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Submetted: Sept. 05, 2023 Accepted: Jan. 11, 2024 Published: Jan. 27, 2024

doi 10.20396/riesup.v11i00.8674466 e-location: e025032

ISSN 2446-9424



Academic engagement and imposter syndrome among undergraduates: a correlational study

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ABSTRACT

Introduction: In the university context, constructs like the Academic Engagement (AE) have become desirable, which refers to a persistent state of affective-cognitive spirit. This space is also categorized by a logic of productivity, creating feelings of fraud, characteristic of Impostor Syndrome (IS). Therefore, it's possible that, aiming to achieve an idealized image of academic success, students can get too involved to diminish this feeling of falsity. Objective: We sought to know the relation between the academic engagement and the impostor syndrome, in addition to verifying if there is a relation of prediction and if there are differences related to sociodemographics variables. Methods: Counting on a sample of 201 undergraduate students from Federal University of Paraíba (UFPB), the respondents were contacted to answer the online questionnaire containing the instruments of study regarding the constructs of academic engagement and impostor syndrome, in addition to sociodemographic informations. To achieve the goals, it were made analysis of correlation, linear regression and ANOVA factorial. Results: Indeed, it was found significant correlations between the constructs and their respective dimensions, as well as a prediction relation, which endorse the previous findings. Regarding the differentiations in engagement based on variables such as gender or work experience, there were no statistically significant results. Conclusion: With this, it's possible to compreehend that along with the positive aspects of commitment in the university, the students can also be dealing with the feeling of fraud and self-deprecation. Delving into this theme allows to promote researches and actions more focused on their well being and perfomance.

KEYWORDS

Imposter syndrome. Academic engagement. University.

Engajamento acadêmico e síndrome do impostor entre graduandos: um estudo correlacional

RESUMO

Introdução: o texto integra pesquisa desenvolvida junto ao Programa de Pós-graduação em Políticas Públicas e Gestão Educacional, da Universidade Federal de Santa Maria (UFSM), articulando-se ao Grupo de Pesquisas em Políticas Públicas e Gestão Educacional - Gestar/UFSM, abordando políticas de assistência e permanência de estudantes na Educação Superior, a partir de um estudo de caso do curso de Odontologia da UFSM, em especial o benefício socioeconômico Auxílio à Aquisição de Material Pedagógico. Objetivo: assim, objetiva-se analisar as relações e contribuições do benefício Auxílio à Aquisição de Material Pedagógico, atribuído a estudantes de graduação em Odontologia da UFSM, referentes à permanência, ao desenvolvimento acadêmico e à conclusão de curso. Metodologia: entre outros aspectos, a metodologia quanti-qualitativa de pesquisa pautou-se na análise documental, sendo a análise de conteúdo adotada enquanto fundamento para a interpretação dos dados junto à estatística descritiva. Resultados: os resultados apontam que a maior parte dos estudantes de Odontologia da UFSM, contemplados de 2017 a 2019, obteve notas acima das médias de seus grupos e que o grupo que teve a maior média geral foi daqueles que receberam mais vezes o benefício Auxílio. O quantitativo de vezes que os estudantes foram beneficiados impactou de forma direta no desempenho da média da maior parte dos grupos. Conclusão: conclui-se que política de assistência e permanência estudantil, permeada pelo Auxílio à Aquisição de Material Pedagógico, contribui para que estudantes da Educação Superior da UFSM, do curso de graduação em Odontologia, possam realizar e permanecer em seu curso com desenvolvimento acadêmico satisfatório.

PALAVRAS-CHAVE

Síndrome do impostor. Engajamento acadêmico. Universidade.

Compromiso académico y síndrome del impostor entre estudiantes universitarios: um estudio correlacional

RESUMEN

Introducción: En el contexto universitario se vuelven deseables constructos como el Compromiso Académico (CA), que hace referencia a un estado mental afectivo-cognitivo persistente. Este espacio también se caracteriza por una lógica de productividad, generando sentimientos de fraude, característicos del Síndrome del Impostor (SI). Por tanto, es posible que, para alcanzar la imagen idealizada de éxito académico, los estudiantes puedan envolverse mucho en reducir este sentimiento de falsedad. Obietivo: Se buscó comprender la relación entre el compromiso académico y el síndrome del impostor, además de verificar si existe una relación predictiva y si existen diferencias en función de variables sociodemográficas. Metodología: Con una muestra de 201 estudiantes de graduación de la Universidad Federal de Paraíba (UFPB), se contactó a los encuestados para responder el cuestionario en línea que contiene los instrumentos de estudio relacionados con los constructos de compromiso académico y síndrome del impostor, además de información sociodemográfica. Para lograr los objetivos se realizaron análisis de correlación, regresión lineal y ANOVA factorial. Resultados: De hecho, se encontraron correlaciones significativas entre los constructos y sus respectivas dimensiones, así como una relación predictiva, lo que corrobora hallazgos anteriores. En cuanto a las diferencias de compromiso en función de variables como el género o la experiencia laboral, no hubo resultados estadísticamente significativos. Conclusión: Con esto, es posible comprender que junto con los aspectos positivos del compromiso con la universidad, los estudiantes también pueden estar lidiando con sentimientos de fraude y autodesprecio. Profundizar en este tema te permite incentivar investigaciones y acciones más enfocadas a tu bienestar y desempeño.

PALABRAS CLAVE

Síndrome del impostor. Compromiso académico. Universidad.

CRediT

- Recognition: Not applicable
- Financing: National Council for Scientific and Technological Development (CNPq).
- Conflicts of interest: The authors certify that they have no commercial or associative interest that represents a conflict of interest in relation to the manuscript.
- Ethical approval Approved by the Research Ethics Committee of the Federal University of Paraíba. CAAE report no. 56813522.2.0000.5188.
- Availability of data and material: The data generated and collected is not available in a repository.
- Author contributions: Conceptualization, Data curation, Research, Methodology, Writing proofreading & editing: Almeida, A. C.; Silva,
 J. D. S.; Formal analysis, Validation, Visualization, Writing original draft: Silva, J. D. S.; Project management, Supervision: Almeida, A. C.
- Translation: Silvia lacovacci MEI

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1 Introduction

Knowing that universities are closely linked to social progress and the development of scientific knowledge, we try to think of actions that increasingly qualify the educational and social processes that take place there (Cofferri et al., 2020). Academic Engagement (AE) has therefore become a major challenge and a key element in discussions about the university environment.

As such, AE has gained ground as a research topic, as it is considered relevant to the learning process and to study persistence (Rigo; Vitória; Moreira, 2018; Escolano-Pérez, 2014). In this sense, those involved in the educational processes of higher education institutions seek strategies that stimulate motivation and engagement among students, also with the aim of improving performance (Santos; Severo; Correia, 2022).

In short, engagement implies an affective-cognitive state of mind that is not momentary for particular objects, events, or behaviors (Schaufeli et al., 2002). It is related to the individual and collective performance of the subject (Schaufeli, 2013). In the university environment, it is a desirable construct because it is related to students' effort, satisfaction, and personal development and is considered a predictor of high academic performance (Meng; Jin, 2017).

However, in the pursuit of academic success, there are often stress factors due to the competitive environment and high pressure for good performance and productivity, as stated by Hutchins (2015). It is common to find academics who, despite high indicators, do not perceive the positivity of their actions (Cisco, 2020). In this context, there is the Impostor Syndrome (IS), which, despite the popularization of this term, is not identified as a de facto diagnostic category (Almeida, 2020).

The feelings generated by IS are characterized by insecurity and an idea of false worthiness regarding the successes achieved by the individual, i.e., they believe that their achievements are due to chance or luck and not to their efforts and performance. In an academic context, many students with IS traits may go to great lengths to reduce their sense of falsity regarding their achievements to achieve an idealized image of success (Schubert, 2013).

Research such as that by Cokley et al. (2018) supports this idea, as it shows that more perfectionist individuals tend to have more impostor characteristics. Similarly, Wang, Sheveleva, and Permyakova (2019) point out that academics with high levels of IS are more perfectionist in their activities. On the other hand, the impostor may also run away from challenges and commitments for fear of failure, or they may exhibit behaviors such as procrastination to attribute a possible failure to external elements such as lack of time (Rohrmann; Bechtoldt; Leonhardt, 2016).

With this in mind, the aim is to answer the question: What is the relationship between academic engagement and impostor syndrome in undergraduates? In this sense, it is assumed that there is a significant relationship between the constructs. As Almeida (2020) points out, IS

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has consequences on the lives and mental health of these students, so research is needed to identify these relationships and how they occur. From this, it will be possible to better explain the phenomenon and suggest interventions that are effective in promoting healthy engagement.

To understand the possible relationships between these variables, the following general objective was developed: To understand the relationship between academic engagement and impostor syndrome, with the following specific objectives: to analyze the correlation between the constructs of impostor syndrome and academic engagement; to check the predictive power of impostor syndrome on academic engagement and to see if there is a difference between the constructs (academic engagement and impostor syndrome) depending on sociodemographic variables (gender, work).

1.1 Academic Engagement

Upon entering the academic environment, students are faced with greater cognitive demands, organization, and commitment to their studies. Thus, research on engagement has emerged to identify it as a way for university students to adapt to the activities that will lead them to the desired academic success. This theme points to student integration and persistence, as well as the implications for student performance (Williams et al., 2017).

The term "engagement" has been used in common parlance with other imprecise words such as involvement, interaction, and motivation. At first glance, the word has various meanings that make it difficult to establish a definition that combines a single concept and covers its many aspects (Vitória et al., 2018). As a result, EE can easily be confused with other variables that, although correlated, are distinct. An example of this is the study by Porto and Gonçalves (2017), which characterizes engagement and involvement as the result of a bidirectional relationship with motivation.

In the field of science, the construct of engagement can be understood as being positive in nature, motivational in nature, persistent over time, and not focused on a single situation (Harju et al., 2016; Schaufeli, 2015). As such, it includes the affective, behavioral and cognitive dimensions of students (Vitória et al., 2018). This study is based on the perspective of Schaufeli, a leading author in this field of research. He postulates that EE is a student's satisfactory mental state in relation to what they are doing (Schaufeli, 2013).

In this model, the authors divide EE into three factors: vigor, dedication, and absorption (Schaufeli; Bakker, 2013). The vigor dimension refers to a behavioral factor of high energy and resilience to carry out activities even in the face of some difficulties (Schaufeli, 2017). The dedication dimension refers to an emotional factor of a sense of enthusiasm, pride, and challenge for studies (Kimbark; Peters; Richardson, 2016). The absorption dimension represents a cognitive factor that deals with total involvement in the activity so that they do not see the time passing or find it difficult to disconnect (Alrashidi; Phan; Ngu, 2016).

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Academic engagement is a dualistic process that encompasses not only the student's commitment, but also the activities promoted by the higher education institution (Vitória et al., 2018). Attention should also be paid to the presence of implicit competitiveness, which, when combined with other stressors, can have negative consequences for students (Meurer; Costa, 2020). In addition, the high demand for activities can lead to risks for the biopsychosocial well-being of these individuals (Oliveira et al., 2021). Thus, from admission to graduation, the university experience can be painful, leaving gaps for problems such as IS.

1.2 Impostor syndrome

IS can also be known as the impostor phenomenon or fraud syndrome. Despite its name, it is not an official diagnosis according to the American Psychiatric Association manual (Simão, 2021), but it has real and psychological consequences in both academic and professional environments. At work, IS can negatively affect the effectiveness of organizations, and at university, it can affect student retention and mental health (Meurer; Costa, 2020).

The impostor phenomenon is based on the belief that all success is the result of chance, luck, or even charm; it is never due to merit, effort, or one's own abilities. They tend to always attribute their achievements to external factors, even though they may have considerable academic and professional achievements (Bezerra et al., 2021; Clance; Imes, 1978). Because of this, there is a certain comparison between their performance and that of other people, which serves to emphasize their shortcomings (Almeida, 2020).

As a result, these individuals find it difficult to accept praise or any kind of recognition. They may even go so far as to sabotage their success by shying away from new opportunities for academic/professional growth for fear of being discovered as cheaters (Bezerra et al., 2021). To cope with feelings of insecurity and anxiety about tasks, they usually act in two different ways: with exhaustive and perfectionist preparation or with self-sabotaging behaviors characteristic of procrastination (Dudau, 2014).

The impostor phenomenon was first identified by researchers Clance and Imes (1978) with a group of successful women who had distorted beliefs about their achievements, believing them to be the result of luck. As a result, they were unable to internalize their accomplishments, believed they didn't deserve what they had achieved, and reported an extreme fear of failure (Clance; Imes, 1978). Through this study, Clance and Imes (1978, p. 241) defined IS as "an internal experience of intellectual falsehood that appears to be particularly prevalent and intense among a select sample of high-achieving women.

According to Clance and Imes (1987), there are four behaviors that individuals use to sabotage themselves. The first has to do with working hard to cover up their inability or incompetence; the second has to do with falsehood, where they use ideas opposite to their own because they believe that if they used their true ideas they would not do well; the third has to do with using sympathy to reach their superiors, believing that their achievements come from this

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factor; finally, the fourth has to do with avoidance, where they choose to avoid seeking success for fear of failing and having their failures observed and pointed out by others.

In this way, the IS present in the academic trajectory can influence the professional career, affecting the performance of these individuals and negatively affecting their mental health (Bezerra et al., 2021). In a study of people in leadership positions, IS was found to be associated with anxiety, dysphoric mood, emotional instability, perfectionism, procrastination behavior, and negative self-evaluation (Rohrmann; Bechtoldt; Leonhardt, 2016). In other studies, individuals with IS may present with depression (Austin et al., 2009), insecurity, low self-esteem, and introversion (Clance, 1985; Holmes et al., 1993; Schubert, 2013).

2 Method

This is a cross-sectional study to analyze data from a specific sample of the population of undergraduates at a public university in the Northeast. As for the level, it is characterized as descriptive, since it seeks to identify and analyze the predictive relationship between two constructs, to explain this phenomenon in the academic environment.

201 undergraduates of the Federal University of Paraíba (UFPB) participated in this study, 77.1% female and 22.9% male, with an age between 19 and 61 years (M = 24.1; SD = 6.68). Regarding marital status, 91% were single, 7% were married, and 2% were divorced. 33.3% of the sample reported working in addition to studying, and most identified themselves as brown (47.3%), followed by white (40.8%). Respondents were contacted via social networks such as WhatsApp, Instagram, Twitter and Facebook, and completed the questionnaire online using Google Forms. As such, it was a non-probability, convenience sample. Respondents participated in the survey with their consent.

The Utrecht Work Engagement Scale (UWES - Schaufeli et al., 2002) was used. This instrument was developed by Schaufeli (2002) to measure work engagement and consists of 17 items in its longest version. For this study, a version called the Study & Well-being Survey (UWES-S) was used, which was translated and adapted for students by Silva et al. (2018). The instrument includes three factors with the following dimensions: vigor (e.g., item 01 "When I do my activities as a student, I feel full of energy"), commitment (e.g., item 05 "I am enthusiastic about my studies"), and absorption (e.g., item 16 "It is difficult to disconnect from my studies"). The UWES-S has a 7-point Likert scale ranging from 0 (never/never) to 6 (always/every day).

The Impostor Syndrome Scale (ISS - Almeida, 2020) was also used. This instrument consists of 16 items to identify aspects of impostor syndrome. The items are divided into four dimensions, namely: self-deprecation (e.g. item 01 "Sometimes I feel disappointed with my current achievements and think I should have done much more"), fear of evaluation (e.g. item 02 "I don't care what other people think about me"), deception (e.g. item 03 "In some situations I act like an imposter") and impression management (e.g. item 04 "Some of my achievements

are due to my charm and/or likability"). These items are answered on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

A socio-demographic questionnaire (e.g., age, gender, course of study, and length of study) was also included to characterize the sample. The home page contained the Informed Consent Form (ICF) with information about the research objectives and ethical principles. There was also information on how to respond to the instruments and on the voluntary and confidential nature of participation, in accordance with the ethical precepts proposed for research involving human subjects, according to CNS/MS Resolutions 510/16 and 466/12. It is worth noting that the study was previously approved by the UFPB Research Ethics Committee, with CAAE Opinion No. 56813522.2.0000.5188, which verified its compliance with the principles.

The data was analyzed quantitatively using SPSS (Statistical Package for the Social Science, version 26), which allows the sample to be characterized using descriptive analyses such as the mean, standard deviation and other percentages. Next, using the same software, it was possible to check the association between the constructs addressed in the study using Pearson's r bivariate correlation. A multiple linear regression was then carried out to estimate the predictive power of the impostor syndrome in relation to academic engagement, followed by a factorial ANOVA to compare means.

3 Results

Of the 201 respondents in this study, when asked to what extent they feel academically engaged, compared to the other students who entered the university in the same period, 33.3% said they were engaged and 12.4% said they were very engaged, as can be seen in Figure 1.

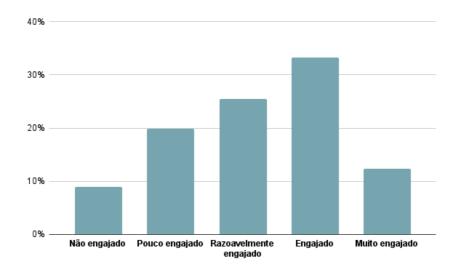


Figure 1. Students' perception of engagement compared to their peers.

Source: Research data

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To understand how academic engagement is associated with impostor syndrome, a two-tailed correlation was carried out using Pearson's r coefficient. According to Schaufeli (2002), engagement has three factors: vigor, dedication and absorption. It was therefore expected that there would be a correlation between these factors and the dimensions of the impostor syndrome construct, and it was significant.

As can be seen in Table 1, the self-deprecation dimension correlated significantly with the engagement factors, namely: vigor (r = -0.387; p < 0.01), dedication (r = -0.343; p < 0.01) and absorption (r = -0.279; p < 0.01). Regarding fear of evaluation, the same was observed: vigor (r = -0.234; p < 0.01), dedication (r = -0.145; p < 0.05) and absorption (r = -0.198; p < 0.01). In the fraud dimension, the correlations were as follows: vigor (r = -0.344; p < 0.01), dedication (r = -0.316; p < 0.05) and absorption (r = -0.247; p < 0.01). However, in the aspect of impression management, the results were not significant, as can be seen: vigor (r = -0.138; p > 0.05), dedication (r = -0.029; p > 0.05) and absorption (r = -0.122; p > 0.05).

Table 1. Pearson correlation analyses between academic engagement factors and imposter syndrome.

	Self-depreciation	Fear of Evaluation	Fraud	Print management	Strength	Dedication	Absorption
Self- depreciation	1	-	-	-	-	-	-
Fear of Evaluation	0,350**	1	-	-	-	-	-
Fraud	0,708**	0,399**	1	-	-	-	-
Print management	0,346**	0,227**	0,479* *	1	-	-	-
Strength	-0,387**	-0,234**	- 0,344* *	-0,138	1	-	-
Dedication	-0,343**	-0,145*	- 0,316* *	-0,029	0,782**	1	-
Absorption	-0,279**	-0,198**	- 0,247* *	-0,122	0,797**	0,754**	1

Note: * = p < 0.05; ** = p < 0.01; n.s. = non-significant relationship.

Source: Research data

A multiple linear regression analysis (forward method) was carried out to investigate the extent to which the four dimensions of imposter syndrome (self-deprecation, fear of evaluation, cheating, and impression management) could predict levels of academic engagement. The results showed a significant influence of the self-deprecation dimension (F(1, 199) = 30.308, p

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< 0.001; R^2 adjusted = 0.128). As can be seen in Table 2, the variable that explained the levels of engagement was self-deprecation, which accounted for 12% of the outcome. The other variables were not included in the model as they had no significant impact: fear of evaluation (B = -0.096, t = -1.361, p = 0.175); fraud (B = -0.138, t = -1.475, p = 0.142) and impression management (B = -0.019, t = 0.270, t = 0.270, t = 0.270.

Table 2. Academic Engagement predictor variable

Predictors	Standardized coefficients	t	Sig.	R^2	ΔR^2
	Beta	_			
(Constant)	-	16,444	0,000	-	-
Self-depreciation	-0,364	-5,505	0,000	0,128	-

Source: Research data

Next, a factorial ANOVA (2x2) was carried out to see to what extent the levels of academic engagement differed between men and women who work or not. The normality of the data was assessed using the Kolmogorov-Smirnov and Shapiro-Wilk tests. Levene's test was also carried out to verify the assumption of homogeneity of variance.

Bootstrapping procedures (1000 re-samples; 95% CI BCa) were implemented to obtain greater reliability in the results, to correct for deviations from the normal distribution of the sample and differences between group sizes and also to present a 95% confidence interval for the differences between the means (Haukoos; Lewis, 2005). Table 3 shows the descriptive statistics for the levels of academic engagement for all the groups.

Table 3. Academic Engagement predictor variables

Sociodemographic variables Gender/Work		Descriptive statistics	Confidence Interval (95% BCa)		
				Lower limit	Upper limit
	-	Average	58,39	53,97	62,41
Female	Works	DP	17,63	15,06	19,50
	Does not	Average	55,27	51,84	58,67
	work	DP	18,98	17,13	20,54
	TF 4 1	Average	56,30	53,50	58,96
	Total	DP	18,55	16,96	19,87
	***	Average	59,06	50,62	67,85
	Works	DP	17,81	10,77	22,13
М.1.	Does not	Average	52,60	44,72	59,58
Male	work	DP	21,27	16,93	25,02
	T-4-1	Average	54,84	49,08	60,04
	Total	DP	20,17	16,39	23,54

	Works	Average	58,55	54,49	62,44
Works	DP	17,54	15,08	19,47	
Total	Does not	Average	54,73	51,39	57,81
Total	work	DP	19,41	17,49	20,99
	Total	Average	56	53,45	58,49
	Total	DP	18,85	17,44	20,14

Source: Research data

The ANOVA results indicated that there was no statistically significant effect on whether they worked (F(1, 196) = 2.048, p = 0.154, $\eta^2 = 0.010$ for gender (F(2, 196) = 0.154, p = 0.858, $\eta^2 = 0.002$) as for the interaction between these two variables (F(1, 196) = 0.249, p = 0.618, $\eta^2 = 0.001$).

4 Discussions

From the findings of the correlation analysis, it can be seen that there is a significant and negative association between the dimensions of imposter syndrome and the factors of academic engagement, except the impression management dimension. This is in accordance with studies such as those conducted by Oliveira et al. (2021), which highlight that one of the behaviors observed in individuals with IS is a steadfast commitment and a considerable effort to accomplish tasks, a characteristic that exemplifies the commitment of engaged students.

According to Bezerra et al. (2021), the IS present in the academic trajectory can negatively affect the learner's performance, thus indicating relationships between the two variables measured. Studies such as those by Cisco (2020) and Cokley et al. (2018) show that, despite having good performance and dedication indicators, some students are unable to identify and internalize the positivity of their actions. For this reason, they attribute their achievements to external factors and not to their abilities, as individuals with IS do.

The regression analysis shows that, as well as being related, there is an influence for IS towards AS, corroborating the findings of Cowman and Ferrari (2002), who say that students who feel like imposters tend to repress their academic abilities. Fearing failure in their activities, these students build obstacles to justify or even sabotage any hint of performance (Cowman; Ferrari, 2002), and may resort to procrastination (Rohrmann; Bechtoldt; Leonhardt, 2016).

Another piece of evidence suggests a relationship between IS and perfectionism (Clance; Imes, 1978), which is expressed by the student's excessive dedication to carrying out their academic tasks, something characteristic of an engaged student. As a result, there is an extreme preoccupation with mistakes, as well as rumination and the need for organization and approval (Thompson; Foreman; Martin, 2000; Dudau, 2014).

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Through comparisons between means, we sought to identify whether there was a difference between academic engagement and the gender of the participants, since research such as Budescu and Silverman (2016), Watanabe (2005) and Strayhorn and Johnson (2014) show that women have a greater tendency to be committed to their studies. However, Maguire et al. (2017) reports that females tend to devote more time and energy to their learning process, but that this does not represent significant differences between men and women, which corroborates the present study.

About undergraduates who not only study but also work, authors claim that they can manage their time better, be more persistent and consequently remain engaged (Chávez-Hernandez; Lugardo-Bravo; Retes-Mantilla, 2018). However, when looking for a difference by comparing the means between individuals who work and those who don't, in terms of engagement, it can be seen that there were no significant differences between the two groups; even so, the literature points to this association as a trend (Xavier, 2019). This result corroborates the research carried out by Silva et al. (2018).

5 Final considerations

Based on the results presented, it can be seen that the general objective of understanding the relationship between academic engagement and impostor syndrome was satisfactorily achieved, as were the specific objectives: to analyze the correlation between the constructs of impostor syndrome and academic engagement; to check the predictive power of impostor syndrome on academic engagement and to see if there are differences between the constructs (academic engagement and impostor syndrome) depending on sociodemographic variables (gender, work).

Thus, there is an association between AS and IS so that there is a predictive relationship between the feeling of self-deprecation and student engagement. It was observed that this correlation is negative: as IS increases, there is a decrease in EE. It can be concluded that this evidence highlights the impostor phenomenon as an obstacle to the development of undergraduates. It is worth emphasizing that discussions about IS in association with EE are also relevant when thinking about the permanence of these students at university.

For the field of research and practice in psychopedagogy and other areas of education, which seek to understand, intervene and favor learning processes, it is important to know more about AS and imposter feelings, given that IS affects relationships with learning, intellectual/professional careers and students' academic engagement. By understanding this relationship more clearly, we can encourage research and actions that are more geared towards student well-being, permanence, and performance.

Although the objectives have been achieved, the study does have some limitations, such as the short time it took to complete the research, given that it was a course completion project.

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This affected the sample, which was limited to just 201 undergraduates, and could have been broader and added more diversity in terms of the groups that responded.

In addition, the instruments used were self-report, which may have a bias towards the social desirability of the respondents. Therefore, further studies on this subject are needed to broaden the theoretical framework using other quantitative analysis techniques. In this sense, the limitations point to directions for future studies that make it possible to expand the theme, in order to contribute to new discussions that will support the theory and achieve the development of effective tools to promote engagement.

Finally, with a view to future studies, we suggest replicating the study with larger and more diverse samples, so that other comparisons can be made between groups. A comparative study could also be carried out between different institutions, namely: public and private, or between undergraduates and postgraduates, to identify how these variables can influence engagement or the incidence of imposter syndrome. In addition, other constructs such as personality, human values and academic performance could be added to the discussions.

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APPENDIX A

1.	Gender: □ Fe	male Male				
2.	Age:	years				
3.	Marital status	s:				
	□ Single					
	☐ Married/stab	ole union				
	☐ Separated/D	ivorced				
	\square Widowed					
	4. You co	onsider yourself:				
5.	□ White	msider yoursen.				
6.	□ Brown					
7.	□ Black					
8.	□ Yellow					
9.	☐ Indigenous					
10	. Other:					
11.	Graduation: _					
12.	Period:					
13.	Are you curre	ntly working?	Yes □ No			
14.	To what exter	nt do you consid	ler yourself academically	engaged,	compared to	the
	students who e	entered universit	y with you?			
	1	2	3	4	5	

1	_
	/
Л	_ /

Very engaged

Engaged

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Fairly engaged

Little engagement

Not engaged

ANNEX A

IMPOSTER SYNDROME SCALE (ISS)

Instructions. Below are statements that deal with situations, thoughts and feelings related to your work/studies. Read each one carefully and, using the response scale below, indicate how much you agree or disagree with the fact that each statement describes you.

1	2	3	4	5
Strongly	I partly	Neither agree nor	I partly agree	I totally agree
disagree	disagree	disagree		

01 Sometimes I feel disappointed with my current achievements and think	ιI
should have done much more.	
02 Other people's opinions of me don't bother me.	
03 In some situations, I act like an imposter.	
04. Some of my achievements are due to my charm and/or friendliness. 05	_ I
feel frustrated because I can't do my job as well as I'd like.	
06 Sometimes I think I'm too worried about what other people think of me.	
07 In some situations I feel like an "imposter".	
08 Sometimes I feel that I am in my current academic/professional positi	on
because of my charm and/or likeability.	
09 When I achieve something and receive recognition for my achievements	, I
have doubts that I can continue to repeat that success.	
10 I generally worry about the kind of impression I make.	
11Sometimes I fear being discovered for who I really am.	
12 On the first day at a new job or course, I sometimes make a point of acti	ng
or behaving smarter than I really am.	
13 Sometimes I feel that my success has been due to some kind of luck.	
14 I worry about what other people will think of me even when I know	it
doesn't make any difference.	
15 I tend to feel like a fake.	
16 I think I got my current academic/professional position because I was	in
the right place at the right time or knew the right people.	
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STUDY & WELL-BEING SURVEY (UWES-S)

Instructions. The following questions refer to feelings in relation to student activity. Please read each of the following items carefully and answer whether you have ever experienced what is reported in relation to your day-to-day life as a student. If you have never had such a feeling, answer "0" (zero) in the column opposite. If so, indicate the frequency (from 1 to 6) that would best describe your feelings, as described below.

0	1	2	3	4	5	6
Never	Almost	Sometimes	Regularly	Frequently	Almost	Always
	never				always	

1	When I do my activities as a student, I feel full of energy.
2	I find my studies full of meaning and purpose.
3	Time flies when I'm studying.
4	I feel strong and vigorous (vitality) when I study or go to class.
5	I'm enthusiastic about my studies.
6	When I'm studying, I forget everything around me.
7	My study inspires me.
8	When I wake up in the morning, I feel like going to class.
9	I feel happy when I study intensively.
10	_ I'm proud of my studies.
11	_ I'm immersed in my studies.
12	_ I can keep studying for long periods of time.
13	For me, my studies are challenging.
14	_ I give myself (get involved) when I'm studying.
15	_ I am mentally resilient (versatile) when it comes to my studies.
16	_ It's hard to disconnect from my studies.
17	_ When it comes to my studies, I always persevere (persist) even when things don't
work o	ut.