Revista Innova Educación

ORIGINAL ARTICLE

Self-regulated learning and personality in university students

Autorregulación del aprendizaje y rasgos de personalidad en estudiantes universitarios

Autorregulação da aprendizagem e traços de personalidade em estudantes universitários

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ABSTRACT. The present investigation analyzes the relationship between the self-regulation of learning and the personality characteristics of university students belonging to the Minuto de Dios University Corporation - UNIMINUTO of Bogotá - Colombia the sample consisted of 75 men and women between 18 and 45 years of age. From the application of the instruments: Gordon's personality profile and inventory (ancestry, responsibility, emotional stability, sociability, caution, originality, commitment, vitality, and self-esteem) and the self-report questionnaire - self-regulation of learning, the correlational analysis was carried out. Using Spearman's Rho (significance level $p<0.05$). The results suggest that students who know and apply learning self-regulation techniques tend to be dominant (ancestry) independent, so they take responsibility for their personal goals (commitment), emotionally stable, and friendly. On the other hand, students who are cautious, original, and oriented towards understanding others tend to give little importance or use, to a lesser extent, the use of self-regulated learning strategies.

RESUMEN. La presente investigación analiza la relación entre la autorregulación del aprendizaje y las características de personalidad de los estudiantes universitarios pertenecientes a la Corporación Universitaria Minuto de Dios – UNIMINUTO de Bogotá - Colombia. La muestra estuvo conformada por 75 hombres y mujeres entre 18 y 45 años de edad. A partir de la aplicación de los instrumentos: Perfil e inventario de personalidad de Gordon (ascendencia, responsabilidad, estabilidad emocional,

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aprendizaje, personalidad.	sociabilidad, cautela, originalidad, compromiso, vitalidad y autoestima) y el cuestionario de autorreporte – autorregulación del aprendizaje se efectuó el análisis correlacional mediante Rho de Spearman (nivel de significancia p<0,05). Los resultados sugieren que los estudiantes que conocen y aplican técnicas de autorregulación del aprendizaje suelen ser dominantes (ascendencia), independientes por lo que se responsabilizan de sus metas personales (responsabilidad), estables emocionalmente y sociables. Por otra parte, los estudiantes cautelosos, originales y orientados a comprender a otros, tienden a dar escasa importancia o emplear en menor medida el uso de estrategias de autorregulación del aprendizaje.

PALAVRAS-CHAVE	RESUMO.
aprendizagem, autorregulação, aprendizagem, personalidade.	**RESUMO.** A presente investigação analisa a relação entre a autorregulação da aprendizagem e as características de personalidade de estudantes universitários pertencentes à Corporação Universitária Minuto de Dios - UNIMINUTO de Bogotá - Colômbia. A amostra foi composta por 75 homens e mulheres entre 18 e 45 anos de idade. A partir da aplicação dos instrumentos: o perfil e inventário de personalidade de Gordon (ascendência, responsabilidade, estabilidade emocional, sociabilidade, cautela, originalidade, comprometimento, vitalidade e autoestima) e o questionário de autorrelato - autorregulação da aprendizagem, a análise correlacional foi realizado usando o Rho de Spearman (nível de significância p<0,05). Os resultados sugerem que os alunos que conhecem e aplicam técnicas de autorregulação da aprendizagem tendem a ser dominantes (ascendência), independentes para que se responsabilizem por seus objetivos pessoais (responsabilidade), emocionalmente estáveis e sociáveis. Por outro lado, alunos cautelosos, originais e orientados para a compreensão do outro tendem a dar pouca importância ou empregar menos o uso de estratégias de aprendizagem autorreguladas.

1. INTRODUCTION

Self-regulation of learning is a theoretical construct that arises from research in which the benefit for the student of assuming a central position in their learning process was identified (Suárez & Fernández, 2004).

It is defined, according to Mayor and col (1993, as cited by Suárez & Fernández, 2004) as "all learning in which learners are metacognitively, motivationally and behaviorally active participants - in their learning process" (p.17). This occurs at a metacognitive level, being aware that its application constitutes something beneficial for the learning process; motivational because importance is given to the establishment or appropriation of learning goals, internal or external, and behavioral, through the use of strategies that are applied before, during and after the grant of knowledge, and that favor its development (Efklides, 2009, 2011; Panadero et al., 2017).

There are different theories related to the self-regulation of learning, focused on identifying the characteristics, processing levels, and tools that make it up. However, for the development of this research, the Metacognitive and Affective Model of Self-Regulated Learning - MARSL (for its acronym in English) was selected, which proposes that the Self-regulation of learning is divided into two dimensions: the person macro-level and the micro-level. Task x person. The first indicates a top-down processing level, where the task analysis is carried out based on how this knowledge allows the student to achieve their personal goals and impacts the subject's characteristics such as personality, motivation, self-concept, and affection. Once the learning is interpreted in light of its benefit for the student's achievement, he uses a set of strategies that facilitate the appropriation of knowledge.

On the other hand, the microlevel task x person describes the level of processing focused on the acquisition of knowledge from the bottom up, where the analysis and treatment of learning activities will be oriented towards

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the achievement of short-term goals, that is, getting good grades, pass the subject, etc. In this dimension, it is not related to the personal accomplishments of the individual, but instead, it is merely instrumental behavior to comply with an external requirement (Efklides, 2011).

Based on what was previously described, one of his approaches to studying self-regulation of learning has focused on identifying students' personality traits that regulate their learning process so that a profile can be established to predict this conduct. Unfortunately, the problem of personality in psychology is not well defined; however, Bermudez et al. (2012) define it as:

> "a series of elements (traits or internal dispositions), relatively stable over time and consistent from one situation to another, that explain the response style of individuals. These personality characteristics of a regular and consistent nature allow us to predict the behavior of individuals" (p.30).

Therefore, the personality of individuals is determined from the level of presence/absence of the differentiating elements that characterize the behavior of the individual. For the development of this research, the theory of Gordon Allport (Ewen, 2009) is taken up, who proposed that there are only 5 to 10 main personal dispositions that constitute a personality profile and that a series of secondary natures would accompany them. Therefore, Allport delimited eight aspects: a sense of the human self, sense of continuous self-identity, self-esteem, self-extension (ego-extension), self-image, the self as a rational being (sometimes described as defense mechanisms), reasonable effort, the self as knower, and consciousness. However, these provisions vary in nomenclature and definition depending on the instruments created to measure them and the social context.

As previously described, the relationship between personality dimensions and learning self-regulation has been studied by establishing a profile that indicates whether there are traits that facilitate learning self-regulation strategies. An example is a study carried out by Bruso et al. (2020) where they applied the Big Five Inventory to a sample of postgraduate university students to assess personality dimensions (openness, conscientiousness, extraversion, agreeableness, and neo-criticism), in addition to an online survey on Self-regulation of learning. The results suggest that open-minded, conscientious, extroverted, and friendly learners tend to have more excellent knowledge and application of strategies focused on self-regulation of learning. Additionally, self-regulatory students have characteristics of openness, communication, help-seeking, and usually have a cooperative spirit.

Another similar study is carried out by Dörrenbächer and Perels (2016) they sought to determine the personality traits that characterize the use of self-regulation learning strategies after training focused on promoting their use. Again, the Big Five Inventory was used, in addition to a training program consisting of eight 90-minute weekly sessions with a theoretical-practical approach to master self-regulation techniques. The authors found that self-regulatory students tend to have characteristics such as extroversion, conscientiousness, agreeableness, and openness to experience; on the other hand, low levels of test anxiety and low neuroticism. Likewise, they suggest that the use of self-regulation strategies is conscious. The student applies it deliberately, especially accompanied by personality characteristics such as conscientiousness and systematization.

As can be seen, the relationship between personality and self-regulation is bidirectional. Not only can personality predict self-regulatory behavior, but self-regulatory strategies can simultaneously favor the modulation of aspects of nature. An example of this is the research developed by Jiang and Kleitman (2015), a study identifying the

relationship between motivational tendencies of self-protection and improvement in the task. They completed self-reports on motivation, metacognitive beliefs, and anxiety with concern. The results obtained showed that the positive motivational ideas (attributions) that the student has about her performance are related to trust. Therefore, if the student considers that she can solve the learning tasks with the knowledge she possesses, the level of confidence increases, promoting the use of learning strategies for the acquisition of knowledge. However, suppose the student considers that their abilities are insufficient to face the task (negative motivational beliefs - predictions) and is also characterized by having fragile self-esteem. In that case, they will carry out self-protection strategies such as recognizing their self-inability, defensive pessimism, and generalized anxiety.

When considering the data described, the relationship between the constructs is identified, although there is no consensus regarding the personality profile of self-regulating students. Placing the characteristics of the self-regulatory student constitutes a fundamental aspect when it comes to promoting its knowledge and application. Additionally, this research allows contributing to this investigative current from two differentiating elements. In the first place, there is little research regarding the profile of the self-regulatory student where the processing dimensions (macro and micro level) are analyzed since the existing studies study the characteristic at a general level (A. Hernández & Camargo, 2017). Secondly, for the evaluation of personality, there is a valid instrument for the context of the evaluated sample, an aspect that is expanded in the methodology section (González et al., 2019).

To develop this study, three objectives were established: first, to identify the level of presence/absence of self-regulation of learning. Second, recognize the relationship between personality traits and self-regulation of learning in the sample evaluated. Finally, determine the factors that affect this association, the characteristics of this study, and the results obtained are described below.

2. METHOD AND MATERIALS

Participants

As described by R. Hernández et al. (2014) for the development of this research with a quantitative, descriptive, and correlational approach, a sample made up of 75 undergraduate students belonging to the Corporación Universitaria Minuto de Dios - UNIMINUTO was selected. The students belong to different academic programs with an age range between 18 and 45 years (average: 19 years) enrolled in the Life Project subject, which constitutes a transversal subject to the different academic programs. Participation was voluntary, so those interested in participating in the study had to enter the evaluation link to fill out the instruments. By the above, only the people met the inclusion criteria: being of legal age, being enrolled in a higher education academic program, confirming their participation by approving the informed consent, and filling out all the research instruments.

Instruments

Sociodemographic survey

A questionnaire was developed to record the basic information of the study participants: age, gender, academic program, academic semester, among other data that were considered in the information analysis process. The

questionnaire consisted of 9 simple questions that were placed at the beginning of the evaluation, basically asking for information on the general data of the participants.

Self-Report Questionnaire – Self-Regulation of Learning

Instrument created to evaluate the Self-regulation of learning construct, based on 29 items with a Likert rating scale of five factors (always, almost always, sometimes, rarely, and never) focused on identifying the student's knowledge regarding the strategies of self-regulation. For its preparation, the following instruments were taken into account: the Self-regulated Learning Scale (EAA) carried out by Elvira and Pujol (2015), the Motivation and Learning Strategies Questionnaire - MSLQ (Sabogal et al. 2011), and the Self-regulation Scale Academic or A-SRL (Magno, 2010).

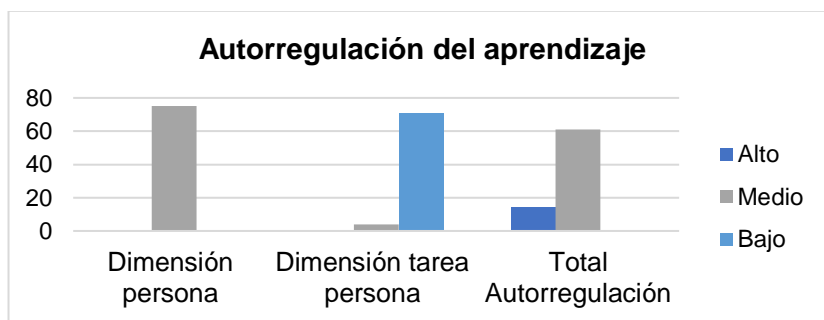## Gordon Profile and Personality Inventory – PPG-IPG

The PPG-IPG is a Personality test developed by Gordon (1996) and that evaluates eight personality traits: ancestry, responsibility, emotional stability, sociability, caution, originality, understanding, vitality, and self-esteem, the latter as an additional factor. Likewise, it is made up of 38 items with a four-factor Likert scale, in which the person evaluated must choose the aspect that is most in keeping with her way of being and the one that is most opposed to her behavior. In Latin America, it has been translated into different Spanish-speaking countries. Moreover, our country has an analysis of psychometric properties developed by González et al. (2019), who indicate that it is a valid test for this context. In addition, this instrument provides a broader range of personality dimensions, considering that the Big Five inventory has been frequently used and is limited to five sizes. However, the PPG-IPG assesses ascendancy, responsibility, emotional stability, sociability, caution, originality, understanding, vitality, and self-esteem.

3. RESULTS

In the first place, the results obtained at a general level indicate that 81.3% of those evaluated are at an average level concerning knowledge and application of learning self-regulation strategies. On the other hand, 18.7% is on the high level. When describing the two dimensions of self-regulation of learning based on the MARSL model and evaluated in this study, it is identified that at the person macro-level, 100% of those estimated report a medium level, which suggests that those evaluated use self-regulation tools. Learning allows them to achieve the objectives oriented towards their life project. However, at the micro-level task x person, the data show variability, since 94.7% are located at a low level, and 5.3% at a medium level, which indicates that the student has little knowledge when focusing on a short-term goal applies few self-regulation learning strategies.

Figure 1.

Summary results self-regulation of learning

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Autorregulación del aprendizaje

(Legend: Alto, Medio, Bajo)

It is opportune to clarify that the data previously described are consistent with the study carried out by Jakubakynov et al. (2021), who identified that according to the value and importance that the student gives to the task, he uses self-regulation strategies that allow him to achieve his purpose. Therefore, the preceding is directly related to the level of estimation that the student makes of the activities, considering whether or not they point to the long-term objectives.

Secondly, the results of the PPG-IPG at a general level present the personality traits that will be described below. The Ascendancy trait at a medium level represents the orientation to exercise a dominant role. However, at times he can give up his position of command to support the ideas of others. For its part, the high-level Responsibility trait indicates a strong orientation towards compliance with established rules and procedures. Likewise, Emotional stability is also at a high level, which describes adequate management of emotions in different situations. Finally, sociability is within the average. Therefore, those evaluated manage to establish interpersonal relationships with ease.

Similarly, Self-esteem is at the medium level, which suggests that those evaluated know their abilities and skills and put them into practice to achieve their personal goals. On the other hand, Caution, which is at a high level, describes the tendency to evaluate situations in terms of cost-benefit to establish a course of action to minimize risk. Likewise, originality is at a high level, which indicates that students have a good development in generating ideas by giving creative answers to problems. Next, Understanding and Vitality are at the medium level. The data suggest that study participants are often empathetic in recognizing the strengths and weaknesses of others. Additionally, they give importance to achieving their personal goals and established objectives with effectiveness and efficiency.

To carry out the analysis between the variables, the data collected by each instrument was selected, and the correlation between the variables was calculated from the application of Spearman's Rho, taking into account that the data were not normalized according to the results provided by the Kolmogorov-Wilk test. The data obtained reflects the correlation index generated from the application of the Spearman test, as described below.

Table 1.

Spearman's correlation index for the study variables

			Person Dimension	Person Task Dimension	Total regulation of Learning	Self-
Rho de Spearman	Age	Correlation coefficient	,019	,120**	,052**	

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	Next (2-sided)	,244	,000	,002
	N	75	75	75
Gender	Correlation coefficient	,059	-0,60	,024
	Next (2-sided)	,0612	,608	,841
	N	75	75	75
Semester	Correlation fficient	-,147**	,121**	-,124**
	Next (2-sided)	,000	,000	,000
	N	75	75	75
Ancestry	Correlation coefficient	,172**	,036*	,163**
	Next (2-sided)	,000	,030	,000
	N	75	75	75
Responsibility	Correlation coefficient	,082**	-,053**	,042*
	Next (2-sided)	,000	,001	,011
	N	75	75	75
Emotional stability	Correlation coefficient	,035*	-,016	,041*
	Next (2-sided)	,033	,320	,014
	N	75	75	75
Sociability	Correlation coefficient	,257**	-,002	,188**
	Next (2-sided)	,000	,921	,000
	N	75	75	75
Caution	Correlation coefficient	-,037*	-,032	-,050**
	Next (2-sided)	,025	,050	,003
	N	75	75	75
Originality	Correlation coefficient	-,004	-,063**	-,026
	Next (2-sided)	,811	,000	,118
	N	75	75	75
Understanding	Correlation coefficient	-,085**	-,048**	-,095**
	Next (2-sided)	,000	,003	,000
	N	75	75	75
Vitality	Correlation coefficient	,147**	-,067**	,078**
	Next (2-sided)	,000	,000	,000
	N	75	75	75
Self-esteem	Correlation coefficient	,239**	,030	,207**
	Next (2-sided)	,000	,070	,000

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	N	75	75	75

**. The correlation is significant at the 0.01 level (bilateral).
*. The correlation is significant at the 0.05 level (bilateral).

Note. Description of the correlation coefficient and significance level between the variables evaluated by SPSS analysis. Source. Own development.

As shown in the table above, the correlations obtained between self-regulation of learning and the different variables evaluated are low. Therefore, the preceding could be interpreted as a scarce or minimal relationship between the concepts assessed. However, as they are significant, they are taken into account for the description of the results and their subsequent interpretation. The first correlation identified is between Self-regulation of learning and age, which is positive for the person dimension (.172) and the general score (.163), and there is no relationship with the task x person dimension. Next, there is evidence of a relationship with the Semester variable, which indicates a negative correlation for the personal size (-.147) and the general score (-.124), and a positive correlation for the task x person dimension (.121).

When reviewing the correlations with personality traits, a positive relationship is found with the Ancestry variable, for the personal dimension (.172), task x person (.036), and general score (.163). Next, a relationship with the Responsibility trait is evidenced, which is positive for the person dimension (.082) and the total score (.042), and harmful for the task x person dimension (-.053). On the other hand, the Emotional Stability trait positively correlates with the personal size and general score (.35 and .041, respectively). Furthermore, a positive relationship is found with the emotional dimension (.25) and the total score (.188) concerning the Sociability variable. On the other hand, with Cautela, a negative correlation is evidenced with the personal size (-.037) and the total score (- .050). Next, with the Originality trait, a negative relationship is evidenced with the task x person dimension (-.063) and in the same negative way for the Comprehension variable with the personal size (-.085) and the total score (-.095). Finally, the Vitality trait presents a positive relationship with the emotional dimension (.147) and the total score (.078), as well as a negative association with the task x person dimension (-.067) and Self-esteem is related to the personal size (.239). and the total score (.207).

4. DISCUSSIONS

Based on the previously recorded data, a significant positive correlation between self-regulation of learning and the age variable for the personal dimension and the general score. This indicates that the older the student, the greater the number of self-regulation learning strategies used. The present result is consistent with the literature since, as reported by Castel et al. (2013), the brain maturation process experienced by individuals generates changes in cognitive abilities, which is why as students age, they usually use techniques that allow them to level their abilities given the demands of the environment.

On the other hand, there is evidence of an important relationship between the academic semester variable and self-regulation of learning at two levels: significant positive with the task x person dimension, and negative with the general score of self-regulation of learning and the personal size. Considering the above, as the student approaches the culmination of his academic program, he tends to give less importance and, therefore, useless quantity and frequency of self-regulation learning strategies to execute educational activities. On the contrary,

the data suggest that the students of the first semesters present a higher level of orientation to reach their immediate academic goals using self-regulatory techniques compared to the later semesters. This is not consistent with previous research such as that carried out by Cazan and Schiopca (2014) who consider that the difference in terms of use of strategies evidenced between students of the first semesters and those who are advanced, lies mainly in the self-knowledge developed by the student, which allows him to recognize the strategies that fit the activities to be carried out and his learning style.

Variable analysis of personality traits

Concerning the personality traits evaluated and their relationship with self-regulation of learning, which is one of the main objectives of this research, a significant positive correlation was found between the ancestry dimension and self-regulation of learning (total value and self-regulation dimension). Person, link that does not appear in the task x person dimension. The Ancestry trait describes the evaluated person's role in the group. It can be of the dominant or submissive type. On the other hand, the analysis indicates that self-regulating students adopt an active role in the group since they are usually autonomous and self-confident. This turns out to be consistent with that reported by other investigations Bruso et al. (2020), Efklides (2006), especially that of Jiang and Kleitman, 2015), who suggest that the self-assessment that the student performs regarding its performance substantially influences the approach to learning activities and the achievement of the objectives. This is because the processing is carried out from the top down. Therefore, the student's attributions, performance in a specific task, or the job itself, influence their performance. And vice versa.

The responsibility trait describes the student's commitment to the activities and the learning process. The results indicate the link of this dimension with the three dimensions of self-regulation of learning: positively with the general value and the person macro-level, and negatively, and not very significant with the task x person micro-level. This occurs because as the student solves the activities, she visualizes the goals to be achieved, that is, the long-term achievements, her level of responsibility increases (directly proportional). On the other hand, when the student's focus is directed towards immediate gratification, the responsibility index decreases since the student's motivation is limited and precise. However, the results obtained by Li et al. (2021) are inconclusive. There is a lack of clarity regarding the differences between responsibility and the top-down or bottom-up processing model.

The Emotional Stability dimension is defined as the person's propensity evaluated in affective-emotional terms to maintain balance. The variable presents two positive correlations with the personal dimension and the general score, which describe the student's importance and the teaching-learning process itself, the student's psychoemotional balance for the execution of higher-order processes (executive functions) that facilitate the appropriation of knowledge. This is consistent with the results previously described by Pekrun et al. (2011), who found that the stability of the individual, specifically about emotions, facilitates the appropriation of knowledge. Additionally, Efklides (2019), in his multiple investigations on the self-regulation of learning, highlights the transversal role that emotion (affect) adopts in the learning process..

The sociability trait is conceived as the level of connection of the evaluated peers. The data obtained describe a significant positive correlation with the total score and the personal dimension, emphasizing the importance of

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knowing and applying social skills within the teaching-learning process. This indicates that the student establishes and maintains interpersonal relationships with ease, which translates into using self-regulation strategies such as peer support and help-seeking. Authors such as Bruso (2019), Bruso et al. (2020) and Kirwan et al. (2014), highlight the importance of peer support and communication in learning.

The Caution dimension describes the student's orientation towards evaluating possible risks and the choice of the course of action. The results report a significant negative correlation with the general score and the personal dimension, contrary to the information described in previous studies, which indicate that self-regulating students tend to plan activities conscientiously. An example of the above is found in the survey by Mägi et al. (2016), who suggest that cautious students tend to have a better appropriation of knowledge because they plan to learn. In agreement, Balaban and Bayindir (2016) indicate that the locus of control facilitates the self-management of expertise, especially in conscientious and methodical individuals.

On the other hand, the originality trait that defines the individual's orientation towards creativity, seeks to create divergent solutions to day-to-day challenges, is related to Self-regulation of learning (task x person dimension) if the student desires a process from below upwards, that is, focused on the achievement of simple goals, and with a practical interest (achieving the objective, obtaining a specific grade), the Originality dimension constitutes an aspect that does not facilitate, but hinders learning. To achieve a particular goal, the student will select the strategy they know or provided to them to achieve the objective. However, studies such as the one conducted by Mulyadi et al. (2016) indicate that the traditional teaching methodology limits their capacity for divergent thinking in favor of adapting to environmental conditions.

Regarding the comprehension trait, a negative correlation was evidenced with the three dimensions: general score, macro-level person, and micro-level task x person, which presents a higher level for the first two. The data suggest that, as the student is more empathic towards his peers, specifically in supporting their academic goals, he neglects his own. This is inversely proportional to the use of self-regulation learning strategies both short, medium, and long term. The preceding is consistent with research by Rathore (2018), which indicates that self-regulating students tend to develop a higher level of emotional intelligence, which allows them to relate to their peers and act with empathy, promoting the relationship between peers and mutual support.

The vitality dimension represents agility in developing activities resolving situations promptly. The results indicate a significant positive correlation with the person macro-level and general score and a negative correlation with the task x person dimension. This suggests that the evaluated want to achieve the activities in an agile and timely manner. This favors the use of self-regulation strategies, especially those oriented to achieving medium and long-term objectives or that impact their life project. On the other hand, the achievement of short-term goals does not benefit from using self-regulation learning strategies since, although it is a tool to facilitate learning, it still constitutes significant cognitive wear. Efklides (2019) indicates that gifted students use techniques to move towards action and achieve goals. Their difference from average students is not to economize behavior but to use tools that facilitate the development of activities.

Finally, Self-esteem, defined as self-confidence and the recognition of one's capacities and abilities, is positively and significantly related to Self-regulation of learning. This occurs because as the student perceives himself as a person capable of facing daily challenges, he puts more effort into achieving learning objectives through self-regulation strategies. The preceding is consistent with the literature since, according to a study by Hiemstra and

Van (2015), the student makes attributions about his performance, which allows him to plan the activities to allocate the necessary resources towards achieving the objectives.

5. CONCLUSIONS

The results obtained from the information collected and the analyses carried out indicate that those evaluated present an average level of knowledge/application of self-regulation of learning in response at a general level. However, when identified by dimensions, a medium level is found for the person macro-level (in-depth analysis) and medium-high for the task x person micro-level (superficial analysis).

On the other hand, the correlation analysis was carried out using Spearman's Rho, which allowed determining relationships between the variables, firstly, between sociodemographic data and personality traits, to visualize the connections at the level of the general population information. Two positive correlations were found with aspects such as age and academic semester. Therefore, the data suggest that the older the student, the greater the use of self-regulation strategies, which could be influenced by the desire of the student to adjust their abilities taking into account daily challenges. Next, the relationship with the academic semester indicates that, as the student approaches the completion of his undergraduate program, the use of self-regulation strategies decreases, taking into account that he recognizes his abilities and uses those strategies that he considers appropriate for the achievement of the objective.

Regarding the relationship between personality characteristics and self-regulation of learning, the results indicate that the dimensions ancestry, responsibility, emotional stability, sociability, vitality, and self-esteem are positively correlated. This suggests that study participants who are self-regulators tend to be dominant and independent. They strive to meet goals and purposes and give importance to affective-emotional balance, especially in learning situations. In addition, they establish optimal interpersonal relationships and are oriented towards planning activities to manage risk. Additionally, they usually recognize their capacities and potentialities to achieve the objectives. On the other hand, the negative correlations in the trait's originality, caution, and comprehension suggest that these two characteristics are inversely proportional to knowledge and application of self-regulated learning strategies.

Finally, it is appropriate to clarify that one of the research limitations was the size of the sample, which was generated by various situations, one of which was the impossibility of evaluating the participants in person due to the contingency Sars-Cov-2. Additionally, it is considered necessary to promote research that allows an adequate identification of personality traits that could predict self-regulatory behavior in students.

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

Aspectos éticos / legales; Ethics / legals:
Los autores declaran no haber incurrido en aspectos antiéticos, ni haber omitido aspectos legales en la realización de la investigación.

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