

Original article

Relationship between emotional competencies and self-regulated learning in general studies students of a private university in Lima

Relación entre competencias emocionales y aprendizaje autorregulado en estudiantes de estudios generales de una universidad privada de Lima

Relação entre competências emocionais e aprendizagem autorregulada em estudantes de estudos gerais de uma universidade privada em Lima

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Received: November 14, 2022.

Accepted: November 29, 2022.

ABSTRACT

The development of emotional competencies has become a priority at all levels of the educational field, as it allows to improve the aspirational level of university students, in addition to allowing an efficient development of their learning strategies. From this point of view, the main objective of this research was to determine the correlation between emotional competencies and self-regulated learning in a sample of general studies students from the "Norbert Wiener" University. A non-experimental design of the correlational type was used, with a sample of 344 subjects, to whom two questionnaires were applied to evaluate each of the variables. These instruments were evaluated and the statistical results show consistent levels of validity and reliability. The data obtained were statistically processed and it was determined that the variables are significantly linked ($r = 0.67$ $p < 0.001$), therefore the first research hypothesis was considered accepted. The specific analyzes show that the areas of both variables are also significantly linked, which is why it is concluded that all the specific hypotheses that were formulated are accepted in the present investigation.

Keywords: emotional competencies; self-regulated learning; learning achievements; motivation for the study.

RESUMEN

El desarrollo de las competencias emocionales se ha convertido en una prioridad en todos los niveles del ámbito educativo, en tanto permite mejorar el nivel aspiracional de los estudiantes universitarios, además de permitir un desarrollo eficiente de sus estrategias para aprender. Desde este punto de vista, la presente investigación tuvo como objetivo fundamental determinar la correlación entre las competencias emocionales y el aprendizaje autorregulado en una muestra de estudiantes de estudios generales de la Universidad "Norbert Wiener". Se utilizó un diseño no experimental de tipo correlacional, con una muestra de 344 sujetos, a quienes se les aplicaron dos cuestionarios para evaluar cada una de las variables. Estos instrumentos fueron evaluados y los resultados estadísticos muestran consistentes niveles de validez y confiabilidad. Los datos que se obtuvieron fueron procesados estadísticamente y se determinó que las variables se encuentran vinculadas de manera significativa ($r = 0,67$ $p < ,001$), por lo que se dio por aceptada la primera hipótesis de investigación. Los análisis específicos muestran que las áreas de ambas variables se encuentran, también, vinculadas de manera significativa, razón por la cual se concluye que todas las hipótesis específicas que fueron formuladas son aceptadas en la presente investigación.

Palabras clave: competencias emocionales; aprendizaje autorregulado; logros de aprendizaje; motivación para el estudio.

RESUMO

O desenvolvimento de competências emocionais tornou-se uma prioridade em todos os níveis do campo educacional, pois permite melhorar o nível aspiracional dos estudantes universitários, além de permitir um desenvolvimento eficiente de suas estratégias de aprendizagem. Deste ponto de vista, o principal objetivo desta pesquisa foi determinar a correlação entre competências emocionais e aprendizagem auto-regulada em uma amostra de estudantes de estudos gerais da Universidade "Norbert Wiener". Foi utilizado um desenho não experimental do tipo correlacional, com uma amostra de 344 sujeitos, aos quais foram aplicados dois questionários para avaliar cada uma das variáveis. Esses instrumentos foram avaliados e os resultados estatísticos mostram níveis consistentes de validade e confiabilidade. Os dados obtidos foram tratados estatisticamente e determinou-se que as variáveis estão significativamente ligadas ($r = 0,67$ $p < 0,001$), portanto a primeira hipótese de pesquisa foi considerada aceita. As análises específicas mostram que as áreas de ambas as variáveis também estão significativamente ligadas, pelo que se conclui que todas as hipóteses específicas formuladas são aceites na presente investigação.

Palavras-chave: competências emocionais; aprendizagem autorregulada; realizações de aprendizagem; motivação para o estudo.

INTRODUCTION

Technological and scientific advances allow research in the educational environment to raise the need to improve student learning capabilities. That is, the teacher uses methodological strategies and technological tools to improve this learning. However, it does not provide the cognitive and attitudinal knowledge that it needs for its formation and integral development. In this context, new paradigms emerged that emphasize the construction of the student's own learning (Perilla, 2018).

The traditional educational model, in most institutions, continues to be applied. However, the new educational proposals pose a new challenge: the integral development of the student. That is, the importance lies not only in cognitive development, but also in its emotional and social development (Huerta, 2019). Despite the fact that this new form is being imposed, greater importance continues to be assigned to the cognitive aspect in the training of students (Pérez and Filella, 2019). It is likely that this way of understanding education continues today. Thus, in most educational institutions, intelligence is prioritized as the unique cognitive aspect and not as the set of capacities that allow the subject to adapt to the environment through their cognitive and emotional conditions (Huerta, 2019; Bisquerra and Hernández, 2017).

According to Fernández-Ponceta (2019), the achievement of the new educational objectives assigns due importance to emotions; since they are essential to achieve an adequate balance in students, both in terms of physical and psychological health.

The educational system needs to prioritize emotional competencies. These skills encourage the adaptation of people to their social environment. That is, they stimulate effective and responsible citizenship, as well

as facing problems of daily life. Likewise, they favor learning processes, interpersonal relationships, labor relations, among others. Therefore, it is relevant that Regular Basic Education integrates this competence into its Curricular Plan (Bisquerra and Pérez, 2007).

However, as emotional formation continues to be delayed in the educational system, academic results continue to be quite meager. Consequently, the advancement of the sciences has privileged the role of emotions in the learning process and, likewise, in the entire formative process of the student. (Hair, 2019). On the other hand, different authors have considered that emotions can act as great stimulators of learning. This will allow students to face and resolve various situations and obligations assigned to them by academic life (Bisquerra and López, 2020).

In this way, the educational work has the purpose of forming good citizens. For this, it is necessary that the training in emotional competencies should begin from their first years of life. However, it is possible to form these skills at later ages, including those that are lived in the university (García, 2012). In short, research shows that emotional competencies are decisive in student learning. For this reason, the role of the teacher is fundamental. rahayu *et al.* (2018), in their research, show that the teacher's emotional intelligence is significantly linked to school effectiveness in terms of student learning.

It is important to recognize that, in the learning process, the information that arrives from the external and internal world is processed, in principle, by the emotional brain (Toro and Yépez, 2018) and only later is it processed by the cerebral cortex, mainly by the anterior regions of the brain. In simple terms, it must be understood that the cognitive processes that are activated to give rise to learning (thinking, memory, attention, etc.) are mediated by emotions.

Various investigations, such as that of Shipley *et al.* (2010), have shown that a correct management of emotions has a positive impact on student learning. Consequently, if there is no positive link between emotion and learning, the results will not be as expected by the educational system. Perhaps this can explain, in some way, the results of international evaluations (OECD, 2016), which place our country in the last places in communication, mathematics and science; a situation that needs to be reversed and this implies attending to the student's training in an integral way to face the learning process in an autonomous and self-regulated way (Silva and Maturana, 2017).

Given the new conditions of the development of societies, there has been a set of paradigmatic changes in education. Based on these conditions, the learning center has been redirected from the teacher to the student, so it has become a priority to develop a set of cognitive, behavioral, affective and motivational strategies. In addition, it depends on external factors such as culture, the individual's relationship system, and the context in which it operates (Schunk and Greene, 2017). This allows the student to develop the necessary skills to become a self-regulated learner; that is, a student who knows how he learns, who is clear about his strengths and weaknesses. Likewise, it regulates their learning processes and guides them towards the goals that have been set (Silva and Maturana, 2017).

Due to the above, it is an immediate need to know the way in which emotional competencies and their dimensions are linked to self-regulated learning and its dimensions, in general studies students of the "Norbert Wiener" University, to finally determine in the In the same context, the level at which these competences and self-regulated learning are located, a problem to be solved in this proposal.

In this way, the present article aims to determine the way in which emotional competencies are linked to self-regulated learning in general studies students of the "Norbert Wiener" University.

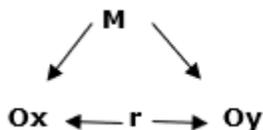
METHODS

The present study was carried out throughout the second semester of 2021 and the beginning of this year, among general studies students of the "Norbert Wiener" University of the city of Lima. According to what was indicated by Sánchez and Reyes (2021), the research method that it was necessary to use was descriptive; to the extent that through this method it is possible to measure and describe the situations, phenomena and events that are investigated. The descriptive method allows us to observe how the phenomenon under investigation is expressed and also allows us to specify the relevant characteristics of the problem under study.

Research design

In the present study, a non-experimental design of correlational and cross-sectional scope was used, as proposed by Hernández and Mendoza (2018), to the extent that the objective of this design is to describe the relationships established between the variables in a specific time. According to the cited authors, the relationships can be causal or descriptive.

In the present investigation, the variables to be correlated are emotional competencies and self-regulated learning, which can be expressed under the following scheme:



Sample

According to Hernández, Fernández and Baptista (2014), the design of the sample is probabilistic, of the stratified type, classifying the students according to the career they entered. From the population under study, which totals 3295, the sample size was estimated using the formula provided by Sierra Bravo (2001), which, when cleared, gave a total size of 344 students, who were distributed according to the cycle of studies to which they belong. The inclusion criteria for participation in this research consisted of students being currently enrolled in the chosen faculty and having at least one academic cycle of studies and freely accepting to participate in this study; otherwise, they were excluded from it.

Table 1- Distribution of the sample considering the academic cycle

Cycle	Frequency	Percentage
Yo	93	27.0
II	74	21.5
III	97	28.2
IV.	80	23.3
Total	344	100.0

As can be seen in Table 1, the number of students in cycle I is 93, in cycle II it is 74, in cycle III it is 97 and, finally, in cycle IV it is 80 students. The total number of the sample is 344 students.

Instruments

For the development of this study, two questionnaires were used: inventory of emotional competencies, which presented five dimensions and 35 items. In the case of

the second variable, the self-regulated learning questionnaire of Juan Carlos Torre was used, with four dimensions and 20 items.

To obtain the necessary data for the development of this study, two questionnaires were used, considering each of the variables. In the case of the first variable, the emotional competencies inventory was used, which presented five dimensions and 35 items; In the case of the second variable, the self-regulated learning questionnaire of Juan Carlos Torre was used, with four dimensions and 20 items.

Analysis of validity and reliability of the instruments

The validity and reliability analyze that were carried out on the instruments, in order to guarantee their correct use, show us that the inventory of emotional competencies obtains a Cronbach's alpha of 0.86, which indicates that the aforementioned inventory is reliable. Regarding the self-regulated learning questionnaire, the Cronbach's alpha obtained is 0.85, a reason that allows us to ensure that it determines that the instrument is equally reliable. The determination of the validity of the instrument was carried out through exploratory factor analysis and varimax rotation; They concluded that the two instruments present validity based on their internal structure.

RESULTS

Descriptive analysis

Table 2- Analysis of normality of the variables studied

Variable	Half	OF	K-SZ	Next.
Awareness Emotional	27.22	4.65	.082	,000
Regulation emotional	25.92	3.56	.074	.002
Autonomy Emotional	25.92	3.88	.078	.001
skills social	27.74	3.53	.073	.002
Skills for life and well-being	26.19	3.78	.085	,000
Awareness metacognitive active	23.45	3.54	.120	,000
Control and verification	28.59	3.81	.120	,000
Daily effort in carrying out tasks	15.74	2.49	.122	,000
Active processing during classes	11.42	2.07	.127	,000

No. = 344

In order to determine if the data collected with the instruments used in this investigation fit the normal curve or not, and which are shown in Table 2, these data were processed using the Kolmogorov test. Smirnov, who determined that the variables under investigation obtain KS Z coefficients that are statistically significant, which is why it is concluded that there is no fit to the normal curve. This result makes it possible to determine that the statistics to be used in the hypothesis test must be of a non-parametric nature.

Table 3- Skill levels _ emotional

levels	frequencies	percentages
Bass	70	20.3
Medium	201	58.6
Tall	73	21.1
Total	344	100.0

The descriptive analyzes carried out on the emotional competencies variable and which are shown in Table 3, inform us that the students submitted to evaluation register percentages that are preferably located at the medium level 58.6%, followed by those who are located at the average level. high 21.1% and, finally, there are those who are located in the low level with 20.3%.

Table 4- Learning levels _ self-regulated

levels	frequencies	percentages
Bass	63	18.4
Medium	208	60.5
Tall	73	21.1
Total	344	100.0

The descriptive analyzes carried out on the self-regulated learning variable and which are presented in Table 4, inform us that the students submitted to evaluation register percentages that are preferably located at the intermediate level, 60.5%, followed by those who are located in the middle level. high level, 21.1% and, finally, there are those who are located in the low level with 18.4%.

Descriptive Correlational Analyzes

Table 5- Correlational estimates between emotional competencies and self-regulated learning

variables	Learning self-regulated
skills emotional	0.67***

* $p < .05$ ** $p < .01$ *** $p < .001$
 N = 344

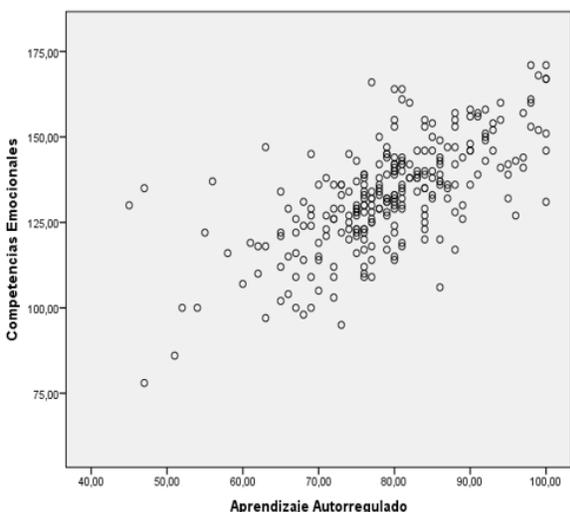


Fig. 1 - Correlation between emotional competencies and self-regulated learning

After the correlation analysis of the variables under study, the results shown in Table 5 and Figure 1 inform us that, in effect, these variables (emotional competencies and self-regulated learning) are linked to each other ($r = 0.67$ $p < .001$), significantly, in the students of the sample.

Table 6- Correlational estimates between the various emotional competencies and the dimensions of self-regulated learning

variables	With MA	ConV	EsfD	thought
Awareness Emotional	0.46**	0.39**	0.42**	0.40**
Regulation emotional	0.54**	0.54**	0.49**	0.46**
Autonomy Emotional	0.45**	0.43**	0.37**	0.40**
skills Social	0.47**	0.50**	0.40**	0.46**
Skills for life and well-being	0.49**	0.45**	0.43**	0.42**

* $p < .05$ ** $p < .01$ *** $p < .001$
 N = 344
 ConMA = Active metacognitive awareness, ConV = Control and verification, EsfD = Daily effort in carrying out tasks, PensA = Active processing during classes

After the correlation analysis between the various emotional competencies and the dimensions of self-regulated learning, the results shown in Table 6 inform us that, in effect, the dimensions of these variables are significantly linked to the students in the sample.

DISCUSSION

Guaranteeing that the data collection instruments meet the technical requirements allows carrying out the necessary processes to ensure optimal levels of validity and reliability. The results of the analyzes report that both instruments: emotional competency inventory and self-regulated learning questionnaire, reach high enough scores to conclude that both meet the validity and reliability requirements. Regarding the hypothesis that was raised "There is a significant relationship between emotional competencies and self-regulated learning in general studies students of a Private University of Lima". The results that were obtained show that both variables are significantly linked to each other, so that it can be concluded that they are oriented in the same direction.

In this line, Bisquerra and Pérez (2007), when marking the importance of emotional competencies, point out that human beings must possess an articulated set of capacities and abilities. Through this competence, the student will be able to function in diverse contexts and be a differentiated person, better adapted, efficient and with greater self-confidence.

Therefore, it is necessary to prepare students to discover their abilities and qualities. These strengths stimulate the achievement of goals, to make better decisions, to value the individual capacities of the people around us, to manage stress and to recognize emotions,

both individually and as a group, in such a way that they can be handled assertively and be highly productive in any academic and social situation.

A number of factors are involved in the learning process and student training, the most relevant being cognitive and emotional. For García (2012), emotions influence the learning process, although it is not relevant in the educational system; however, they influence the moment of learning and teaching. In addition, he maintains that, in order to facilitate learning, it is important to manage emotional intelligence together with the emotional side. Therefore, the results show that students only achieve an emotional competence of 21%, while the average level is 60%. That is, these results corroborate the author's position. Such is the case of the university, where the subject of emotions is not mentioned and less is stimulated and developed in the students. However, in basic education, from the changes registered as a result of the appearance of new theoretical proposals such as emotional intelligence and multiple intelligences, the importance that emotions may have for the student's learning process has been debated. and for all your personal and professional training.

The results obtained indicate that the emotional competencies of the general studies students of the Norbert Wiener University, as well as the self-regulated learning, are predominantly at a medium level, which implies that the students are not properly regulating their learning and are not adequately managing their emotions. On the other hand, the results show that the variables under study, emotional competencies and self-regulated learning, are significantly correlated, as well as their respective dimensions. These results should allow drawing up the strategies that are necessary so that students can self-regulate their learning and manage their emotional processes, so that they can improve the

performance that leads them to achieve their goals.

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Conflict of interests:

The authors declare not to have any interest conflicts.

Contribution of the authors:

The authors participated in the design and writing of the work, and analysis of the documents.



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Cite as

Cosi Cruz, E., Peña Miranda, C., Silarayan Ruiz, L., Espinosa Herrera, E., & Cruz Huallpara , A. (2023). Relationship between emotional competencies and self-regulated learning in general studies students of a private university in Lima. *Mendive. Revista de Educación*, 21(1), e3259. <https://mendive.upr.edu.cu/index.php/MendiveUPR/article/view/3259>