worldwide

| Name | Number of JEs (NJE) | Country/Continent |
|-------------------|---------------------|-------------------|
| Brazil Junior | 1.612 | Brazil |
| Raíces | 3 | Argentina |
| JE Austria | 7 | Austria |
| JE Belgium | 16 | Belgium |
| JE Cameroon | 20 | Cameroon |
| JE Europe | 400 | Europe |
| JE France | 140 | France |
| CGJE | 10 | Gabon |
| BDSU | 34 | Germany |
| JC Network | 38 | Germany |
| JE Italy | 31 | Italy |
| JE Netherlands | 12 | Netherlands |
| JE Portugal | 25 | Portugal |
| JE Switzerland | 13 | Switzerland |
| JET | 30 | Tunisia |
| Junior Enterprise | 6 | USA |

Table 2

Sample demographics

| | Categories | N | % of Total |
|------------------------------|--------------------------|-----|------------|
| Gender | Cis woman | 680 | 50.4 % |
| | Cis man | 646 | 47.9 % |
| | Trans man | 3 | 0.2 % |
| | Non-binary | 8 | 0.6 % |
| | I prefer not to answer | 11 | 0.8 % |
| Region of the country | North | 66 | 4.9 % |
| | Northeast | 330 | 24.5 % |
| | Central-West | 86 | 6.4 % |
| | Southeast | 829 | 61.5 % |
| | South | 37 | 2.7 % |
| CNPQ Areas | Exact and Earth Sciences | 128 | 9.5 % |
| | Biological Sciences | 44 | 3.3 % |
| | Engineering / Technology | 485 | 36.0 % |



| | | | |
|----------------------------|----------------------------------|-----|--------|
| | Health Sciences | 159 | 11.8 % |
| | Agricultural Sciences | 85 | 6.3 % |
| | Social Sciences | 286 | 21.2 % |
| | Human Sciences | 59 | 4.4 % |
| | Linguistics, Literature and Arts | 19 | 1.4 % |
| | Others | 83 | 6.2 % |
| Positions | Trainee | 84 | 6.2 % |
| | Consultant / Advisor | 664 | 49.3 % |
| | Director / Manager | 481 | 35.7 % |
| | President / Vice-president | 108 | 8.0 % |
| | Cousenlor | 11 | 0.8 % |
| Leadership Position | Yes | 513 | 38.1 % |
| | Not | 835 | 61.9 % |

Table 3

Internal Consistency Statistics of the Organizational Support Scale

| | Mean | Standard-Deviation | Cronbach's α | McDonald's ω |
|-------------------------------------|-------|--------------------|---------------------|---------------------|
| Organizational Support Scale | 5,480 | 0,791 | 0,711 | 0,824 |

Note: Items 1, 2 and 8 have been reversed.

Table 4

Kruskal-Wallis Analysis

| | Gender | | | |
|-------------------------------------|------------------------------|----|-------|--------------|
| | χ^2 | Df | p | ϵ^2 |
| Organizational Support Scale | 6.19 | 4 | 0.185 | 0.00460 |
| | Region of the country | | | |
| | χ^2 | Df | p | ϵ^2 |
| Organizational Support Scale | 12.6 | 4 | 0.013 | 0.00937 |



Table 5

Pairwise Comparisons – Region and Organizational Support

| Group | Group | W | p |
|--------------|--------------|--------|---------|
| North | Northeast | -0.169 | 1.000 |
| North | Central-West | -0.369 | 0.999 |
| North | Southeast | -0.801 | 0.980 |
| North | South | -4.251 | 0.022** |
| Northeast | Central-West | -0.264 | 1.000 |
| Northeast | Southeast | -1.319 | 0.884 |
| Northeast | South | -4.879 | 0.005* |
| Central-West | Southeast | -0.564 | 0.995 |
| Central-West | South | -4.237 | 0.023** |
| Southeast | South | -4.590 | 0.010* |

Note: ** $p < 0,05$; * $p < 0,01$

Table 6

POS Items ranked by Mean Score

| POS Item | Mean Score |
|--|------------|
| It is possible to get help from this organization when I have a problem. | 6.41 |
| This organization really cares about my well-being. | 6.34 |
| This organization tries to make my work as interesting as possible. | 6.30 |
| This organization cares about my satisfaction at work. | 6.24 |
| This organization is ready to help me when I need a special favor. | 6.08 |
| This organization would be willing to expand its facilities to help me use my best skills at work. | 5.93 |
| This organization does not consider my interests when making decisions that affect me. (reversed) | 5.75 |
| This organization would ignore any complaint I made. (reversed) | 5.26 |
| This organization cares more about its profits than about me. (reversed) | 1.99 |

Table 7

Mean POS Item Scores by Gender

| POS Item | Cis Women (M) | Cis Men (M) | Difference (W - M) |
|--|---------------|-------------|--------------------|
| This organization would ignore any complaint I made. | 1.75 | 1.70 | -0.05 |
| This organization does not consider my interests when making decisions that affect me. | 1.99 | 1.86 | -0.12 |
| It is possible to get help from this organization when I have a problem. | 6.24 | 6.16 | -0.08 |
| This organization really cares about my well-being. | 06.07 | 06.05 | -0.02 |
| This organization would be willing to expand its facilities to help me use my best skills at work. | 4.98 | 5.13 | 0.15 |



| | | | |
|---|-------|------|-------|
| This organization is ready to help me when I need a special favor. | 5.66 | 5.79 | 0.13 |
| This organization cares about my satisfaction at work. | 06.08 | 6.00 | -0.08 |
| This organization cares more about its profits than about me. | 2.63 | 2.32 | -0.31 |
| This organization tries to make my work as interesting as possible. | 5.75 | 5.59 | -0.16 |

Note. POS = Perceived Organizational Support. Scores range from 1 (Strongly Disagree) to 7 (Strongly Agree). Values represent group means by item.

Table 8

Mean POS Scores by Academic Area (STEM vs. Non-STEM)

| POS Item | Non-STEM | STEM |
|--|----------|-------|
| This organization would ignore any complaint I made. | 1.59 | 1.76 |
| This organization does not consider my interests when making decisions that affect me. | 1.63 | 1.97 |
| It is possible to get help from this organization when I have a problem. | 6.41 | 6.15 |
| This organization really cares about my well-being. | 6.34 | 06.01 |
| This organization would be willing to expand its facilities to help me use my best skills at work. | 5.26 | 05.02 |
| This organization is ready to help me when I need a special favor | 5.93 | 5.68 |
| This organization cares about my satisfaction at work. | 6.30 | 5.99 |
| This organization cares more about its profits than about me | 2.30 | 2.50 |
| This organization tries to make my work as interesting as possible. | 5.95 | 5.63 |

Note: Classification based on CNPq areas. POS = Perceived Organizational Support. Scores range from 1 (Strongly Disagree) to 7 (Strongly Agree).

