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# Resilience and engagement in university students during the context of COVID 19

Resiliencia y engagement en estudiantes universitarios durante el contexto del COVID 19

### Germán Medina<sup>1</sup>

Universidad Nacional del Altiplano de Puno, Puno-Puno, Perú

https://orcid.org/0000-0002-4048-6418

## Yolanda Lujano

Universidad Nacional del Altiplano de Puno, Puno-Puno, Perú

https://orcid.org/0000-0001-7178-3346

## Patty Aza

Universidad Nacional del Altiplano de Puno, Puno-Puno, Perú

https://orcid.org/0000-0001-6083-0397

#### Wilson Sucari

Universidad Nacional del Altiplano de Puno, Puno-Puno, Perú

https://orcid.org/0000-0001-5874-0966

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#### **ORIGINAL ARTICLE**

# **KEYWORDS**

Engagement, students, resilience, university **ABSTRACT.** Resilience and engagement are mental capacities that allow a high possibility of overcoming stressful positions. The main purpose of the research was to determine the association between the levels of resilience and engagement (vigor, dedication and absorption) in the Accounting Sciences students of Universidad Nacional del Altiplano de Puno during the context of COVID 19, 2020. The method used It was the hypothetical deductive, descriptive type and cross-correlational design. The study was developed in the aforementioned Professional School and they voluntarily responded to the online questionnaires. The population consisted of 70 students from the third to the fifth semester (cycle 2020 I). The results indicate a significant association of 0.693 between resilience and engagement in Spearman's rho correlation coefficient. In conclusion, resilience is positively associated with engagement in Accounting Sciences students at the Universidad Nacional del Altiplano de Puno.

# PALABRAS CLAVE

Engagement, estudiantes, resiliencia, universidad **RESUMEN.** La resiliencia y el engagement son capacidades mentales que permiten tener una alta posibilidad de sobreponerse a las posturas estresantes. El propósito principal de la investigación consistió en determinar la asociación entre los niveles resiliencia y engagement (vigor, dedicación y absorción) en los estudiantes de Ciencias Contables de la Universidad Nacional del Altiplano de Puno durante el contexto del COVID 19, 2020. El método empleado fue el hipotético deductivo, de tipo descriptivo y de diseño correlacional transversal. El estudio se desarrolló en la Escuela Profesional antes mencionada y respondieron voluntariamente a los cuestionarios online. La

<sup>&</sup>lt;sup>1</sup> Correspondence: gamedina@unap.edu.pe



población estuvo constituida por 70 estudiantes de tercero al quinto semestre (ciclo 2020 I). Los resultados indican asociación significativa de 0.693 entre resiliencia y engagement en el coeficiente de correlación de rho de Spearman. En conclusión, la resiliencia se asocia positivamente con el engagement en los estudiantes de Ciencias Contables de la Universidad Nacional del Altiplano de Puno.

#### 1. INTRODUCTION

The Real Academia Española has incorporated the definition of resilience as a human capacity to flexibly assume extreme situations and overcome them. With this definition, the construct to which the term resilience refers is much more complex and continues to evolve at a high speed, which is difficult to overcome (Kateb, 2019). Despite the large number of existing definitions, most indicate that for resilience to take place, three central aspects must be evidenced: adversity, positive adaptation and the presence of resources to face said adversity. Consequently, according to Berzosa (2017), resilience could be globally defined as "positive adaptation to adversity".

Interest in resilience has increased in recent years, especially in youth and adolescent populations and specifically in the university environment (Fínez & Morán, 2014). This is due, in part, to the fact that every student is susceptible to perceiving situations of poor execution, adversity or pressure derived from studies (Gonzales et al., 2020). In this context, some authors define academic resilience as the ability of students to adequately overcome stressful situations and the pressure derived from studies. Therefore, those students who are resilient will have a greater capacity to adequately handle academic demands (Fínez & Morán, 2015).

Resilience is that capacity that we all have to overcome emotional pain, a difficult experience and to be ourselves again (Carazo 2018). The loss of a loved one, physical or mental abuse, abandonment, failure, or poverty are limited situations that are difficult to overcome. But anyone can generate biological, psychological or social factors to resist these attacks and generate dynamics (Kateb, 2019). Resilience can be approached from two different approaches. On the one hand, there is the "risk" perspective, which focuses on the aspects that can trigger psychological, biological or social damage; their interest is in the risk factors around the individual. On the other hand, there is the resilience approach or also called the "challenge model", which focuses on the aspects or protective shields that can generate a defense against the possible damage or threat of the aforementioned risk factors and that trigger in the individual the ability or ability to overcome these adversities (Polo, 2009).

For his part, Grotberg (1995) (Cited by Gonzáles, 2013) makes reference to interactive sources of resilience to face adversities, overcome them and emerge from them strengthened or even transformed, individuals take resilience factors from four sources: "I have", what I have in my social environment, external support factors. "I am" concerns the personal strengths and internal conditions with which he defines himself. "I am", what I am willing to do, strengths. "I can" includes skills to relate to others and resolve conflicts (Gonzáles, 2013). Resilience in the educational context plays an important role, because in educational institutions the individual faces different challenges and demands, not only academic but also psychosocial.

Engagement emerges as the positive antithesis of Burnout in the paradigm of Positive Psychology (Christenson, 2020). Academic engagement is understood as a state of psychological

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well-being related to everything circumscribed to studies, without being focused on any specific situation or circumstance.

Student engagement and participation has grown from simple classroom attention to a composite construction of cognitive, emotional, and behavioral components that further embody and develop motivation for learning (Christenson, 2020). Similarly, the goals of student engagement have evolved from preventing dropout to best outcomes for lifelong learning. This solid expansion has led to numerous lines of research in all disciplines and they come together in a clear and comprehensive way.

Seen in this way, the definition of academic engagement is related to the criteria of psychological bond or commitment and is considered as a "positive psychological state characterized by vigor, dedication and absorption in the face of studies" (Caballero et al., 2015) student level, this goes hand in hand with students who have adapted correctly with their teachers, fellow students and with the student environment (Domínguez & Mendoza, 2019). Thus, the students who present the engagement are comfortable with their academic development, and the demands of it, being thus enthusiastic about the new challenges that are presented to them during their academic life.

Perhaps the theory with the greatest certainty about the organization of academic engagement is that suggested by Salanova et al. (2005) which mention a constant state of motivation that students perceive in relation to their academic activity and that implies 3 dimensions: Vigor indicates high levels of energy during study, high firmness and a constant desire to do their best in activities academic. Dedication to high levels associated with studies, such as feeling proud and identified with the career under study, finally absorption compromises high levels of concentration along with the perception that time passes quickly and one lets go (Medrano et al., 2015).

There is sufficient evidence about the association of resilience and engagement in university students (Berzosa, 2017; Vizoso-Gómez & Arias-Gundín, 2018); However, during the COVID 19 period, research affirms the increase in academic stress, which is the opposite of engagement in university students (Lovón & Cisneros, 2020; Ozamiz-Etxebarria et al., 2020). This reality, to simple perception, is evident enough in the students of the Professional School of Accounting Sciences of the Universidad Nacional del Altiplano de Puno.

Faced with this reality, this research work aimed to determine the degree of association between resilience and engagement in students of the Professional School of Accounting Sciences of the Universidad Nacional del Altiplano de Puno during the context of COVID 19.

### 2. METHOD AND MATERIALS

#### Method and design

This work corresponds to the hypothetical deductive method, descriptive type and cross-correlational design.

# **Objectives**

- Determine the association between resilience and engagement in students of the Professional School of Accounting Sciences of the Universidad Nacional del Altiplano de Puno during the context of COVID 19.
- Identify the level of resilience.
- Know the level of engagement.

# **Population**

We worked with 70 students (between men and women between 18 and 20 years old approx.), Which belonged to the third, fourth and fifth semesters of the 2020 I academic year.

#### **Instruments**

To measure the level of resilience, the Brief resilient coping scale by Sinclair and Wallston (2004) adapted to Spanish by Moret-Tatay et al. (2015). This questionnaire was structured by 4 items established on a Likert scale (1 = never and 5 = always). Through a pilot test of a confidence of 0.857 in Cronbach's alpha.

To measure the level of engagement, the Utrecht Work Engagement Scale by Schaufeli & Bakker (2003) structured in the dimensions of vigor, dedication and absorption was applied. It consisted of 17 items, also established on the Likert scale. Her confidence level was 0.912 in Cronbach's alpha.

To obtain results, the Spearman Rho correlation statistical test was applied, associating resilience with engagement and resilience with the engagement dimensions (vigor, dedication and absorption).

#### 3. RESULTS

#### 3.1. Resilience level

The 70 students surveyed answered all the questions asked, according to the study it was possible to determine that there is a high level of resilience (74.29%). This result is encouraging, since it means that the Accounting Sciences students of the UNAP, despite the COVID 19 pandemic, know how to adapt positively to adversity (Berzosa, 2017). On the other hand, it suggests that, despite the scourges, sudden changes in the relationship between teacher-student, family-student, virtuality vs face-to-face classes, etc. have been and are being overcome with strength, all of which justify the high level of resilience (Carazo, 2018; Fínez & Morán, 2014; Gonzáles, 2013; Sucari et al., 2020).

Table 1. Resilience level of Accounting Sciences students at the Universidad Nacional del Altiplano de Puno, 2020

LEVEL	QUANTITY	PERCENTAGE
HIGH	52	74,29%
REGULAR	17	24,29%
LOW	1	1,43%
TOTAL	70	100,00%

Source: Questionnaire applied to students.

Table 2. Level of resilience according to sex in Accounting Sciences students of the Universidad Nacional del Altiplano de Puno, 2020

SEX	HIGH	%	REGULAR	%	LOW	<b>%</b>	TOTAL	%
Woman	32	71,11%	13	28,89%	0	0,00%	45	100,00%
Male	20	80,00%	4	16,00%	1	4,00%	25	100,00%

Source: Questionnaire applied to students.

In the multivariate analysis, women had a high level of resilience of 71.11%, and men had a high level of resilience 80.00%. As well as the regular level, women represent 28.89% and men 16% and at the low level only men represent 4%. With concrete, the average difference levels between men and women are not very significant. We can affirm that the levels of resilience have no association with sex.

# 3.2. Engagement level

From the results it is confirmed that 75.71% have a high level of engagement, that is, the Accounting Sciences students at UNAP have a strong commitment to the personal goals that each of the students have (Medrano et al., 2015; Salanova et al., 2005). It can be confirmed that the sudden changes caused by the COVID 19 pandemic did not significantly affect the dedication, motivation and concentration they have for their academic studies and other activities (Berzosa, 2017; Domínguez & Mendoza, 2019; Gonzáles, 2013; Salanova et al., 2005; Schaufeli & Bakker, 2003).

Table 3. Level of engagement in Accounting Sciences students of the Universidad Nacional del Altiplano de Puno, 2020

LEVEL	QUANTITY	PERCENTAGE
HIGH	53	75,71%
REGULAR	16	22,86%
LOW	1	1,43%
TOTAL	70	100,00%

Source: Questionnaire applied to students

Table 4. Level of engagement by sex in the Accounting Sciences students of the Universidad Nacional del Altiplano de Puno, 2020

SEXO	ALTO	<b>%</b>	REGULAR	%	BAJO	<b>%</b>	TOTAL	%
Woman	36	80,00%	9	20,00%	0	0,00%	45	100,00%
Male	17	68.00%	7	28.00%	1	4.00%	25	100.00%

Source: Results of the questionnaire applied to the students

Like the levels of resilience, the levels of engagement are not significantly related to the gender variables.

Table 5. Scales of engagement dimensions (vigor, dedication and absorption) in Accounting Sciences students at the Universidad Nacional del Altiplano de Puno, 2020

ENGAGEMENT	VI	GOR DEDICATION		DICATION	ABSORTION	
SCALE	fi	Hi	fi	hi	fi	hi
NEVER	0	0,00%	0	0,00%	1	1,43%
HARDLY EVER	2	2,86%	2	2,86%	2	2,86%
SOMETIMES	10	14,29%	6	8,57%	6	8,57%
USUALLY	31	44,29%	13	18,57%	16	22,86%
FOREVER	27	38,57%	49	70,00%	45	64,29%
TOTAL	70	100,00%	70	100,00%	70	100,00%

Source: self made.

Analyzing the engagement dimensions (vigor, dedication and absorption) we can affirm that the dedication dimension is the one that stands out the most (70%), that is, these students have the attitude of firmness in achieving academic and personal goals, which are pre-achievements where perseverance is included to reach a defined goal (Buitrago et al., 2012; Domínguez & Mendoza, 2019; Medrano et al., 2015; Salanova et al., 2005).

# 3.3. Relationship between resilience and engagement

Table 6. Relationship between resilience and engagement in Accounting Sciences students at the Universidad Nacional del Altiplano de Puno, 2020

Spearman's Rho		RESILIENCE	VIGOR	DEDICATION	ABSORTION	ENGAGEMENT
	Correl. coefficient	1,000	,647**	,577**	,661**	,693**
RESILIENCE	Sig. (bilateral)		,000	,000	,000	,000
	N	70	70	70	70	70
	Correl. coefficient	,647**	1,000	,719**	,770**	,923**
VIGOR	Sig. (bilateral)	,000		,000	,000	,000
	N	70	70	70	70	70
	Correl. coefficient	,577**	,719**	1,000	,775**	,876**
DEDICATION	Sig. (bilateral)	,000	,000		,000	,000
	N	70	70	70	70	70
	Correl. coefficient	,661**	,770**	,775**	1,000	,920**
ABSORTION	Sig. (bilateral)	,000	,000	,000		,000
	N	70	70	70	70	70
	Correl. coefficient	,693**	,923**	,876**	,920**	1,000
<b>ENGAGEMENT</b>	Sig. (bilateral)	,000	,000	,000	,000	•
	N	70	70	70	70	70

\*\*. The correlation is significant at the 0.01 level (bilateral).

Source: Data analysis using Spearman's Rho correlation coefficient.

Table 6 indicates that the degree of association between resilience and engagement in Accounting Sciences students at UNAP is 0.693. Which is a considerable and significant positive relationship at the 0.01 level. On the other hand, it is shown that resilience is more associated with the "vigor" dimension of engagement.

#### 4. DISCUSSION

Among the indicators of a healthy life, the Resilience constructs stand out and, in relation to the study, that of engagement (Study commitment). However, while Resilience encompasses the process that facilitates overcoming adversity. Menezes et al. (2006) in the same way, the high correlation between the dimensions of Vigor and Dedication can be explained by the existence of some important variable whose influence is affecting the high levels of energy and dedication in teaching work in a homogeneous way. Flores et al. (2015) regarding the alpha values obtained in our study, they are similar to those found in Mexico, Argentina and Puerto Rico in both versions of the UWES, except for the Absorption dimension, since it is slightly lower (.66). This also suggests the replicability of the internal consistency of the UWES subscales, and that it makes the instrument comparable between different samples by keeping the measurement error relatively constant (Moreno & Saiz, 2016).

Those with the highest frequency of occurrence in the survey manifested in itself the resilience in the educational environment of the students surveyed, for which there are also multiple investigations. There are some authors who mention in their results of the original CRE-U Resilience Questionnaire for University Students, an exploratory factor analysis was carried out in order to adapt it to the Spanish population, using the method of main axes for extraction and the procedure Varimax, for rotation. With the guide of the "scree test" criterion, eight factors were extracted, which were compared with the eight original factors of the CRE-U. (Moreno & Saiz, 2016) in the research, women had a high level of resilience of 71.11% and men in 80% (table 2). In similar works, the relationship between Resilience and the dimensions of Engagement and Burnout was analyzed. The Resilience scale correlated negatively with the "heart of Burnt" and positively with the EF scale and with the three dimensions of Engagement. (Menezes et al., 2006).

The correlation matrix between the different scales reveals that the dimensions of Burnout and Engagement correlate in the expected direction; that is, the AG and CI scales negatively and significantly correlate with VI, DE and AB, while the EF moderately positively correlates with the three dimensions of Engagement. In the same way, the direction of the correlations between the Burnout variables was as expected, although in this study the negative correlation between the AG and EF variables was not significant. In parallel, the AB scale was the one that showed the lowest significant correlations with the Burnout dimensions. Also, as expected, there was a strong positive correlation between VI, DE, and AB. The relationship between Bournout and engagment was made through a second order exploratory factor analysis with the six scales (AG, CI and EF, VI, DE and AB), discovering the existence of two factors that jointly explained 70% of the variance. The study carried out on accounting science students from the Universidad Nacional del Altiplano de Puno, in whose multivariate analysis, women had a high level of resilience of 71.11%, and men

had a high resilience of 80.00%. As well as the regular level, women represent 28.89% and men 16% and at the low level only men represent 4%.

# 5. CONCLUSIONS

The findings of this research, it is important to know the factors that have been affecting academic development in quarantine situations due to the pandemic that not only affects our region or country but the entire world and in order to establish a relationship of resilience and engagement. In the analysis of correlations of the variables Resilience and engagement, there is a correlation of 0.693, a significant index at the level of 0.01 (bilateral), in the analysis of the dimensions of the engagement variable, for which the vigor dimension has a correlation coefficient of 0.647 which indicates a high significant correlation, the correlation with dedication is 0.577. The correlation with absorption was 0.661, finally the correlation with engagement was 0.693, indicators that show that there is a significant correlation.

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#### Rol de los autores / Authors Roles:

Germán Medina: conceptualización, curación de datos, análisis formal, adquisición de fondos, investigación, metodología, administración del proyecto, recursos, software, supervisión, validación, visualización, escritura - preparación del borrador original, escritura - revisar & amp; edición.

Yolanda Lujano: conceptualización, análisis formal, investigación, metodología, administración del proyecto, recursos, software, supervisión, validación, visualización, escritura - preparación del borrador original, escritura - revisar & amp; edición.

Patty Aza: conceptualización, investigación, metodología, administración del proyecto, recursos, software, supervisión, validación, visualización, escritura - preparación del borrador original, escritura - revisar & amp; edición.

Wilson Sucari: conceptualización, investigación, metodología, administración del proyecto, recursos, software, supervisión, validación, visualización, escritura - preparación del borrador original, escritura - revisar & amp; edición.

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