

# GENERAL SELF-EFFICACY AND ACADEMIC SELF-EFFICACY IN UNIVERSITY STUDENTS IN ECUADOR

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## Abstract

Dropping out and poor academic performance have been considered a socio-community problem due to their impact on student development. Several factors have been studied as determinants in these academic problems, especially self-efficacy. This study analyzes the relationship between general self-efficacy and academic self-efficacy in university students in Ecuador. The study design is non-experimental, cross-sectional, with a population of 190 students. The results obtained confirm that the higher the level of general self-efficacy in students, the higher their academic self-efficacy. These findings can contribute to academic strengthening, through the implementation of study plans or strategies that allow stimulating the development of general and academic self-efficacy.

**Keywords:** General self-efficacy, academic self-efficacy, young.

## Introduction

Since the beginning of the history of humanity, people seek to develop and grow as a person, which allows them to achieve goals and meet objectives. However, the adversities and difficulties that human beings have had to face hinder their normal development. But, what is it that allows a person to overcome different difficulties. According to Alhadabi and Karpinski, (2020) self-efficacy is one of the essential characteristics and conditions that contribute to the acquisition of achievements in the individual. For Bandura (1992, 1994) this quality refers to the perceptions or beliefs about the capacities that each one has, emphasizing the importance of the environment so

that, from the evaluation itself, their capacities are adapted to the environment in which they find themselves and thus have a greater possibility of achieving their objectives (Cheng, 2020; Kahraman & Demirdelen Alrawadieh, 2021).

Self-efficacy is a prospective factor that allows the successful development of activities that require greater effort and perseverance (Bulfone et al., 2021; Gebauer et al., 2019; Zysberg & Schwabsky, 2020a). But the development of these perceptions depends as much on your assessment of the difficulties present in the activities you are going to carry out as on the expectations you have about your own abilities. In the latter, two situations are distinguished: (1) the expectation of effectiveness, in which the subject has the conviction of power with the activity and (2) the expectation of result, in which a certain act or behavior will allow him to achieve the desired result (Kahraman & Demirdelen Alrawadieh, 2021). The model of psychological change proposed by Social Cognitive Theory (TSC) mentions that the factors involved in self-efficacy are the activation of emotions, verbal persuasion, experiences of observation (vicarious) and achievements obtained in subsequent events (Gebauer et al., 2019).

It is important to differentiate self-efficacy from ability, which although it is true that they are terms that are related, have different conceptualizations allow us to understand why people with similar abilities or aptitudes obtain different results (Alsaidan & Zhang, 2018). In this sense, skills would be the skills or abilities that a person has, while self-efficacy is the belief or thinking about these abilities (Dixon et al., 2019). Therefore, each skill will depend on the specific situation to which a person is exposed and must face, so that self-efficacy can be defined according to the context or situation to be treated; for example, in health, personal cognitive capacity (Peguero & Shaffer, 2014), motor skills, sociability and specifically academia, considered one of the most relevant within this area (Cassidy, 2015; Dixon et al., 2019; Gebauer et al., 2019; Peguero & Shaffer, 2014; Zysberg & Schwabsky, 2020a).

Academic self-efficacy could be defined as the ability to evaluate and judge one's own abilities and aptitudes, with the aim of organizing and planning actions that allow student goals to be achieved (Liu et al., 2020). This type of personal judgment allows predicting academic performance (Alkharusi et al., 2014). Self-efficacy beliefs in the academic area are recognized as aspects that mediate the processes of motivation - affect, cognition and selection of tasks associated with learning, which encourages students to get more involved in their educational process and achieve learning successfully (Taheri-Kharameh et al., 2018)

Self-efficacy in young people and adolescents has been widely studied, being related to the level of scientific communication, the ability to face problems (Sarkoc & Oksuz, 2017); academic performance (Shaywana et al., 2021); the ease of completing activities proposed at a personal or academic level and stress reduction (Bulfone et al., 2021). It has been seen that university students with high levels of self-efficacy present self-regulation in their learning, thanks to their intrinsic motivation to learn (Dominguez-Lara & Fernández-Arata, 2019). In addition, it was found that self-efficacy works as a cognitive mediator between competence and performance in any activity, that said, students aim for higher academic goals in which greater persistence and dedication in time is required (Abusalehi et al., 2019).

Although this topic has been studied extensively from various perspectives, there is currently little empirical evidence that has addressed the relationship between the presence of general self-efficacy and academic self-efficacy. Through this study it is intended to know if students with a high level of general self-efficacy also have high levels of academic self-efficacy, and that therefore would increase the opportunity for students to obtain better performances at a personal, academic, and professional level.

## Materials and methods

The present study is non-experimental, cross-sectional. The research population consisted of 190 university students (68.8% women and 43.2% men), originally from and residents of the city of Ambato. The ages of the participants ranged from 18 to 28 years ( $M = 20.56$  years). It is important to note that 100% of the population investigated self-identifies as mestizo. Most of the population is single and to a lesser extent married, divorced and in a common-law union (2.6%). All participants are students of Psychology from the Technical University of Ambato, Faculty of Health Sciences and belong to different levels of preparation between the first and ninth semester. The selection of participants was made through non-probabilistic sampling for convenience with the following inclusion criteria: a) voluntary participation, b) acceptance of informed consent to participate in the project, c) be legally enrolled, and d) not present mental disorders diagnosed or present during the evaluation.

### *Instruments*

Scale of perceived self-efficacy specific to academic situations (EAPESA) (Palenzuela, 1983).- For the assessment of each student, the adapted version in the university population of Peru was taken into account. Measures the perception of each student related to the academic field; consists of nine items with a Likert-type response format, with responses such as "Never", "Sometimes", "Quite a few times", "Always". It has adequate psychometric properties with a Cronbach's alpha 0.89 and a confidence interval of 0.878 to 0.916; In addition, its content was validated with the criteria of eight judges who evaluated the relevance of the reagents in relation to the perceived self-efficacy construct specific to academic situations. Likewise, the Aiken V was used with results above 0.70. Some items included in this test refer to: "I consider myself sufficiently qualified to successfully face any academic task", "I think I have the ability to understand a subject well and quickly", "I feel confident to address situations that test my academic ability".

General Self-Efficacy Scale (GAE) (Jerusalem and Schwarzer, 1992).- This scale aims to measure the expectation of perceived self-efficacy, which refers to the feeling of confidence in the personal abilities that a person has to handle stressful events. The scale has ten items with a Likert-like format of four ranks: 1 = Never, 2 = Few times, 3 = Sometimes, 4 = Always. The scores range between ten and forty points, where, the higher the score, the greater the self-efficacy. It has a good internal consistency ( $\alpha = 0.76$ ). Some items are: "I can solve difficult problems if I make the necessary effort", "Even if someone opposes me, I can find the means and the way to get what I want", "I find it easy to focus on achieving the ends I pursue and achieve my goals".

Other clinical and sociodemographic variables.- Personal information was taken into account on: age, marital status, family and personal history of alcohol consumption, address, socioeconomic status, gender, religion, important data for subsequent analysis.

### *Procedure*

The present study was based on the criteria described in the Declaration of Helsinki for the application and collection of information from each participant. Informed consent was obtained from all participants through an online form. All measures analyzed in this study were obtained virtually through online questionnaires. It was not approved by a bioethics committee because it was an observational study.

### Statistical analysis

Analyses were performed with SPSS version 23 software. A normality analysis was performed for all quantitative variables, which followed a non-normal distribution. The clinical and sociodemographic characteristics of the population were represented with descriptive statistics. Nominal variables were represented by number and percentage. For the analysis of the hypothesis test, Spearman's statistical correlation test was used. Correlations with moderate ( $|r| > 0.24$ ) to large ( $|r| > 0.30$ ) effect size were considered.

### Results

**Table 1. General and demographic characteristics of the study population.**

				Frequency		Percentage	
Gender		Female		127		66.8	
		Male		63		33.2	
Marital status		Bachelor		182		95.8	
		Common-law marriage		3		1.6	
		Divorced		1		.5	
		Married		4		2.1	
		None		82		43.2	
Type of consumption		Alcohol		104		54.7	
		Other drugs		4		2.1	
				M		OF	
Age				20.56		1.88	
		Non-consumption		Consumption			
		M	OF	M	OF	F	p
Academic efficacy	self-	28.1	4.9	28.6	4.5	.534	.881
Overall efficacy	self-	29	5.9	28.9	5.9	.33	.437

Table 1 shows the general analysis of the study group, finding a minimum age of 18 and a maximum of 28 years. Of the participants, 66.8% belong to the female gender and 33.2% are male. As for marital status, the largest population belongs to the single marital status (95.8%), the minority group is made up of students who have divorced (.5%). Regarding the presence or not of consumption in students, there was evidence of a majority consumption of alcohol (54.7%), although 43.2% confirmed that they did not consume any addictive substance. When analyzing the score of general self-efficacy and academic self-efficacy between the groups that consume some substance with those that do not, no statistically significant differences were found ( $p = .881$ ;  $p = .437$ ).

**Table 2. Normality test**

Kolmogorov-Smirnov		
Statistical	Gl	Gis.

Overall self-efficacy total score	.154	190	.001*
Total academic self-efficacy score	.090	190	.001*

\* Sig. < .05

Table 2 shows the results of the Kolmogorov-Smirnov normality test to determine the type of statistic to be used. The results confirm that the variables of general and academic self-efficacy do not follow a normal trend ( $p = 0.001$ ), so nonparametric statistical tests should be used. To analyze the associations between the scores of general self-efficacy and academic self-efficacy, the analysis was performed through the Spearman statistical test (see Table 3). A directly proportional correlation was found ( $|r| > .598$ ); That is, the greater the overall self-efficacy a student has, the greater academic self-efficacy he or she will have. In addition, a high effect size ( $p = .77$ ) and a very good statistical power ( $1 - \beta = 1$ ) are evident.

**Table 3. Correlation between academic self-efficacy and general self-efficacy.**

		A. Academic
A. General	Gis.	.598*
	$p$	.77
	1- $\beta$	1

\* Sig. < .05  $p = .10$  low, .30 medium, .50 high

## Discussion

The objective of this research was to analyze the relationship between general self-efficacy and academic self-efficacy in university students of the Technical University of Ambato, Ecuador. The results obtained confirm that there is a directly proportional correlation between general and academic self-efficacy.

The sample studied was made up mostly of the female gender, with a predominance of single population and with a higher prevalence of alcohol consumption. In this study, no significant differences were found between the average scores of students who did not consume compared to those who did have consumption, results that were contradictory with the literature, where higher scores have been evidenced for those students who did not consume any substance (Berte et al., 2019; Festa & Knotts, 2021). It has even been observed that students with higher consumption and associated with illegal drugs such as marijuana and cocaine had a lower perceived self-efficacy than the rest, and therefore a low academic performance marked by worse grades in school or university (Abusalehi et al., 2019; Massar & Malmberg, 2016; Rossi et al., 2020). The discordance of the data found in this research with other studies could be determined by the population analyzed. Possibly careers where subjects that motivate the development of these variables are taught could serve as modulating variables; in this case, the students analyzed belong to the psychology career, who receive subjects throughout the semester that would contribute to the development of these skills (Sarıkoc & Oksuz, 2017; Taheri-Kharamneh et al., 2018). Some studies have shown that belonging to careers in the health area contributes to the development of positive characteristics to overcome adversities and stressful events, such as an increase in the level of self-esteem, self-efficacy, resilience, conflict resolution (Cave et al., 2018; Gaffney, 2011). Taking into account

these results, then it could be said that the consumption of alcohol or other illegal drugs may not be influential in the development of these characteristics in students of the psychology career (Escalera-Chavez et al., 2018).

The findings obtained in the present study are in the same line with previous studies, where it has been shown that the greater the overall self-efficacy of students, the greater their academic self-efficacy will be (Aharony & Gazit, 2019; Grimm, 2018). It is evident that a student has a greater positive perception of their abilities and therefore a better academic performance (Oppermann & Lazarides, 2021; van Dinther et al., 2014). In addition, it has been shown that students with good general and academic self-efficacy present a greater motivation in student performance, therefore, they are considered more effective in terms of academic aspects and are the ones who have more tools to learn (Jones, 2017; Richards et al., 2020).

While general and academic self-efficacy are still important for excellent performance in the academic area, authors such as Aharony and Gazit (2019) mention that there are other variables that could modulate the good level of the student and that have the same weight as beliefs related to self-efficacy such as self-regulation of learning, where the student plans, executes and evaluates their learning (Milosis et al., 2018; Valdebenito, 2017; Van Lankveld et al., 2017). Likewise, it has been seen that having high expectations, motivation and optimism could improve academic performance and independent learning (Jones, 2017; Richards et al., 2020; Zysberg & Schwabsky, 2020b). Academic history is another variable that influences academic success. Peguero and Shaffer (2014), found that the grades obtained the previous year, added to the approved subjects and obtaining a scholarship increase beliefs of academic self-efficacy.

Likewise, it has been determined that the level of general self-efficacy is closely related to the choice of goals and motivation in the university environment (Cave et al., 2018; Sarikoc & Oksuz, 2017; Taheri-Kharamah et al., 2018). In addition, it is known that students with greater self-efficacy project the ability to properly manage their personal and academic time are more proactive in the management of their skills, monitor the activities and behaviors they must develop, analyze their intellectual achievements and project their next achievements, and use metacognitive learning strategies that allow them to guarantee the acquisition of knowledge (Cassidy, 2015; Rossi et al., 2020; Sarikoc & Oksuz, 2017).

On the other hand, it has been shown that individual skills and characteristics are better in those people who have greater perceived self-efficacy (Halter et al., 2015; Myran & Sylvester, 2020; Soykan & Kanbul, 2018). Likewise, a better quality of life has been associated in young people with high scores in self-efficacy, for example, it has been seen that when the level of self-efficacy is adequate one is able to control stressful aspects of the environment such as excess work-study hours or work pressure, developing salutogenic lifestyle habits that reduce the level of stress (Aharony & Gazit, 2018; Tang & Tseng, 2017; Van Dinther et al., 2011). On the contrary, students with low levels of self-efficacy have presented high levels of anxiety, depression, and in the case of young workers they have high levels of burnout (Alhadabi & Karpinski, 2020; Cheng, 2020). People with these types of beliefs often have an overrated perception of the difficulties of an activity or magnify the severity of a situation (Shaywanna et al., 2021).

It is pertinent to mention that the present study had some strengths and limitations. Among the strengths, the evaluated population stands out, with a significant number for statistical analysis. On the other hand, it is necessary to recognize that one of the limitations was the collection of data virtually, which could influence the veracity of the data. Also, it should be mentioned that the population is made up only of students of the clinical psychology career. In addition, within the variable academic self-efficacy are immersed aspects such as the perception of the student regarding the institution where he is trained, the attitude and pedagogy of teachers, personal



difficulties, career assessment and study strategies, so it is suggested that future research expand the information regarding the perception of the student with the activities and academic experiences, In addition to deepening the relationship of the variables studied with the consumption of substances.

Even so, the results found are relevant and can contribute in the academic field. From these findings, study plans or strategies can be strengthened and developed that allow students to stimulate their perceived self-efficacy, and therefore academic self-efficacy, thus improving academic performance and professional quality. Likewise, by exploring and working based on the present study, it would contribute to the improvement in educational implications such as the possibility of creating tutorial action plans in which students of all semesters and teachers participate to work on the self-regulation of learning, study habits, academic resources and motivation in the student population both at a transversal and longitudinal level. all with the aim of necessary skills for life.

## Conclusion

According to the results, it can be concluded that there is a directly proportional association in the variables proposed, which means that the greater the general self-efficacy of a student, the greater academic self-efficacy he will have. Although the presence of alcohol consumption yielded inconclusive results because the presence of consumption in most students was not related to less self-efficacy, it could be inferred that the choice of a career such as Psychology could influence or modulate the presence or absence of self-efficacy.


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