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Correlation Between Academic Engagement and Positive Mental Health in University Students

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ABSTRACT

Academic Engagement is a theoretical construct internationally recognized for the evaluation of higher education institutions. Empirical studies of academic engagement in Brazil are still scarce and its importance is gradually increasing, given the expansion of the number of higher education institutions and students in the last decades in the country. The objectives of the present study are to describe the self-perception of the academic satisfaction, the degree of integration of students on their courses and to identify if there is an association between the perception of academic engagement and positive mental health. The participants were 3484 students of 37 courses of graduation at public university of the south area of the country, with an average age of 22,8 (sd = 6,92). The results indicate that almost half of the students (47,4%, n=1644) do not feel satisfied with their academic performance. The items related to their academic experience showed that the students interviewed perceive themselves moderately integrated on their courses. The Pearson correlation showed significant positive association between the dimensions of academic engagement and positive mental health. The strongest correlation between these constructs was between the dimension of emotional engagement and positive mental health ($r = 0,403$, $p < 0,01$). The study demonstrated that the more the students felt good with themselves on the university facilities, more they engaged emotionally on studies, which provoke cognitive development. The results indicate the potential of active participation of the university on the promotion of policy and practices that contribute to the academic engagement and positive mental health of university students.

KEYWORDS

Wellbeing. Academic involvement. Higher education.

Correlação entre Engajamento Acadêmico e Saúde Mental Positiva em Estudantes Universitários

RESUMO

O engajamento acadêmico é um construto teórico reconhecido internacionalmente para a avaliação da função das instituições de ensino superior. Estudos empíricos de engajamento acadêmico no Brasil ainda são escassos e sua importância se faz cada vez maior, dada a ampliação de estudantes e universidades no país durante as últimas décadas. Os objetivos deste estudo foram descrever a autopercepção de satisfação quanto ao desempenho acadêmico, o grau de integração dos estudantes em seus cursos e também identificar se havia associação entre a percepção de engajamento acadêmico e saúde mental positiva. Os participantes foram 3484 estudantes de 37 cursos de graduação de uma universidade pública do sul do país, com idade média de 22,8 (dp = 6,92). Os resultados indicaram que quase metade dos estudantes (47,4%, n=1644) não se sentiam satisfeitos com seu desempenho acadêmico. Os itens relacionados à experiência acadêmica mostraram que os estudantes entrevistados se percebiam moderadamente encaixados ao seu curso. A correlação de Pearson demonstrou associação significativa positiva entre as dimensões de engajamento acadêmico e saúde mental positiva. A correlação mais forte entre estes construtos foi entre a dimensão de engajamento emocional e saúde mental positiva ($r = 0,403$, $p < 0,01$). Evidenciou-se que quanto mais os estudantes se sentem bem consigo e no ambiente universitário, mais se engajam emocionalmente nos estudos, o que estimula o desenvolvimento cognitivo. Os resultados indicam o potencial de participação ativa da universidade na promoção de políticas e práticas que contribuam para o engajamento acadêmico e a saúde mental positiva dos universitários.

PALAVRAS-CHAVE

Bem-estar. Envolvimento acadêmico. Ensino superior.

Correlación entre Compromiso Académico y Salud Mental Positiva en los Estudiantes Universitarios

RESUMEN

El compromiso académico es un constructo teórico reconocido internacionalmente para la evaluación de la función de las instituciones de enseñanza superior. Estudios empíricos de compromiso académico en Brasil todavía son escasos y su importancia se hace cada vez mayor, dada la ampliación de estudiantes y universidades en el país en las últimas décadas. Los objetivos de este estudio han sido describir la autopercepción de la satisfacción cuanto al desempeño académico, el grado de integración de los estudiantes en sus cursos y también identificar si había asociación entre la percepción de compromiso académico y salud mental positiva. Los participantes fueron 3484 estudiantes de 37 cursos de graduación de una universidad pública del sur del país, con edad media de 22,8 (dp = 6,92). Los resultados indican que casi la mitad de los estudiantes (47,4%, n=1644) no se sentían satisfechos con su desempeño académico. Los ítems relacionados a experiencia académica mostraron que los estudiantes entrevistados si percibían moderadamente encajados en sus cursos. La correlación de Pearson ha demostrado asociación significativa positiva entre las dimensiones de compromiso académico y salud mental positiva. La correlación más fuerte entre los constructos fue entre la dimensión de compromiso emocional y salud mental positiva ($r = 0,403$, $p < 0,01$). Se ha evidenciado que cuanto más los estudiantes se sienten bien consigo mismos en el ambiente universitario, más ellos se envuelven emocionalmente en los estudios, lo que estimula el desenvolvimiento cognitivo. Los resultados indican el potencial de participación activa de la universidad en la promoción de políticas y prácticas que contribuyen para el involucramiento académico y la salud mental positiva de los universitarios.

PALABRAS CLAVE

Bienestar. Envolvimiento académico. Educación superior.

Introduction

Dealing with formal teaching-learning environments such as higher education often implies considering issues of access, permanence, and quality. An especially important factor for the prevalence of these last two phenomena is the student's engagement with academic activities (VITÓRIA *et al.*, 2018). This is understood in the literature as academic engagement (HU; KUH, 2002), which is widely studied in the international scenario (ALRASHIDI; PHAN; NGU, 2016; MARTINS; RIBEIRO, 2017), being considered of unquestionable value by higher education institutions for evaluating their performance in their function (MARTINS; RIBEIRO, 2017; TROWLER; TROWLER, 2010; VITÓRIA *et al.*, 2018).

Academic engagement is interrelated with several other psychic phenomena related to academic life. More academically engaged students are less likely to drop out of higher education (ALRASHIDI; PHAN; NGU, 2016; HATCH; GARCIA, 2017; LEI; CUI; ZHAO, 2018; LOES *et al.*, 2017), usually achieve higher grades and academic achievements (DOMENÉCHEC-BETORÉT; ABELLÁN-ROSELLÓ; GOMÉZ-ARTIGA, 2017; DATU, 2016; LEI; CUI; ZHAO, 2018; ROEBKEN, 2007), and report higher degrees of satisfaction when completing assignments and participating in academic activities (CALISKAN; MERCANGOZ, 2013; KARIMI; SOTOODEH, 2019; URQUIJO; EXTREMERA, 2017).

Although it is a broad term with many ways of being conceptualized, one of the many possible definitions of academic engagement is the student's commitment to learning activities, a qualitative result of the complex set of behaviors, thoughts, and feelings related to academic life (HU; KUH, 2002; ALRASHIDI; PHAN; NGU, 2016). Some of the elements that can constitute academic engagement are collaborative engagement (KUH, 2009; LOES *et al.*, 2017), reflective and integrative learning (KUH, 2009; LINDH; THORGREN, 2016), and behavioral engagement (FREDRICKS; BLUMENFELD; PARIS, 2004).

Collaborative engagement says about the time and energy spent by college students to perform academic activities together, bonding and collaborating to prepare for exams or any other challenges that everyday college life may bring (KUH, 2009). When college students end up coming together to perform the activities required by the institution, they share experiences and knowledge that enrich the learning process both because of the cultural diversity they experience and the feeling of welcome that arises from these encounters (CHEN, 2017). Being an object of constant research in the last decades, it is considered as one of the most studied and most promising instructional approaches regarding its high cost-benefit, its effectiveness and practicality (LOES *et al.*, 2017). Some activities that promote and express collaborative engagement are in-class discussions, group presentations, participation in community projects, and theoretical discussions beyond the classroom (KUH, 2009).

Reflective and integrative learning occurs when students relate knowledge that is acquired during the course and systematize it in a coherent way so that it relates to reality that goes beyond the content (LINDH; THORGREN, 2016). This reflection allows them to make sense of the learnings, signifying ideas, and theoretical constructs with their own experiences, which makes integrative reflective learning as an important tool to consolidate learnings (FULLANA *et al.*, 2016). Therefore, integrative reflective learning takes place from moments of theoretical reflection and practical experimentation, where the participation of extracurricular activities, volunteer work and social interaction with other students from diverse backgrounds and identities are fundamental in this process (KUH, 2009).

The behavioral dimension of academic engagement is understood as the attitudinal patterns that are taken by students in different educational contexts. It can be understood from active and positive participation in learning activities, such as contributing to discussions and asking questions. In addition, it is also characterized by the positive conduct of harmonious coexistence with other classmates, including adherence to classroom norms, and participation in extracurricular activities (ALRASHIDI; PHAN; NGU, 2016; FREDRICKS; BLUMENFELD; PARIS, 2004). The cognitive dimension of academic engagement refers to the level of interest and consideration with the investment of time and energy in understanding academic subjects. Included in it is also the use of appropriate learning strategies, self-regulation, and persistence in learning activities, both inside and outside the educational institution (ALRASHIDI; PHAN; NGU, 2016; FREDRICKS; BLUMENFELD; PARIS, 2004). The emotional dimension is related to other modes of engagement, such as motivational, psychological, and affective engagement. All of these can be understood as negative or positive emotional attitudes towards the various elements of the academic dimension, such as teachers, classmates, tests, assignments, and the institution. Indicators of this dimension refer to the presence of positive feelings such as happiness, hope, and well-being. They also seek to map the absence of negative feelings such as boredom, discouragement, and nervousness (ALRASHIDI; PHAN; NGU, 2016; FREDRICKS; BLUMENFELD; PARIS, 2004).

There are many challenges that hinder students' engagement with their academic activities, such as those related to mental health. According to the 2018 Sociodemographic Profile Survey of Federal Higher Education Institutions (IFES), 83.5% of students said they had some emotional difficulty (BRASIL, 2019). The category "emotional problems" is among the top five difficulties impacting academic performance, affecting 23.7% of students (BRASIL, 2019). The World Health Organization defines mental health as the "State of well-being in which the individual knows his or her own abilities, can cope with the usual stresses of life, can work productively, and is able to make contributions to his or her community" (WHO, p. 12). The European Psychiatric Association states that:

Mental health is a dynamic state of internal balance that enables individuals to use their abilities in harmony with the universal values of society. Basic cognitive and social skills; ability to recognize, express, and modulate one's own emotions, as well as exercise empathy toward the emotions of others; flexibility and ability to cope with adverse life events and perform social functions; and having a harmonious

relationship between body and mind represent important components of mental health that contribute, in different proportions, to the state of internal balance (GALDERISI *et al.*, 2015, p. 231-232).

Consisting of a combination of feeling good and being able to act functionally, positive mental health is fundamental to understanding that it is not only about not suffering with psychological problems, but also about conducting daily life in such a way that there is satisfaction, i.e., that the individual feels good about his own actions. Therefore, positive mental health is made up of the set of actions, thoughts, and feelings that allow the individual to live a life that they consider worthy and satisfying (HUPPERT, 2009).

Interrelated with mental health and academic engagement, another especially important concept is academic satisfaction. This can be understood as the student perception of the fulfillment of a certain personal need or desire that involves the university context (PINTO *et al.*, 2017). Included within this scope are their social relationships, the perception of the efficiency and relevance of their actions, and the success involved in their academic and professional training. There is much evidence of a positive correlation between academic satisfaction and other phenomena important to student life, such as academic engagement, self-efficacy, and positive mental health (DOMENÉCHEC-BETORÉT; ABELLÁN-ROSELLÓ; GOMÉZ-ARTIGA, 2017). Satisfaction with the university is given from the social relationships that the student has with other students and with members of the university, while student satisfaction towards the course is mostly given from social relationships, from instructional and emotional perspectives, with professors (KOROBOVA; STAROBIN, 2015).

International studies demonstrate the correlation between academic engagement and positive mental health (OUWENEEL; LE BLANC; B. SCHAUFELI, 2011; ROCHOWIAK, 2017). One of the studied phenomena that are part of the topic are students' affective postures, which can be positive or negative (ABUN; MAGALLANES; INCARNACION, 2019; KING *et al.*, 2015; ROCHOWIAK, 2017). While positive affective postures mean possessing enthusiasm, motivation, and willingness, negative ones are its opposite, expressing demotivation, lethargy, and disinterest. These concepts, when applied in relation to the studies and academic activities provided by universities, directly infer on the level of student engagement (ABUN; MAGALLANES; INCARNACION, 2019; KING *et al.*, 2015; KOTERA; TING, 2019). Students who have a positive affective stance towards learning are more engaged with academic life, providing behaviors, feelings, and actions that are geared towards extolling academic self-growth, while a negative affective stance is insipid and infertile to learning, as it demonstrates disinterest and boredom (ABUN; MAGALLANES; INCARNACION, 2019; KING *et al.*, 2015; KOTERA; TING, 2019; ROCHOWIAK, 2017).

When this set of positive emotions, such as motivation and contentment, arises in the classroom or when performing university activities of an academic nature, the student feels emotionally rewarded by the activity itself and tends to autonomously pursue it (ROCHOWIAK, 2017). Furthermore, from these positive emotions comes a broader

cognitive perception, both conceptual and behavioral, of different and creative ways to approach a problem (ROCHOWIAK, 2017). The opposite happens when negative emotions arise in the same contexts, as the student who feels disengaged and dissatisfied with the activity tends to avoid it, which ends up limiting the range of possibilities perceived by the individual (ROCHOWIAK, 2017; STEELE; FULLAGAR, 2009).

Furthermore, the psychological well-being that arises from the affective engagement with academic life generates feelings such as greater self-confidence, self-efficacy and resilience, fundamental concepts that constitute positive mental health. In turn, in pursuit of positive emotions, the student starts to have actions aimed at more evident and well-defined academic goals, building for himself a framework of mental concepts and emotional skills that help him maintain his mental health and achieve his study goals, thus favoring academic engagement (KING *et al.*, 2015; ROCHOWIAK, 2017; STEELE; FULLAGAR, 2009).

Promoting positive mental health and academic engagement in higher education institutions is therefore both a challenge and a necessity. International research reports interventions that seek to develop and enhance students' mental skills that are necessary to ennoble positive mental health and promote academic engagement (GREGOIRE *et al.*, 2018; KIVLIGHAN *et al.*, 2018; STALLMAN; KING, 2016). In addition to being successful in their main goals, these interventions help to promote beneficial aspects for students in important issues such as increased well-being and decreased symptoms of stress, anxiety, and depression (GREGOIRE *et al.*, 2018).

In the national context there are studies that address the mental health of students within higher education institutions from different approaches, addressing their connections with social relationships, perceived bias, depression, anxiety, and burnout syndrome (CASTRO, 2017; CERQUEIRA-SANTOS; AZEVEDO; RAMOS, 2020). Even though there is a broad national interest in assessing various dimensions of the quality of education being provided in higher education institutions, there is a small amount of studies addressing academic engagement (MARTINS; RIBEIRO, 2017) and even less in Higher Education (CAMPOS; SCHMITT; JUSTI, 2020; FIOR; MERCURI; SILVA, 2013; MARTINS; MACHADO; VOSGERAU, 2021; SILVA *et al.*, 2018).

For the foregoing, it is considered the relevance of developing a study that evaluates the academic engagement among college students and its relationship with mental health, aiming to expand the investigations on the theme in the national context. Investigations of aspects of the academic experience are of special importance to provide scientific subsidies for the construction of public and institutional policies that help students to remain in higher education, in their academic training and in their well-being during this process.

Thus, this work¹ aims to describe the self-perception of college students regarding their academic performance and their feelings about the course; to identify whether there is a correlation between positive mental health and academic engagement. The hypothesis, according to the literature review, is that there is a positive correlation between all dimensions of academic engagement and positive mental health.

Method

This is a cross-sectional study, of quantitative and descriptive approach, which carried out descriptive and relational analyses. Descriptive research aims to describe certain phenomena, objects, people, or groups, which consists of specifying their properties, characteristics, and/or profiles. They collect information about the objects of study, but do not relate them to each other. Correlational research, on the other hand, aims to find relationships between variables, whether they are indifferent to each other or are associated in a positive or negative way, in addition to measuring the degree of relationship between them. These correlations allow certain hypotheses to be consolidated or disregarded (SAMPIERI; COLLADO; LUCIO, 2013). The following details the participants, instruments and procedures for data collection and analysis.

Participants

A total of 3484 students from 37 undergraduate courses at a university in southern Brazil participated in the survey. The mean age of the participants was 22.8 (SD = 6.92). Most of them were white (72.7%, n = 2524), heterosexual (79.4%, n = 2747) and female (56.5%, n = 1966). Regarding the area of knowledge, 18.5% (n = 646) were from the Exact and Earth Sciences area, 17.82% (n = 621) from the Social and Applied Sciences area, 15.3% (n = 533) from the Agricultural Sciences area, 14, 38% (n = 501) in Engineering, 12.8% (n = 447) in Health Sciences, 9.3% (n = 326) in Humanities, 5.94% (n = 207) in Linguistics, Literature and Arts, and 5.4% (n = 190) in Biological Sciences. Most students studied during the day shift (66.3%, n = 2308).

Instruments

In this study, we used three scales (Academic Engagement Scale, Positive Mental Health Scale, and Academic Experience Scale) and a questionnaire of sociodemographic data, compiled into a single questionnaire presented to the research participants. Following are the details of these instruments and a summary presented in Table 1.

¹ This study is linked to the "[deleted to avoid identification]" Project, coordinated by Professors [deleted to avoid identification] and [deleted to avoid identification].

Academic Engagement Scale

The instrument is composed of 18 items to assess the perception of academic engagement in a multidimensional way. The dimensions of collaborative learning and integrative and reflective learning were inspired by the National Survey of Student Engagement - NSEE (GRAHAM; HURTADO; GONYEA, 2018). The dimensions of behavioral, cognitive, and emotional engagement, on the other hand, were adapted from the First Year Experience Questionnaire - FYEQ (KRAUSE; COATES, 2008). The questions were answered using a five-point Likert-type response scale (1 = Strongly Disagree; 5 = Strongly Agree).

The perceived behavioral engagement dimension consisted of three items (Cronbach's alpha internal consistency index of 0.52 and McDonald's was 0.54) such as "I organize my time to be able to study" and "I rarely miss classes". The dimension of perceived cognitive engagement has three items, such as "I take pleasure in the intellectual challenge of the subjects I study" (Cronbach's alpha and McDonald's internal consistency index of 0.79). The perception of emotional engagement was also formed by three items, such as "I enjoy being a university student" and "I am satisfied with the courses I am taking" (Cronbach's alpha internal consistency index was 0.76 and McDonald's was 0.75).

The dimension of perceived integrative and reflective learning was assessed from five items, such as "I combine ideas from different materials to do assignments" and "I relate what I learn to problems or issues in society" (Cronbach's alpha and McDonald's internal consistency index was 0.72). Finally, perceived collaborative engagement was characterized by the five items, such as "I have at least one or two close friendships at university," and "I ask colleague(s) for help in understanding course subjects" (Cronbach's alpha and McDonald's internal consistency index of 0.76).

Positive Mental Health Scale

The positive mental health dimension was adapted from the Flourishing Scale - FS (DIENER *et al.*, 2010). This single-factor scale consists of eight items, including "My life has purpose and meaning", "I am engaged and interested in my daily activities" and "I am optimistic about my future", answered from a Likert-type scale of five points (1 = I strongly disagree; 5 = I strongly agree). Cronbach's and McDonald's alpha index was 0.88.

Academic Experience Scale

The academic experience dimension, which measures the degree of student attachment and persistence with their course, was inspired by the Healthy Minds Study - HMS (EISENBERG *et al.*, 2017). There are four items, such as "If I could choose again, I would still choose to enroll in my course" and "I have or have had the intention to change my course". Five-point Likert scale was also used (1 = Strongly Disagree; 5 = Strongly Agree). Cronbach's and McDonald's alpha index was 0.79.

Sociodemographic Questionnaire

Brief self-report questionnaire prepared by the researchers in which the participant should indicate course; ethnicity; gender; affective-sexual identity; way of entering the course; period of study; satisfaction with their own academic performance.

Table 1. Summary of the instruments used in the study

Instrument	Number of items	Cronbach's Index	McDonald's Index
Academic Engagement Scale	18	0,52 - 0,79	0,54 - 0,79
Positive Mental Health Scale	8	0,88	0,88
Academic Experience Scale	4	0,79	0,79
Sociodemographic questionnaire	7	–	–

Source: The authors

Data Collection Procedures

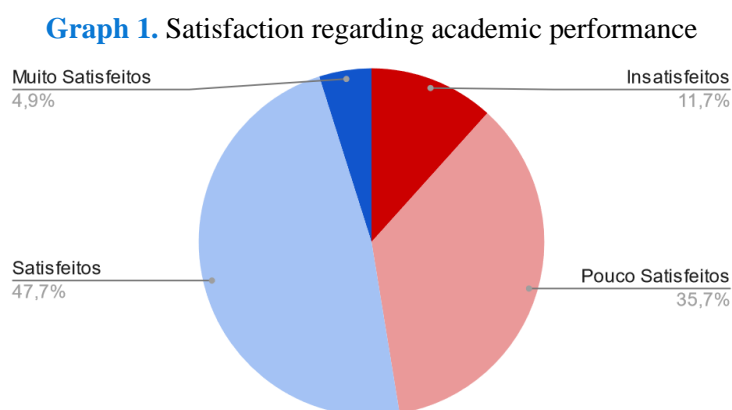
Data were collected between the months of August and October 2019. Initially, all undergraduate courses at the university were invited. After the coordination accepted, two courses per sector were chosen, totaling 37 courses from 16 sectors. Seeking to reach a representative sample and the greatest diversity, the sample calculation was made per course, considering the total number of enrolled students (confidence level: 95%; margin of error: 5%); the physical questionnaire was applied in class, in classes of different years and shifts. The application of the questionnaire was previously communicated and organized with the coordinators and professors of the courses, who granted their class schedules for the research. In the classroom, after a previous standardized explanation to the students about the content of the questionnaire and the purposes of the research, informed consent forms were distributed for them to sign if they agreed to participate. Therefore, all students in the classrooms visited were invited to participate in the research. Those who agreed to participate and signed the Informed Consent Form were included. The questionnaires took, on average, about twenty minutes to be answered individually and anonymously. After the delivery, all the questionnaires were put together in an envelope to be later scanned and validated through software for further data analysis. The choice for face-to-face application was since it provides greater adherence. The research project was evaluated and approved by the Ethics Committee for Research with Human Beings (CAAE: [deleted to avoid identification]).

Data Analysis

Data were analyzed using statistical software SPSS (Statistical Software for Social Sciences) version 21.0. Descriptive statistics were employed to characterize the sample in sociodemographic aspects and regarding academic satisfaction and experience with their course. To investigate whether there is a positive correlation between positive mental health and academic engagement it was necessary to perform a Pearson correlation analysis.

Results

Initially, the participants' perception of their academic performance was verified. A total of 3484 subjects answered the instruments. Of these, 11.7% ($n = 406$) identified themselves as dissatisfied, 35.7% ($n = 1238$) as not very satisfied, 47.7% ($n = 1653$) as satisfied, and 4.9% ($n = 170$) as very satisfied, according to Graph 1.



Source: The authors, field research

It was also identified their perception regarding their academic experience with the course, i.e., how much they agreed that they fit or had made the right choice of course, as can be seen in Table 2. This dimension was made up from four items and acquired the following averages on an agreement scale of 1 to 5 (the higher the average, the higher the agreement): "I feel good in my course" got mean 4.07 ($dp=0.99$), "If I could choose again, I would still choose to enroll in my course" got mean 4.04 ($dp=1.22$), "I have no doubts if my course is worth the time money and effort I am spending" got mean 3.33 ($dp=1.47$) and the last item "I do not have or have not had any intention to change courses" got mean 3.15 ($dp=1.66$).

Table 2. Students' self-perception of their academic experience

ITEMS	AVERAGE
I feel good in my course	4,07 ($dp=0,99$)
If I could choose again, I would still choose to enroll in my course	4,04 ($dp=1,22$)
I have no doubt that my course is worth the time, money, and effort I am spending	3,33 ($dp=1,47$)
I have no or no longer have any intention of changing my course	3,15 ($dp=1,66$)

Source: The authors, field research

Analyzing the overall research sample, Pearson's correlations were performed between the dimensions of positive mental health and academic engagement. Higher level of positive mental health showed positive association with all dimensions of engagement as can be seen in Table 3.

Table 3. Correlations between components of academic engagement and positive mental health

Variables	Reflective and integrative learning	Collaborative Engagement	Cognitive engagement	Emotional Engagement	Behavioral engagement	Positive mental health
Reflective and integrative learning	1					
Collaborative Engagement	0,243**	1				
Cognitive engagement	0,449**	0,254**	1			
Emotional Engagement	0,321**	0,245**	0,638**	1		
Behavioral engagement	0,211**	0,246**	0,401**	0,342**	1	
Positive mental health	0,237**	0,273**	0,396**	0,403**	0,261**	1

Note. **. Correlation is significant at the 0.01 level.
Source: The authors, field research.

Fisher's r-to-z test demonstrated that positive mental health score associated more strongly with emotional engagement ($r = 0.403$, $p < 0.01$) than with collaborative engagement ($r = 0.273$, $p < 0.01$) ($z = 6.816$, $p < 0.001$) and then with integrative and reflective learning ($r = 0.237$, $p < 0.01$) ($z = 9.082$, $p < 0.001$). Such positive significant correlations were appropriate because the higher the perception of positive mental health, the higher the academic engagement of college students.

Discussion

The results showed that most students (52.6%) participating in the study felt satisfied with their academic performance. However, almost half of the participants (47.4%) fit either into the not very satisfied or dissatisfied category, the latter reaching a percentage of 11.7%. International studies from different countries have results that corroborate with the numbers found in this research: just over half of students satisfied (ANG; LEE; DIPOLOG-UBANAM, 2019; LUO; XIE; LIAN, 2019) and the proportion of dissatisfied between 10% and 20% (LIPSON; EISENBERG, 2017). Research reports that while among students who do not have any mental health problems only about 10% are dissatisfied with their academic performance, in the group of those with a mental health problem this percentage rises to 26% (LIPSON; EISENBERG, 2017). Given that academic satisfaction, in addition to being related to mental health, is also related to greater academic engagement (ANG; LEE; DIPOLOG-UBANAM, 2019), it is important that a look be taken at student support policies that address these issues, thinking about their role in academic life.

Even if in Brazilian contexts of university student care there are already student support initiatives such as psychological care and advising to student bodies, it is possible to notice that in international universities there is a much wider diversity of student support practices and policies. Some examples that can be listed are counseling and academic improvement programs for higher education students (KIVLIGHAN *et al.*, 2018), periodic and institutionalized mental health studies in universities (TROWLER; TROWLER, 2010), policies to encourage the search for psychological treatment (help-seeking), among others. Therefore, it is considered that, while considering the cultural differences between countries, it is possible that Brazilian universities are inspired by these student support policies. Thus, it is understood to be of utmost importance to consider these parameters in the development of these institutional support actions for university students, given that higher rates of academic satisfaction correlate positively with positive mental health and academic performance (DOMENÉCHEC-BETORÉT; ABELLÁN-ROSELLÓ; GOMÉZ-ARTIGA, 2017; KOROBOVA, STAROBIN, 2015).

Evaluating the data collected on academic experience, it is possible to see that the average of the students' responses for two of the items that make up this dimension is very close to 3, indicating that the feeling of uncertainty about the value of the course they are taking is common, as well as the feeling of insecurity about continuing their studies in the course itself. There are also international studies in which a significant proportion of students, between 10% and 20%, share these same insecurities (MANSFIELD, O'LEARY; WEBB, 2011; LIPSON; EISENBERG, 2017). These data reinforce the importance that the challenge of course dropout in higher education be properly understood and addressed in a multidimensional manner. It is highlighted that, among economic and professional factors, the level of academic demands and health problems (physical/mental) are among the four most listed reasons for dropping out of the course (BRASIL, 2019).

The importance of student support policies is resumed here, as research indicates that they are effective in improving the academic experience of higher education students, with the promotion of academic performance (KIVLIGHAN *et al.*, 2018), well-being, and academic engagement (GREGOIRE *et al.*, 2018; STALLMAN; KING, 2016). Moreover, it is highlighted that student support policies are perceived positively by the student body itself: there is evidence that most students identify these policies as effective in feeling greater confidence in their choice and of their trajectory in their course (MANSFIELD, O'LEARY; WEBB, 2011). Thus, thinking about the reduced score achieved in the items referring to students' confidence regarding their own permanence in higher education in this study, it is assumed that actions that promote students' belonging in courses would be relevant, (KIVLIGHAN *et al.*, 2018).

All dimensions of academic engagement were positively correlated with positive mental health, which confirms association found in other studies (OUWENEEL; LE BLANC; SCHAUFELI, 2011; ROCHOWIAK, 2017). Of the engagement dimensions, the ones that had the strongest correlation with positive mental health were emotional and cognitive.

Therefore, it is evident how beneficial it would be to foster positive affective attitudes among students towards studying. These, contribute to the emergence and maintenance of behaviors, feelings, and actions that increase their engagement and positive mental health, which can result in improvements in quality of life and performance (ABUN; MAGALLANES; INCARNACION, 2019; KING *et al.*, 2015; KOTERA; TING, 2019; ROCHOWIAK, 2017). In the same sense, the more students feel good about themselves and in the university environment, the more they engage emotionally with their studies, that is, the more they show positive feelings regarding their academic endeavor, which stimulates cognitive development, as already evidenced in the literature (CALISKAN; MERCANGOZ, 2013; ROCHOWIAK, 2017; URQUIJO; EXTREMERA, 2017).

It was identified that the components of integrative and reflective learning and collaborative engagement had significant positive correlations with lower intensity mental health. However, such correlation is nonetheless a relevant factor. Working collaboratively and reflecting on what one learns at university with other aspects of one's education and life, relates positively to the flourishing of positive mental health. As such, the more wellness and positive mental health are present in people's lives, the more they can engage in situations of helping others, which is something to be encouraged in a learning environment like university (KIVLIGHAN *et al.*, 2018).

Furthermore, positive mental health and psychological well-being are positively correlated with the emergence of a range of skills and feelings that contribute to academic performance and engagement, such as self-confidence, self-efficacy, and resilience, making efforts that address this issue have positive cognitive as well as emotional outcomes (KING *et al.*, 2015; ROCHOWIAK, 2017; STEELE; FULLAGAR, 2009).

Thus, the university has immense potential to provide actions and programs that contribute to students' positive mental health and academic engagement towards their studies (GREGOIRE *et al.*, 2018; KIVLIGHAN *et al.*, 2018; STALLMAN; KING, 2016). The institution of the university, if it neglects the importance of positive mental health and academic satisfaction, omits the particularly important role of encouraging students to recognize their learning, progress, achievements, and feel good about their academic activities. Not doing so implies missing this opportunity to enhance the students' academic performance, which is one of its main social functions.

Moreover, promoting positive mental health and academic engagement in universities has gains that go beyond its fundamental importance of enhancing the quality of studies of the institution's student body (GREGOIRE *et al.*, 2018; KIVLIGHAN *et al.*, 2018; STALLMAN; KING, 2016). In addition to contributing to the well-being of these individuals (GREGOIRE *et al.*, 2018; ROCHOWIAK, 2017), it is work that can aid in lower dropout rates in higher education (HATCH; GARCIA, 2017; LEI; CUI; ZHAO, 2018; LOES *et al.*, 2017).

Final Considerations

This research investigated college students' self-perceptions of their academic performance and their feelings about their course. In addition, it analyzed the existence of a correlation between positive mental health and academic engagement among the same students. It was observed that most feel satisfied with their academic performance and perceive themselves as having made the correct choice of course. Even so, there is an incredibly significant percentage of students who think differently, which indicates the need for a close look by the institution. A significant positive correlation was found between all dimensions of academic engagement and positive mental health, corroborating previous findings in the literature. We infer the importance of positive mental health and academic engagement to be promoted through institutional actions and university programs.

A limitation of this study is the fact that the sample was only from a public Brazilian university. For future studies, research with students from private institutions and cross-cultural studies are recommended. Longitudinal studies could also be used to verify the temporal variation of the indicators, in addition to investigating predictors of academic engagement among university students.

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