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DEVELOPMENT OF ACADEMIC ENGAGEMENT OF STUDENTS.
DIFFERENCES BETWEEN WOMEN AND MEN

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Abstract

Through the present longitudinal study, it is intended to know the development in the perception of academic engagement during the accomplishment of degree studies, as well as the influence of the students' gender in said process. A total of 264 students (58.2% men, 41.8% women) enrolled in the academic years from 2010/2011 to 2014/2015 in the Degree of Physiotherapy of the University of Vigo (Spain) participated voluntarily in the study. In order to get this data, the Utrecht Work Engagement Scale for Students (UWES-S) paper questionnaire was used, which is composed of the dimensions of *Dedication*, *Vigor* and *Absorption*. The results show that, while women experience an increase in *Dedication*, men maintain their values or even decrease them, both between 1st and 2nd year, and between 3rd and 4th year. By contrast, there are no differences noticed among genders in *Dedication* between 2nd and 3rd year, but so in *Vigor* and *Absorption*, since while women experience a decrease in these variables, men experience an increase in their levels. Therefore, it can be concluded that the evolution of academic engagement is conditioned by the gender of the student, so that *Dedication* tends to increase for women, while it decreases for men. On the other hand, *Vigor* and *Absorption* decrease in women, while they increase in men in the course of the degree.

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Keywords: Academic engagement, emotional well-being, gender differences, higher education, university students.



1. Introduction

Academic engagement influences positively on academic performance

The research on academic engagement is not very extensive, even much less the one related to the university field due to the relative innovation of the concept. However, results show the positive influence of engagement on academic performance. Thus, the students that get the best real performance and the ones with the best expectations of success are the ones that are considered to be the most effective, the most vigorous and the less exhausted (Martínez and Salanova, 2003). On the other hand, Enríquez (2011) observed how emotional intelligence and engagement prevent from non-adaptive behaviors in academic environment such as absenteeism or expells due to bad behaviour, and how they promote academic performance.

2. Problem Statement

The review of literature indicates that the perception levels of negative emotions are directly related to the academic year, decreasing as the student progresses in his studies, but mostly in cross-sectional investigations. In relation to this, it is stated that the decrease in the perception of negative emotional situations occurs because the students start to develop skills that help them to face these situations in a positive way. In this sense, it would be important to verify the perception evolution of academic engagement analyzing the variations during the development of the degree, and to present the findings segregated by gender to get a better perception of the real situation of men and women.

2.1. Knowing the perception development of academic engagement

Analyzing the engagement variations during the development of the degree.

2.2. Checking if there are differences depending on the gender of the student

Determine if the gender of the student conditions the variations of engagement.

3. Research Questions

During the degree, students modify the perception of answers according to their socio-educational characteristics.

3.1. Does academic engagement modify as the student studies the university degree?

The levels of engagement increase as the student progresses in his studies.

3.2. Does the gender of the student influence in the development of academic engagement?

The development of academic engagement is influenced by the gender of the student.

4. Purpose of the Study

4.1. Knowing the development of academic engagement during degree studies

Through the present longitudinal study, it is intended to know from the perspective of the student himself, which the perception of academic engagement of the students (their commitment or academic motivation) is, as well as their development during the degree in order to know how these values modify as the students study the degree.

4.2. Finding out the influence of gender on the development of academic engagement

It is also intended to develop the study from a gender perspective, which allows identifying the needs and interests of women and men in a differentiated way, considering how social roles influence the teaching-learning process. This way, we hope to achieve a more complete view of the students' profiles in order to take preventive measures to respond to their socio-educational needs and ensure quality in the teaching-learning process, acquiring the institutionalization of gender perspective in the university system.

5. Research Methods

5.1. Participants

The study sample consists of 264 students enrolled in the academic years from 2010/2011 to 2014/2015 in the Degree of Physiotherapy of the University of Vigo, who wanted to be part of the research voluntarily, and who were previously informed in what the investigation consisted, including a 66.33% of the 398 possible students.

5.2. Measurement of the variables

Engagement evaluation has been possible thanks to the Utrecht Work Engagement Scale for Students or well-being scale in academic context (UWES-S) proposed by Schaufeli, Martínez, Pinto, Salanova, & Bakker (2002), which allows to study the engagement of university students. There are two versions of this questionnaire for students in Spanish, one of 17 items and another abbreviated to 9 items. The Spanish version was translated from the original Dutch version.

3 dimensions can be distinguished in it: *Vigor*, which refers to a high degree of vitality and eagerness to work hard in daily work; *Dedication*, which refers to enthusiasm, inspiration and challenges in studies; and *Absorption*, which refers to the students' concentration and feeling comfortable with what they do.

5.3. Data analyse

The computer application SPSS-22 was used for the statistical analysis (IBM Corp. launched 2013. IBM SPSS Statistics v 22.0 for Windows, Armonk, NY, USA).

The internal consistency of the scale was evaluated by Cronbach's alpha. (>0.640).

6. Findings

6.1. Changes from 1st to 2nd year

It is observed (Table 1) that *Vigor* and *Absorption* do not vary significantly between men and women.

But in *Dedication* there are statistically significant differences between both genders.

Table 01. Averages differences: 2 factors ANOVA, 1 intragroup + 1 intergroup. Variation of the engagement dimensions between 2nd and 1st year depending on gender

| Variables | Gender | N | 1 st year | 2 nd year | 2 factors ANOVA | | | |
|------------|--------|----|----------------------|----------------------|-----------------|-------|---------|-----------------------------|
| | | | Average (S.D.) | Average (S.D.) | Component | F | p-value | Effect size: R ² |
| Vigor | Women | 83 | 2.96 (0.97) | 2.87 (0.86) | Dif. by gender | 0.37 | .546 NS | --- |
| | Men | 76 | 2.98 (1.10) | 3.03 (1.04) | Gender / year | 0.98 | .324 NS | --- |
| Dedication | Women | 83 | 5.05 (0.95) | 5.13 (0.84) | Dif. by gender | 10.57 | .001** | .063 |
| | Men | 76 | 4.78 (1.17) | 4.46 (1.18) | Gender / year | 6.35 | .013 * | .039 |
| Absorption | Women | 83 | 3.21 (1.27) | 3.30 (1.05) | Dif. by gender | 3.61 | .059 NS | --- |
| | Men | 76 | 3.00 (1.16) | 2.89 (1.15) | Gender / year | 1.46 | .229 NS | --- |

6.2. Changes from 2nd to 3rd year

There are significant differences in *Vigor* and *Absorption* factors when contrasting the effect of the interaction of gender with the changes between 2nd and 3rd year. In the *Dedication* dimension there are significant differences between genders, but not between years.

Table 02. Averages differences: 2 factors ANOVA, 1 intragroup + 1 intergroup. Variation of the engagement dimensions between 2nd and 3rd year depending on GENDER

| Variables | Gender | N | 2nd year | 3rd year | 2 factors ANOVA | | | |
|------------|--------|----|----------------|----------------|-----------------|-------|---------|-----------------------------|
| | | | Average (S.D.) | Average (S.D.) | Component | F | p-value | Effect size: R ² |
| Vigor | Women | 85 | 2.99 (0.91) | 2.93 (0.93) | Dif. by gender | 0.33 | .567 NS | --- |
| | Men | 57 | 2.91 (1.13) | 3.19 (1.15) | Gender / year | 3.91 | .049 * | .028 |
| Dedication | Women | 85 | 4.94 (1.07) | 4.81 (1.10) | Dif. by gender | 11.42 | .001** | .075 |
| | Men | 57 | 4.25 (1.26) | 4.28 (1.35) | Gender / year | 0.81 | .369 NS | --- |
| Absorption | Women | 85 | 3.39 (1.11) | 3.22 (1.20) | Dif. by gender | 3.50 | .064 NS | --- |
| | Men | 57 | 2.76 (1.27) | 3.18 (1.29) | Gender / year | 8.33 | .005** | .056 |

6.3. Changes from 3rd to 4th year

There are no significant differences between genders or between academic years in *Vigor* and *Absorption*. But in *Dedication* differences do appear between genders, but not between years.

Table 03. Averages differences: 2 factors ANOVA, 1 intragroup + 1 intergroup. Variation of the engagement dimensions between 4th and 3rd year depending on GENDER

| Variables | Gender | N | 3rd year | 4th year | 2 factors ANOVA | | | |
|------------|--------|----|----------------|----------------|-----------------|------|---------|-----------------|
| | | | Average (S.D.) | Average (S.D.) | Component | F | p-value | Effect size: R2 |
| Vigor | Women | 80 | 2.94 (0.89) | 3.26 (0.93) | Dif. by gender | 0.27 | .602 NS | --- |
| | Men | 47 | 3.22 (1.24) | 3.15 (1.25) | Gender / year | 3.84 | .052 NS | --- |
| Dedication | Women | 80 | 4.58 (1.19) | 5.01 (0.93) | Dif. by gender | 5.82 | .017 * | .044 |
| | Men | 47 | 4.03 (1.50) | 4.57 (1.40) | Gender / year | 0.42 | .519 NS | --- |
| Absorption | Women | 80 | 3.22 (1.16) | 3.39 (1.22) | Dif. by gender | 0.96 | .329 NS | --- |
| | Men | 47 | 3.14 (1.33) | 3.06 (1.50) | Gender / year | 1.45 | .231 NS | --- |

7. Conclusion

7.1. Knowing the development of academic engagement during degree studies

There are differences in *Dedication* between men and women, but not so in *Vigor* and *Absorption*. It is female students who have higher values than male students in all the courses, a fact that Extremera and Durán (2007) had already proved. In relation to this, Manzano (2004), Benevides-Pereira, Fraiz de Camargo, & Porto-Martins (2009) and Soto (2011) could not establish differences in engagement based on gender. On his part, Soto (2011) did not observe any relationship between the dimensions of engagement and the sociodemographic variables investigated, and neither Manzano (2004) on age, while Benevides-Pereira et al. (2009) note that the higher the age of the students is, the higher the level of engagement.

7.2. Finding out gender influence in the development of academic engagement

With regard to the variation in time of the levels of engagement, when considering the participants according to their gender, it is observed that the *Vigor* dimension does not vary significantly between men and women. By contrast, in the *Dedication* dimension, differences do appear due that women score above men, and because while women maintain very similar values with a slight increase, in men a clear decrease is observed in the course of the degree.

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