



RESEARCH ARTICLE

Positive Psychosocial Factors Associated with the University Student's Engagement

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Abstract:

Background:

Student's performance comes from the engagement they have with the academic activities of their institution. This conviction is determined by multiple factors both internal and external. Student's engagement is a key factor in academic performance at the university.

Objective:

The aim of this study of this study was to find the relationship between the factors of emotional intelligence, orientation to happiness and positive social relationships within the school with the engagement of university students in a population of Mexico.

Method:

A stratified probabilistic sampling of students from a public higher education institution in the city of Guaymas, Sonora, was conducted. A total of 226 students answered the self-report, 52% were women, and 48% were men. A model of structural equations was performed to evaluate the relationships between the studied factors.

Results:

The results show that positive factors, both social (relationships with teachers and classmates) and personal (emotional intelligence and orientation to happiness), maintain a direct and significant relationship with the university student's engagement.

Conclusion:

To improve the student's engagement in university activities is necessary to promote personal issues such as emotional intelligence and orientation to happiness. It is also important to foster good social relationships with teachers and classmates.

Keywords: Student's engagement, Psychosocial, Emotional intelligence, Positive factors, Academic activities, Factors.

1. INTRODUCTION

The academic performance of university students is a quality of higher education institutions determinant [1], which is why this factor is found in numerous investigations that focus on discovering the variables related to this performance to understand and encourage better results in students, especially university students.

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The concern to study the academic performance in Mexico comes from the educational reports whose results have been little encouraging. To mention a few: between the years 2000 and 2010 there was a 17% dropout. On the other hand, the schooling average in our country is freshman year of junior high school and in Sonora people study only about ten years. This agrees that there are a few people who start their higher education, and from that small population, 15% are defected in the first year [2].

Studying the factors that intervene in better academic performance is increasingly necessary. Society is constantly changing; the needs of the new generations are different from those of past generations. In past times the acquisition of knowledge was enough for the professional development of the graduates, however, at present-day, it is necessary for university students to acquire more than just knowledge [3].

Therefore, the present study focuses on students' engagement, which is described as the mediating factor [4] and as the key to good academic performance [5], especially in higher education students. This engagement is defined as the willingness of students to participate in school activities and is determined by the dimensions of behavior, emotions, and cognition [6].

Of course, there are multiple aspects associated with the student's engagement, including internal and external components of the individual. For example, a person who is perceived as effective is more likely to perform better than the individual who does not [7]. Also, students who perceive a better social environment tend to seek support from their peers, which translates into better academic results [8]. Finally, there is evidence that students with full life feelings have self-control and value intrinsic life goals, and are happier [9].

There have been many Psychological factors empirically related to school performance, for example, the academic self-concept [10], emotional intelligence [11], and personal well-being [12], among others. These studies focus on the student and are factors that are closely linked to the performance of the university, which is why some institutions of higher education adopt tutoring programs to support their students in personal and academic issues [13, 14].

However, the school environment also offers an opportunity for growth and development since students spend approximately one-third of their lives in this context [15]. Some studies have established a relationship between academic performance and social aspects, such as the student environment [16, 17]. Salanova *et al.* [8] focused their interest in solidarity, companionship and social support within the educational institution, and found that these three factors are a support for the favorable performance within the school context.

The present study combines psychological and social factors to gain a broader understanding of student engagement. There are previous studies that have studied psychosocial factors as independent variables associated with development in the school setting. According to Álvarez *et al.* [18], self-concept and family relationships have been closely linked to academic performance. Vélez *et al.* [19] present evidence that university students with the greatest satisfaction for their institution, and who also have less pressure by the parents, present notoriously better grades.

According to Borkar [20], educational institutions should broadly educate their students; help them develop not only knowledge but emphasizing positive aspects of students. Therefore, it is important to expand research on student performance that focuses on personal and social issues, not the study of these factors in isolation. Although several studies investigate the factors associated with student performance, only a few emphasize on the positive issues and the number of jobs that include the combination of personal and social factors is less. Therefore, a more empirical evidence is needed to link positive psychosocial aspects and academic performance. Additionally, although there are several studies focused on increase academic performance, most of them measure learning outcomes such as academic average. However, the available evidence suggests that student's engagement could be a good predictor of academic performance [21],

In this context, the aim of this study was to determine the relationship that exists between university student's engagement and the psychosocial factors of orientation to happiness, emotional intelligence and positive interpersonal relations found in university students of a public institution in the city of Guaymas, Sonora, México.

1.1. University Student's Engagement

Research is becoming more frequent around the factors that are associated with academic achievement; most of them represent these variables through a qualification [22, 23]. However, the study of academic performance may be somewhat limited if its attention focuses solely on a value such as the average [24] since a number does not fully determine the student's daily performance.

Given this limitation, there is an interest in studying student's engagement, defined as the willingness of students to participate in academic activities [6, 25, 26]. Student engagement can help prevent low academic performance, dropout and other negative factors for students and institutions of higher education [5]. These authors argue that the study of student's engagement should be holistic.

According to Fredricks *et al.* [6] student engagement is determined by three components: behavioral, emotional and cognitive. Behavioral engagement refers to the active participation of individuals in school and extracurricular activities; emotional engagement is what entails reactions (positive and negative) towards people or situations in the school context; cognitive engagement includes the psychological investment to learn, in other words, the achievement-oriented thoughts, which are behind the effort made by the students.

There are studies that associate engagement with personal well-being; this is present in the school setting [27]. The present investigation seeks to integrate the study of positive psychosocial factors to the research of university student's engagement.

1.2. Psychological Factors Associated With Student's Engagement

In the search for academic performance predictors, cognitive intelligence is recurrently found. However, studies have shown that people with very high intellectual abilities do not necessarily complete their studies satisfactorily or achieve success in the workplace. Therefore, the importance of the concept of emotional intelligence emerges, as an alternative to the intellectual coefficient [28].

Emotional intelligence is defined by Goleman [29] as people's ability to distinguish and give an appropriate response to states of mind, temperaments, motivations, and desires. According to Mayer *et al.* [30], emotional intelligence is the ability to perceive emotions to improve thinking and to understand and regulate them effectively. Mestre [31] presents a theoretical review of the concept and concludes that it is composed of factors such as self-knowledge, self-efficacy, and empathy.

Self-knowledge is defined as the ability to answer about oneself, that is the set of knowledge that a person has about himself, in which first there is the identification and then an evaluation [32]. These own judgments are developed from childhood, especially with family relationships. The self-concept is closely linked to the assessment perceived within the family environment.

The emotional intelligence component called self-efficacy is defined as the person's belief in his capacity to organize and carry out a task, and in this way to fulfill his objectives [33]; it depends to a great extent on the individual's thinking about their abilities. As long as the person considers that they have the capacity to do something, is more likely to do it and vice versa [34].

The last factor that integrates emotional intelligence is empathy, according to Mestre [29] it helps people to balance the emotional behavior of others in a precise way and also shows the ability to choose acceptable responses to such behaviors. It's the basis of healthy interpersonal relationships because it helps to consider the opinion and position of other people.

Emotional intelligence is a factor that improves student's performance both inside and outside the school environment. However, it is not the only personal characteristic that is associated with academic success; there is evidence that proves the relationship of the construct called orientation to happiness and academic performance [11]. This factor was proposed by Peterson *et al.* [35], who combine three types of well-being; the two classic facets proposed by Ryan *et al.* [36] the hedonic and the eudaemonic well-being; and flow, a concept took from the theory of Csikszentmihalyi [37].

The hedonic well-being is the sum of the positive feelings, emotions, and states of mind associated with the pleasure of an individual [38]; emphasizing issues that give emotion to the person usually at the time of performing the activity. This concept is mainly related to subjective well-being and can be understood as the sum of pleasurable issues considered as good for the subject [39].

In contrast to this facet is the eudaemonic well-being, which is related to the positive emotions that result from reaching something, so this sensation can rarely be obtained in the short term; this well-being emphasizes personal development, the way to face the challenges of life and the effort of people to achieve their goals. This well-being is usually obtained from activities that give meaning to life [40].

The last type of well-being is flow, and it refers to the happiness that each obtains when engaging (and penetrating) to perform a pleasant activity [35]. For an activity to be considered as a flow, it is necessary that the individual can perform it, but at the same time it requires a certain degree of difficulty. Otherwise, it can become boring and cause frustration. This type of well-being can be found in the workplace, school, and sports, among others.

1.3. Positive Social Factors Associated with Student Engagement

In addition to the psychological aspects, it's necessary to include social issues since the students are not attending classes in isolation, they are in constant interaction with their classmates and teachers; while this relationship is perceived as positive, the school environment can help foster student success [41]. Students who consider themselves in a good social environment within their institution of higher education perform activities more assertively, while people who don't feel included among their peers tend to be absent, have problems with group activities or not give importance to their studies.

A positive school climate is one that stimulates emotions of trust and security in the people associated in the school, to be precise, it affects students, teachers, parents and even the community in general [19]. The school climate is something intangible that can be perceived by people who come into contact with the school [42].

This social component has been studied as a variable associated with engagement, a study presented by Sampermans *et al.* [43] concludes that relationships presented within the school context are predictors of the student's electoral commitment. Although it's not exactly an engagement in school activities, it is evidence of the link between these factors. Within the school, climate can be found in various components. However, this study focuses its interest on educational interaction, which includes interpersonal relationships between teachers and students, as well as the coexistence among classmates [44].

2. METHOD

2.1. Participants

A stratified probabilistic sampling with a reliability of 95% and an error of 6% was carried out. A total of 226 students from all the courses taught at the Technological Institute of Sonora, Guaymas, participated. 52% were female and 48% were male. 91% reported being a regular student at the time of participating in the investigation.

2.2. Instruments

To evaluate the psychological factors, authors used four sections of the Emotional Intelligence Questionnaire (CIE) [29], the response scale is a 5-point Likert type (*1=Completely false for me to 5=Completely true for me*). The dimensions resumed were: self-knowledge (16 items), self-efficacy (10 items), empathy (9 items) and emotional knowledge (10 items). To measure the *orientation to happiness* we used the Spanish version [45] of the scale made by Peterson *et al.* [33], is composed by 18 items divided equally into the dimensions of hedonic, eudaimonic and flow. It contains answers with a Likert scale, ranging from "*completely opposite to me*" to "*very similar to me*."

Social factors were evaluated through the school climate scale [42], implementing the subscale of educational interaction, constituted by the factor "relationship with peers" that includes six items, and "the relations with the teachers," where nine statements that measure the teacher-student interaction are presented. The participants answered using a Likert scale with options that range from *total disagreement* to *total agreement*.

Finally, the student engagement was evaluated through a translation of the USEI scale (University Student Engagement Inventory) proposed by Maroco *et al.* [5], in a Spanish version presented by Durón *et al.* [46] which consists of 15 items and is divided into the following dimensions: cognitive, affective and behavioral. Each one composed of 5 items; participants could respond using a Likert-type response scale that ranges from *1 = never* to *5 = always*.

2.3. Procedure and Data Analysis

After establishing the representative sample, data were collected in classrooms or areas within the institution of higher education. Subsequently, a database was made where the responses of all the participants were captured. Using the statistical package SPSS version 21, an internal consistency analysis of the scales was performed; subsequently, indices for each variable were computed with the means values of the corresponding indicators; with these indices the statisticians that mark the measures of central tendency of each scale were obtained; finally, using the EQS program a

model of structural equations was elaborated.

3. RESULTS

Table 1 presents the values of central tendency of each variable studied, in addition, it exhibits the internal consistency value through Cronbach's Alpha, and all the values were in an acceptable range. The means of the 3 types of engagement show similar values at a medium-high level with means that ranged between 2.59 and 2.92; regarding personal factors, students present values that indicate acceptable levels of emotional intelligence and orientation to happiness; in interpersonal relationships better values were obtained in the teacher-student interaction scale (*mean*= 3.26, *SD* = 0.58) than in the relationship between peers (*mean* = 2.98, *SD* = 0.63).

Table 1. Descriptive statistics and Cronbach's alpha of variables.

	Min	Max	Mean	SD	Alpha
–	–	–	–	–	–
Student's engagement	–	–	–	–	–
Behavioral engagement	0	4	2.92	0.65	.72
Emotional engagement	0	4	2.81	0.76	.74
Cognitive engagement	0	4	2.59	0.75	.71
Psychological factors	–	–	–	–	–
Self-knowledge	1	5	3.92	0.64	.89
Self-efficacy	1	5	3.75	0.60	.73
Empathy	1	5	3.71	0.62	.71
Emotional knowledge	1	5	3.62	0.51	.61
Hedonic well-being	1	5	3.63	0.69	.73
Eudaimonic well-being	1	5	3.78	0.68	.71
Flow	1	5	3.55	0.61	.60
Social factors	–	–	–	–	–
Teacher-student interaction	1	4	3.26	0.58	.91
Pairs relationship	1	4	2.98	0.63	.86

Fig. (1) presents the structural equation's model made to estimate the association between psychological and social factors in the engagement of the university student. A direct and significant relationship of personal factors (0.73) and social factors (0.24) can be observed with the university student's engagement. This factor presents an R² of 0.79, the theoretical and practical goodness of fit indices obtained acceptable levels (BBNNFI=0.95, CFI=0.97; IFI=0.97; RMSEA = 0.06).

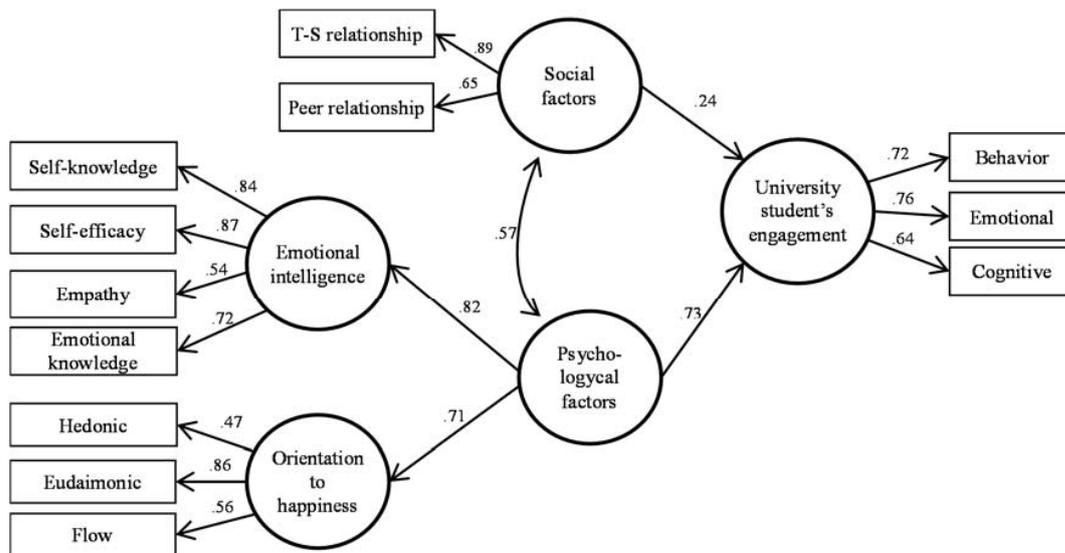


Fig. (1). Model of psychological and social factors related to university student's engagement. Factorial weights and structural coefficients were significant (*p*<.05). Goodness of fit: $X^2 = 78.66$ (47 GL), *p* <.005; BBNNFI=0.95, CFI=0.97; IFI=0.97; RMSEA=.06. R² University Students's Engagement = 0.79.

4. DISCUSSION

The student's engagement is determined by the behavioral, cognitive and emotional components, as has been reported in previous studies [5, 6, 44]. According to the results found, this factor can be predicted by social and psychological aspects. Similar results are reported in the work of Tsai [47], where they prove that satisfaction of the student and the relationship with the teacher have a direct relationship with the scholar performance in a college population.

According to this investigation, social interactions have less impact on university students' engagement than personal aspects; however, this association is direct and significant, which indicates the importance of seeking a positive school climate within schools [19]. The interpersonal relationships in the school context seem to be presented in a more positive way between students and teachers, probably because there's more cordiality [48] due to the respect that this interaction implies. According to Engels *et al.* [49], teachers can promote better relationships among students. Although Gristy [50] suggest the importance of peer relationships within the school context, this study proves that personal factors are more important. Therefore, the need for seeking both social and psychological welfare for students is established.

This research is evidence that the performance of students in the academic activities of their professional training is linked to the personal aspects of pupils. Empirical evidence of two positive aspects is presented, such as emotional intelligence [10] and wellbeing [11]. It seems that better academic performance can be reached through activities that improve more than just the knowledge from the students in higher education [51]. These means that people can become more active in the search for being a better student, instead of blaming other circumstances for low performance; similar to what Haidt [52] states in the hypothesis of happiness, people can't change just by the willingness, actions must be taken.

CONCLUSION

The university student's engagement is largely determined by the positive factors proposed in this study, mainly by personal ones, integrated with emotional intelligence and orientation to happiness. These results serve as a basis for Higher Education Institutions to recognize the importance of supporting their students in the personal and social development, thus impacting on better academic performance through their student's engagement in and out of the university.

Research is recommended to continue the study of student performance, which combines both: the grade and engagement of students. It's also necessary to investigate the positive factors that promote good performance and engagement in students, to encourage people to reach positive aspects, not only to prevent those negative.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Not applicable.

HUMAN AND ANIMAL RIGHTS

No animals/humans were used for studies that are the basis of this research.

CONSENT FOR PUBLICATION

We obtained the written informed consent from each subject or subject's parent.

CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

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