



Examining Academic Self-Efficacy and Perceived Social Support as Predictors for Coping With Stress in Peruvian University Students

Rosa Alfaro Vasquez¹, Renzo Felipe Carranza Esteban^{2*}, Oscar Mamani-Benito¹ and Tomás Caycho-Rodríguez³

¹ Facultad de Ciencias de la Salud, Universidad Peruana Unión, Juliaca, Peru, ² Grupo de Investigación Avances en Investigación Psicológica, Facultad de Ciencias de la Salud, Universidad San Ignacio de Loyola, Lima, Peru, ³ Facultad de Ciencias de la Salud, Universidad Privada del Norte, Lima, Peru

OPEN ACCESS

Edited by:

Krystyna Kowalczyk,
Medical University of Białystok,
Poland

Reviewed by:

Nurfitriany Fakhri,
State University of Makassar,
Indonesia
Anggara Wisesa,
Bandung Institute of Technology,
Indonesia
Anna Mazurek-Kusiak,
University of Life Sciences in Lublin,
Poland

*Correspondence:

Renzo Felipe Carranza Esteban
rcarranza@usil.edu.pe

Specialty section:

This article was submitted to
Higher Education,
a section of the journal
Frontiers in Education

Received: 22 February 2022

Accepted: 08 June 2022

Published: 24 June 2022

Citation:

Alfaro Vasquez R,
Carranza Esteban RF,
Mamani-Benito O and
Caycho-Rodríguez T (2022)
Examining Academic Self-Efficacy
and Perceived Social Support as
Predictors for Coping With Stress
in Peruvian University Students.
Front. Educ. 7:881455.
doi: 10.3389/educ.2022.881455

This study determines if academic self-efficacy and perceived social support are predictors for coping with stress in Peruvian university students. A cross-sectional research study of the predictive design was employed. The study participants included 455 Peruvian university students. The global academic self-efficacy questionnaire, perceived social support survey, and academic stress coping scale were employed for the analysis. Further, the collected data were analyzed using correlation coefficients and multiple linear regression models. The study results revealed a statistically significant relationship between coping with stress, academic self-efficacy, and perceived social support. Linear regression analyses reported a satisfactory fit for the model (F -test = 76.938, $p < 0.001$) wherein academic self-efficacy ($\beta = 0.292$, $p < 0.05$) and perceived social support ($\beta = 0.360$, $p < 0.01$) are variables that significantly predict stress-coping means used by the study participants (adjusted $R^2 = 0.25$). Hence, it is evident that academic self-efficacy and perceived social support are predictors for coping with stress in Peruvian university students.

Keywords: academic self-efficacy, perceived social support, coping with stress, university students, Peru

INTRODUCTION

College students face numerous academic and personal challenges in the pursuit of their professional and personal development goals, which can be harmful to their mental health (Alarcón, 2019). As a result, psychological changes tend to be common in this population, complicating their professional training (Wada et al., 2019).

In this sense, being a university student involves having to deal with various responsibilities, tasks, and demands, which, if not properly controlled, can become risk factors and stressors (Oro et al., 2019). Thus, recent studies have shown that university students having insufficient time to work or perform tasks, combined with work overload, interpersonal conflicts, assessments, academic competitiveness, and other factors, could experience negative impacts on their wellbeing and emotional balance (Chen and Jiang, 2019; Son et al., 2020).

This is added to the reality of undergoing an evolutionary stage—late adolescence—and the beginning of young adulthood, which forces them to define their identity and personality, as well

as to achieve their aspirations (Gaete, 2015). Thus, students must assess their resources to manage these demands (Sontag-Padilla et al., 2018), particularly their ability to cope with stress.

Coping With Stress

At the university stage, a Student's resources are usually insufficient to manage the demands and pressures of the academic context (Fasoro et al., 2019). Therefore, coping strategies are essential to regulate the pressure caused by tasks, meetings, exams, and group work, among other activities (Radu et al., 2016). In this case, coping with stress is defined as the behavioral and cognitive efforts that a subject undertakes to face stressful demands and suppress the emotional state that causes emotional overload (Barquín-Cuervo et al., 2018). Thus, the students' reactions to the same stressful situation may vary; some become alert, others try to deny the situation by ignoring it or trying to forget it, or in contrast, they act directly and actively try to change the situation or accept it (Enns et al., 2018).

Potential stressors are not only derived from academic demands but also from the difficulty in managing stressful events (Chau and Saravia, 2016). In the Peruvian context, stress among university students has become a crucial topic for educational researchers (Cassaretto et al., 2021). The prevalence of this problem has been demonstrated by various studies conducted in the three regions of Peru; however, in recent years, a unique scenario has emerged, which has increased the pressure on university population (RPP Noticias, 2018). (1) The changes in the new university law (RPP Noticias, 2019) require universities to improve their basic quality conditions and simultaneously demand students to take on more challenging tasks, such as conducting a research to obtain a bachelor's degree, a thesis for a professional degree, and the knowledge of a foreign language. (2) The emergence of conflicts due to political causes, where young university students have become involved knowing that managing higher education fell to politicians who came to power without democratic support, a fact that has led to various strikes, delayed classes, and even unfortunate deaths (BBC News Mundo, 2020).

These facts, although not directly linked to academics, have tested Peruvian university Students' ability to cope with various pressures caused by educational, social, and personal factors. In this regard, the available scientific literature recognizes that there are other factors that can facilitate the Student's process of adapting and coping with the events of the context in which they interact (Freire et al., 2020). Two of them are the subject of study in this research: academic self-efficacy and perceived social support.

Predictors of Coping With Stress

The academic self-efficacy variable is considered a determining factor for positive experiences in the academic environment (Borzone, 2017). Academic self-efficacy is defined as an individual's belief in their ability to organize and execute actions required to handle difficult or challenging situations in their academic life (Hechenleitner-Carvalho et al., 2019). Students pursuing higher education face learning challenges and other difficult circumstances; therefore, research on self-efficacy has

focused on the field of higher education (Fook and Sidhu, 2015). Some research works have shown that academic self-efficacy works as a protective factor that creates motivation to achieve goals and fosters emotional balance and academic progress (Priesack and Alcock, 2015; Schöber et al., 2018; Matteucci and Soncini, 2021).

Perceived social support represents a construct that triggers interest in different areas, from healthcare to education, and it has been related to stress and its influence over personal and social wellbeing (Azpiazu et al., 2015). This variable is defined as a set of real or perceived instrumental and/or expressive provisions arising from the community, social media, and close friends, which may be created both in daily situations and during a crisis (Reynoso et al., 2018). Scientific literature shows that perceived social support is related to one's sense of belonging and bonding with other human beings, which creates commitment and concern for others, nurturing situations where advice and material support are provided, and where individuals have the ability to express their emotions (Kang et al., 2016). Therefore, this variable represents a person's assessment regarding the help they believe they have (Almeida et al., 2018). Research conducted in academic settings has shown that perceived social support enhances academic performance (López-Angulo et al., 2020); further, those believing that they receive affection, assistance, and support from social groups have a greater degree of self-efficacy when facing different experiences as university students (Fernández-Lasarte et al., 2019).

As for the relationship with coping with stress, the available literature points to the recognition that academic self-efficacy and perceived social support may act as predictors. Further, the level of confidence in personal abilities can promote strategies to cope with emotional overload (Freire et al., 2020). A university student with high levels of self-efficacy will consider the obstacles that may arise as challenges because they have a remarkable ability to regulate perceived stress (Schönfeld et al., 2016). This situation is contrary to what could be seen among students with low self-efficacy, who generally have doubts regarding their learning capacities, so the perception of lack of efficacy will influence their consideration of being able to control situations and will make them rate those events as uncontrollable (Ornelas et al., 2012). In this way, when students are confident that they can handle or control environmental stressors, then, these will not be considered as disturbing or adverse. Further, they will put healthy coping strategies in place to mediate between these events and emotional consequences (Piergiovanni and Depaula, 2018).

As for perceived social support, it is known that to face difficult or stressful situations, we need to have trustworthy people with whom we can externalize emotions, problems, or difficulties. Therefore, when students know that others are willing to support them, listen to them, and share their opinions, they might react positively to stressful events in academic settings (Martínez et al., 2019). However, if they do not perceive such support, they might experience even more stress (López-Angulo et al., 2020).

While in the clinical field there are reports that reveal that social support does not determine the type of coping strategy (Amaya-Ropero and Carrillo-González, 2015;

García-Alonso and Medina-Gómez, 2016), research conducted in the educational field highlights the value of social support for the university population. For example, in Calvete and Connor-Smith's research on American undergraduates Calvete and Connor-Smith's (2007), a decrease in the use of disengagement coping partially explained the protective value of perceived social support. Xiaoyou et al. (2021) studied university students from seven regions of China and emphasized the importance of family support vs. passive coping strategies.

Although these studies may seem decisive and their results can even be extrapolated to the Peruvian context, the characteristics of the university population in Peru are different from those of the aforementioned countries. For example, in Peru, a large percentage of students migrate from provinces to the capital city, where the largest number of Peruvian universities are located (Superintendencia Nacional de Educación Superior Universitaria [SUNEDU], 2021), moving away from their family. This makes it almost impossible for them to receive any kind of close social support. Furthermore, a recent study (Avellaneda et al., 2021) reported that the number of graduates increased by 131% in just 10 years in Peru; however, only 52% have managed to find employment after achieving a good level of employability. This fact can be attributed to the low confidence and security in the abilities that students achieved during their training stage.

Justification

In summary, perceived social support and academic self-efficacy can predict the type of stress coping. However, there is still little evidence from Peru, a country where it is urgent to manage the higher education system with evidence-based decisions, because academic stress has become a recurring problem due to the lack of policies to protect mental health in the university community (RPP Noticias, 2018). Therefore, this study aims to test a hypothesized model product of the available literature review and the behaviors observed in the university population, through a predictive design, which has a methodological value by generating information with which to predict behavioral patterns, thus, enabling the generation of intervention strategies in the university community.

Objective

Based on the above, this study aimed to determine if academic self-efficacy and perceived social support are predictors for coping with stress in Peruvian university students.

METHODOLOGY

Design and Participants

This study employed a predictive cross-sectional study design (Ato et al., 2013). G*Power (Faul et al., 2009) was used to calculate the sample size. This software used a small effect size ($f^2 = 0.15$), $\alpha = 0.05$, and power = 0.80; it showed that 104 was a sufficient number of participants to identify any effects. The sample comprised 455 (75.8%

female and 24.2% male) university students. Participants' age range was 18–28 years ($M = 20.87$; $SD = 2.62$). All of the participants confirmed that they studied in private universities in the Lima Metropolitan area. Intentional non-probability sampling was used.

Measures

Global Academic Self-Efficacy Questionnaire

This brief questionnaire (Torre, 2006) analyzes general self-efficacy for academic learning; it constitutes nine items that are evaluated on a Likert scale (from 0 = Completely disagree to 4 = Completely agree). For the present study, the Cronbach's alpha coefficient value for estimating the reliability of the questionnaire was good [$\alpha = 0.82$ (95% CI: 0.77–0.85)].

Perceived Social Support Survey (MOS)

This questionnaire evaluates the social support perceived by people (Sherbourne and Stewart, 1991). The instrument's 20 items are scored from 0 (Never) to 4 (Always). In the present study, this survey showed good internal consistency [$\alpha = 0.92$ (95% CI: 0.89–0.93)].

Academic Stress Coping Scale (A-CEA)

This scale (Cabanach et al., 2010) was employed to measure the strategies that university students use to manage demands and potentially stressful academic situations. It comprises 23 items that are evaluated on a Likert scale (0 = Never and 3 = Always). In the present study, this scale reported adequate reliability [$\alpha = 0.84$ (95% CI: 0.77–0.85)].

Procedure

University students of legal age were identified and informed of the study purposes, the use of data, and the confidentiality agreement. It was also emphasized that their participation was voluntary, and only those who gave their consent and met the study conditions would be considered. After providing their informed consent, the university students completed the questionnaire and the survey and provided their responses for the abovementioned scale, which took approximately 10 min.

Ethical Considerations

The study was approved by the Ethics Committee of the Universidad Peruana Union.

Statistical Analysis

The Statistical Package for the Social Sciences Statistics software program version 25.0 was used to conduct the statistical analyses, which were completed in stages. In Stage 1, the average score, standard deviation, skewness, and kurtosis of the study variables (self-efficacy for academic writing, reading comprehension, and reading self-efficacy) were estimated, while Stage 2 involved the Students' *t*-test that was performed for independent samples, and Cohen's *d* was used as a measure of effect size (ES) to find out whether there are significant differences in the scores of the variables between men and women; Cohen's (1988) guidelines were followed, indicating that values of 0.20, 0.50, and 0.80 represent a small, moderate, and large ES, respectively. In Stage

3, an analysis of Pearson’s correlation between variables was conducted, where values of $r \geq 0.20$, $r \geq 0.50$, and $r \geq 0.80$ express a minimum, moderate, and strong ES, respectively (Ferguson, 2016). Finally, a multivariate linear regression analysis considering a significance level of 0.05 was performed. The ES of the regression analysis was calculated using the coefficient of determination (R^2); an $R^2 < 0.02$ indicates the absence of the ES; $R^2 \geq 0.02$ expresses a small ES, $R^2 \geq 0.13$ stands for a medium ES, and $R^2 \geq 0.26$ accounts for a large ES (Ellis, 2010). To complete this stage, a Microsoft Excel® document was used (Caycho-Rodríguez, 2018).

RESULTS

Descriptive Analysis

Table 1 presents the descriptive analysis of the study variables. The skewness and kurtosis coefficients of the variables are adequate, as they do not exceed the range $> \pm 1.5$ (Pérez and Medrano, 2010).

Differences Between Coping With Stress, Academic Self-Efficacy, and Perceived Social Support

With regard to the median comparison (Table 2), we found no statistically significant differences among men and women in coping with stress and academic self-efficacy ($t = -0.195$, $p = 0.845$; $t = -0.780$, $p = 0.436$). However, when we compared the perceived social support between genders, we found statistically significant differences in favor of women ($t = 2.402$, $p = 0.02$), with an effect size that was not moderate ($d = 0.39$).

Results of the correlation analysis were statistically significant (Table 3). The highest scores of coping with stress are correlated to the highest scores in academic self-efficacy ($r = 0.359$) and perceived social support ($r = 0.415$).

TABLE 1 | Descriptive analysis of coping with stress, academic self-efficacy, and perceived social support.

Variable	Mean	SD	Asymmetry	Kurtosis
Coping with stress	71.63	10.531	-0.638	1.353
Academic self-efficacy	35.14	5.044	-0.984	2.887
Perceived social support	70.15	14.924	-0.690	-0.087

TABLE 2 | Difference between men and women in relation to coping with stress, academic self-efficacy, and perceived social support.

Variable	Men		Women		t	p	d
	Mean	SD	Mean	SD			
Coping with stress	70.47	11.905	72.00	10.045	-1.326	0.186	0.14
Academic self-efficacy	35.48	5.200	35.03	4.996	-809	0.419	0.08
Perceived social support	66.45	15.769	71.32	14.470	-3.012	0.003	0.39

TABLE 3 | Correlation between coping with stress, academic self-efficacy, and perceived social support.

Variable	Coping with stress	Academic self-efficacy	Perceived social support
Coping with stress	1		
Academic self-efficacy	0.359**	1	
Perceived social support	0.415**	0.186**	1

**Significant at 0.01% level (bilateral).

TABLE 4 | Predictors of stress-coping strategies in university students.

Predictors	B	EE	β	t	p
(Constant)	32.402	3.356		9.665	0.000
Academic self-efficacy	0.609	0.86	0.292	7.052	0.000
Perceived social support	0.254	0.029	0.360	8.712	0.000

Dependent variable = coping with stress (F -test = 76.938, $p < 0.001$; adjusted $R^2 = 0.251$), B, non-standardized coefficient; SE, standard error; β , standardized regression coefficient.

Prediction on Coping With Stress

Results from the multiple regression analysis show a satisfactory model fit (F -test = 76.938, $p < 0.001$), where academic self-efficacy ($\beta = 0.292$, $p < 0.05$) and perceived social support ($\beta = 0.360$, $p < 0.01$) significantly predict university Students’ stress coping (adjusted $R^2 = 0.25$). The R^2 -value indicates that the regression model has a small size effect. Additionally, the t -values of the predictor variable’s beta regression coefficients are highly significant ($p < 0.01$) (Table 4).

DISCUSSION

In recent years, research has been conducted on issues related to positive psychological functioning in academic settings (Denovan and Macaskill, 2013). Although these environments impact and increase stress vulnerabilities, university Students’ personal stress-coping skills need broader analysis and study (Phang et al., 2015). Therefore, this study analyzes the role of two positive psychological resources—academic self-efficacy and perceived social support—in coping with stress during university studies.

Initially, the variables of academic self-efficacy, perceived social support, and coping with stress were compared based on participants’ gender. A single significant difference was reported when comparing perceived social support in favor of the women’s group, which is consistent with other research findings (Cheng and Chan, 2004; Kendler et al., 2005). This can be explained by the fact that support networks, which are more common among women than in men, enable better social and academic performance. Such networks become a protective agent that lessens the harmful effects of tense interactions (Awang et al., 2014; Soman et al., 2016). Support networks are more common among women because women tend to express their emotions more easily than men and have better interaction skills (Hess et al., 2000).

This study's main analysis was performed using a multivariate linear regression. The results show that academic self-efficacy and perceived social support explain 25% of Students' coping with stress. This is because self-efficacy is an important factor in the theory of stress developed by Lazarus and Folkman (1984); that is, an individual's beliefs regarding their own abilities impact the way in which they perceive difficulties. If individuals believe that they can handle difficulties and develop coping strategies, they will perceive the difficult situation as a challenge rather than as a threat. Likewise, when individuals who do not trust their abilities face a threatening situation, they will experience higher levels of stress and perceive the context as dangerous (Bandura, 1986). Therefore, individuals with higher self-efficacy beliefs perceive that their lives are less stressful when compared to those with low self-efficacy perceptions; additionally, self-efficacy is considered the strongest element to moderate stress (Jerusalem and Mittag, 1997). The perception of belated and unsatisfactory support generates greater distancing when dealing with pain, as well as hostile and negative coping strategies (Holtzman et al., 2004).

The results support the hypothesis proposed in this study. Nevertheless, it is important to mention some limitations. First, self-report measures were used to evaluate all the constructs. The answers provided by participants may be influenced by social desirability biases; however, as we previously mentioned, the findings are consistent with previous research. We would recommend that this study's measures be combined with other qualitative or observational evaluation techniques. The use of observation, self-reporting measures, and interviews with students would enrich the study of the psychological resources of students and provide greater soundness to the findings (Freire et al., 2019). Second, university students participated voluntarily and were not chosen using a rigorous procedure. Therefore, the sample was not representative of the population. For this reason, caution should be exercised when generalizing these findings, and further research should be conducted using more representative samples and probability sampling. Third, the correlational nature of the investigation design did not allow for causal relationships to be established between the analyzed variables. This is an issue that should be addressed afterward using longitudinal research designs. Fourth, the characteristics of the participants may also constitute a limitation because they are all students from private universities in the Lima Metropolitan area. Therefore, future research that replicates this study with students from other geographic and cultural backgrounds is needed in order to generalize these findings for university students throughout Peru. For instance, studies that analyze groups of students from public and private universities of the three regions of the country and sampling techniques other than those used in this study may be applied. Finally, although some predictor variables of coping

with stress were considered, other variables that may provide a better understanding of the problem were ignored. Hence, future correlational, predictive, or explanatory studies must consider variables such as academic engagement, satisfaction with studies, self-concept, coping with academic stress, psychological distress, and psychological wellbeing, among others.

This study provides empirical evidence on the joint effects of academic self-efficacy and perceived social support on university Students' stress-coping mechanisms. Therefore, academic self-efficacy and perceived social support are relevant tools that promote adequate coping with academic stress. These findings constitute an important contribution to the study of stress prevention in students, highlighting academic self-efficacy and perceived social support as valuable psychological resources. The study shows that positive psychological interventions can be an effective tool to foster the personal resources of university students (Lambert et al., 2019). These interventions aim to help students discover, nurture, and use their personal resources and qualities appropriately.

In summary, the results of this study show that academic self-efficacy and perceived social support are significant predictors of students' coping with stress. These findings serve as evidence to support the development of intervention programs that strengthen strategies for coping with academic stress as a measure to prevent emotional exhaustion, psychological distress, dropout, and/or academic stagnation in university students.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by the Universidad Peruana Unión. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

RA and RC conceived and designed the experiments, performed the experiments, analyzed and interpreted the data, and wrote the manuscript. OM-B and TC-R contributed reagents, materials, analysis tools and data, and wrote the manuscript. All authors contributed to the article and approved the submitted version.

REFERENCES

- Alarcón, R. (2019). La salud mental de los estudiantes universitarios. *Arq. Neuro Psiquiatr.* 30, 219–221.
- Almeida, L. Y., de Carrer, M. O., Souza, J., de, and Pillon, S. C. (2018). Avaliação do apoio social e estresse em estudantes de enfermagem. *Rev. Esc. Enferm. USP* 52:e03405. doi: 10.1590/s1980-220x2017045703405
- Amaya-Ropero, M., and Carrillo-González, M. (2015). Apoyo social percibido y afrontamiento en personas con dolor crónico no maligno. *Aquichan* 15, 461–474. doi: 10.5294/aqui.2015.15.4.2

- Ato, M., López, J., and Benavente, A. (2013). Un sistema de clasificación de los diseños de investigación en psicología. *An. Psicol.* 29, 1038–1059. doi: 10.6018/analesps.29.3.178511
- Avellaneda, J., Orihuela, O., Chávez, E., and Quiroz, O. (2021). Empleabilidad y rentabilidad de las carreras universitarias de la región centro del Perú: desafíos para la gestión universitaria peruana. *Horizonte de la Ciencia* 11, 361–374. doi: 10.26490/uncp.horizonteciencia.2021.21.917
- Awang, M. M., Kutty, F. M., and Ahmad, A. R. (2014). Perceived Social Support and Well Being: first-Year Student Experience in University. *Int. Educ. Stud.* 7, 261–270.
- Azpiazu, L., Esnaola, I., and Sarasa, M. (2015). Capacidad predictiva del apoyo social en la inteligencia emocional de adolescentes [Predictive Capacity of Social Support in the Emotional Intelligence of Adolescents]. *Eur. J. Educ. Psychol.* 8, 23–29. doi: 10.1016/j.ejeps.2015.10.003
- Bandura, A. (1986). *Social Foundations of Thought and Action: a Social Cognitive Theory*. Upper Saddle River, NJ: Prentice-Hall Inc.
- Barquín-Cuervo, R., Medina-Gómez, M. B., and Albéniz-Garrote, G. P. D. (2018). El Uso de Estrategias de Afrontamiento del Estrés en Personas con Discapacidad Intelectual [The Use of Stress Coping Strategies in People with Intellectual Disabilities]. *Psychosocial. Interv.* 27, 89–94.
- BBC News Mundo (2020). Renuncia Manuel Merino: Inti Sotelo y Bryan Pintado, los Jóvenes de la “Generación Bicentenario” Cuya muerte en las Protestas en Perú aceleró la Caída del Presidente. Available online at: <https://www.bbc.com/mundo/noticias-america-latina-54960439> (accessed January 18, 2022).
- Borzone, M. A. (2017). Autoeficacia e vivências acadêmicas em estudantes universitários. *Acta Colombiana de Psicología* 20, 275–283. doi: 10.14718/ACP.2017.20.1.13
- Cabanach, R. G., Valle, A., Rodríguez, S., Piñeiro, I., and González, P. (2010). Las creencias motivacionales como factor protector del estrés en estudiantes universitarios. *Eur. J. Educ. Psychol.* 3, 75–87. doi: 10.30552/ejep.v3i1.49
- Calvete, E., and Connor-Smith, J. (2007). Perceived social support, coping, and symptoms of distress in American and Spanish students. *Anxiety Stress Coping Int. J.* 19, 47–65. doi: 10.1080/10615800500472963
- Cassaretto, M., Vilela, P., and Gamarra, L. (2021). Estrés académico en universitarios peruanos: importancia de las conductas de salud, características sociodemográficas y académicas. *Liberabit* 27:e482. doi: 10.24265/liberabit.2021.v27n2.07
- Caycho-Rodríguez, T. (2018). Tamaño del efecto en análisis de regresión en investigación geriátrica: comentarios a Rubio et al. [Effect Size in Regression Analysis in Geriatric Research: comments to Rubio et al.]. *Revista española de geriatría y gerontología* 53:61. doi: 10.1016/j.regg.2017.04.009
- Chau, C., and Saravia, J. C. (2016). Does Stress and University Adjustment Relate to Health in Peru? *Journal of Behavior. Health Soc.* 8, 9–17. doi: 10.1016/j.jbhsi.2017.08.002
- Chen, M., and Jiang, S. (2019). Analysis and Research on Mental Health of College Students Based on Cognitive Computing. *Cogn. Syst. Res.* 56, 151–158.
- Cheng, S. T., and Chan, A. C. (2004). The Multidimensional Scale of Perceived Social Support: dimensionality and Age and Gender Differences in Adolescents. *Pers. Individ. Differ.* 37, 1359–1369. doi: 10.1016/j.paid.2004.01.006
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences (2 ed.)*. Hillsdale: Lawrence Erlbaum.
- Denovan, A., and Macaskill, A. (2013). An Interpretative Phenomenological Analysis of Stress and Coping in First Year Undergraduates. *Br. Educ. Res. J.* 39, 1002–1024. doi: 10.1002/berj.3019
- Ellis, P. D. (2010). Effect sizes and the interpretation of research results in international business. *J. Int. Bus. Stud.* 41, 1581–1588. doi: 10.1057/jibs.2010.39
- Enns, A., Eldridge, G. D., Montgomery, C., and Gonzalez, V. M. (2018). Perceived Stress, Coping Strategies, and Emotional Intelligence: a Cross-sectional Study of University Students in Helping Disciplines. *Nurse Educ. Today* 68, 226–231. doi: 10.1016/j.nedt.2018.06.012
- Fasoro, A. A., Oluwadare, T., Ojo, T. F., and Oni, I. O. (2019). Perceived Stress and Stressors Among First-year Undergraduate Students at a Private Medical School in Nigeria. *J. Taibah Univ. Med. Sci.* 14, 425–430. doi: 10.1016/j.jtumed.2019.08.003
- Faul, F., Erdfelder, E., Buchner, A., and Lang, A. G. (2009). Statistical power analyses using G* Power 3.1: tests for correlation and regression analyses. *Behav. Res. Met.* 41, 1149–1160. doi: 10.3758/BRM.41.4.1149
- Ferguson, C. (2016). “An Effect Size Primer: A Guide for Clinicians and Researchers,” in *Professional Psychology: Research and Practice*, ed. A. E. Kazdin (Washington, DC: American Psychological Association), 301–310.
- Fernández-Lasarte, O., Ramos-Díaz, E., Goñi, E., and Rodríguez-Fernández, A. (2019). Comparative Study Between Higher and Secondary Education: effects of Perceived Social Support, Self-concept and Emotional Repair on Academic Achievement. *Educación XXI* 22, 165–185. doi: 10.5944/educxx1.22526
- Fook, C. Y., and Sidhu, G. K. (2015). Investigating Learning Challenges Faced by Students in Higher Education. *Proc. Soc. Behav. Sci. U.S.A.* 186, 604–612.
- Freire, C., Ferradás, M., del, M., Regueiro, B., Rodríguez, S., Valle, A., et al. (2020). Coping Strategies and Self-Efficacy in University Students: a Person-Centered Approach. *Front. Psychol.* 11:841. doi: 10.3389/fpsyg.2020.00841
- Freire, C., Ferradás, M. D. M., Núñez, J. C., Valle, A., and Vallejo, G. (2019). Eudaimonic Well-Being and Coping with Stress in University Students: the Mediating/Moderating Role of Self-Efficacy. *Int. J. Environ. Res. Public Health* 16:48. doi: 10.3390/ijerph16010048
- Gaete, V. (2015). Desarrollo psicosocial del adolescente [Adolescents’ Psychosocial Development]. *Revista Chilena de Pediatría* 86, 436–443. doi: 10.1016/j.rchipe.2015.07.005
- García-Alonso, I., and Medina-Gómez, M. (2016). Apoyo social y afrontamiento del estrés en personas con discapacidad intelectual. *INFAD* 2, 215–220.
- Hechenleitner-Carvallo, M. I., Jerez-Salinas, A. A., and Pérez-Villalobos, C. E. (2019). Autoeficacia académica en estudiantes de carreras de la salud de una universidad tradicional chilena. *Revista Médica de Chile* 147, 914–921. doi: 10.4067/s0034-98872019000700914
- Hess, U., Senécal, S., Kirouac, G., Herrera, P., Philippot, P., and Kleck, R. E. (2000). Emotional expressivity in men and women: stereotypes and self-perceptions. *Cogn. Emot.* 14, 609–642. doi: 10.1177/1049732308319825
- Holtzman, S., Newth, S., and Delongis, A. (2004). The Role of Social Support in Coping with Daily Pain Among Patients with Rheumatoid Arthritis. *J. Health Psychol.* 9, 677–695. doi: 10.1177/1359105304045381
- Jerusalem, M., and Mittag, W. (1997). Schulische Gesundheitsförderung: differentielle Wirkungen eines Interventionsprogramms. *Unterrichtswissenschaft* 25, 133–149.
- Kang, H. W., Park, M., and Wallace, J. P. (2016). The Impact of Perceived Social Support, Loneliness, and Physical Activity on Quality of Life in South Korean Older Adults. *J. Sport Health Sci.* 7, 237–244. doi: 10.1016/j.jshs.2016.05.003
- Kendler, K. S., Myers, J., and Prescott, C. A. (2005). Sex Differences in the Relationship between Social Support and Risk for Major Depression: a Longitudinal Study of Opposite-Sex Twin Pairs. *Am. J. Psychiatr.* 162, 250–256. doi: 10.1176/appi.ajp.162.2.250
- Lambert, L., Passmore, H. A., and Joshanloo, M. (2019). A Positive Psychology Intervention Program in a Culturally-Diverse University: boosting Happiness and Reducing Fear. *J. Happ. Stud.* 20, 1141–1162. doi: 10.1007/s10902-018-9993-z
- Lazarus, R. S., and Folkman, S. (1984). *Stress, Appraisal, and Coping*. New York: Springer.
- López-Angulo, Y., Pérez-Villalobos, M. V., Cobo-Rendón, R. C., and Díaz-Mujica, A. E. (2020). Apoyo social, sexo y área del conocimiento en el rendimiento académico autopercebido de estudiantes universitarios chilenos [Social Support, Gender and Area of Knowledge in the Self-Perceived Academic Performance of Chilean University Students]. *Formación Universitaria* 13, 11–18. doi: 10.4067/S0718-50062020000300011
- Martínez, L., Fernández, E., Gonzales, E., Avila, Y., Lorenzo, A., and Vasquez, H. (2019). Apoyo social y resiliencia: factores protectores en cuidadores principales de pacientes en hemodiálisis [Social Support and Resilience: protective Factors in Primary Caregivers of Hemodialysis Patients]. *Enfermería Nefrológica* 22, 130–139.
- Matteucci, M. C., and Soncini, A. (2021). Self-Efficacy and Psychological Well-Being in a Sample of Italian University Students With and Without Specific Learning Disorders. *Res. Dev. Disabil.* 110:2021. doi: 10.1016/j.ridd.2021.10.3858
- Ornelas, M., Blanco, H., Gastélum, G., and Chávez, A. (2012). Autoeficacia Percibida en la conducta Académica de Estudiantes Universitarias [Perceived Self-Efficacy in the Academic Behavior of College Students]. *Formación Universitaria* 5, 17–26.

- Oro, P., Esquerda, M., Viñas, J., Yuguero, O., and Pifarre, J. (2019). Psychopathological Symptoms, Stress and Burnout Among Medical Students. *Educ. Méd.* 20, 42–48. doi: 10.1016/j.edumed.2017.09.003
- Pérez, E., and Medrano, L. (2010). Análisis Factorial Exploratorio: bases Conceptuales y Metodológicas. *Revista Argentina de Ciencias del Comportamiento* 2, 58–66. doi: 10.32348/1852.4206.v2.n1.15924
- Phang, C. K., Mukhtar, F., Ibrahim, N., Keng, S. L., and Sidik, S. M. (2015). Effects of a Brief Mindfulness-Based Intervention Program for Stress Management Among Medical Students: the Mindful-Gym Randomized Controlled Study. *Adv. Health Sci. Educ.* 20, 1115–1134. doi: 10.1007/s10459-015-9591-3
- Piergiovanni, L. F., and Depaula, P. D. (2018). Autoeficacia y estilos de afrontamiento al estrés en estudiantes universitarios [Self-Efficacy and Coping Styles For Stress in University Students]. *Ciencias Psicológicas* 12:17.
- Priesack, A., and Alcock, J. (2015). Well-Being and Self-Efficacy in a Sample of Undergraduate Nurse Students: a Small Survey Study. *Nurse Educ. Today* 35, e16–20. doi: 10.1016/j.nedt.2015.01.022
- Radu, G., Harris, N., Hessen, J., Fowler, K., Pickett, S., Ren, W., et al. (2016). Student's Strategies to Cope With Stressful Situations. *Eur. Psychiatr.* 33:s234. doi: 10.1016/j.eurpsy.2016.01.585
- Reynoso, O. U., Caldera, J. F., De la Torre, J., Martínez, A., and Macías, G. A. (2018). Autoconcepto y apoyo social en estudiantes de bachillerato. Un Estudio Predictivo [Self-Concept and Social Support in High School Students. A Predictive Study]. *Revista de Psicología y Ciencias Del Comportamiento de La Unidad Académica de Ciencias Jurídicas y Sociales* 9, 100–119. doi: 10.29365/rpcc.20180529-66
- RPP Noticias (2018). *Hasta 30% de la Población Universitaria del Perú Sufre de Impactos en su Salud Mental Por Presión Académica*. Available online at: <https://rpp.pe/vital/vivir-bien/hasta-30-de-la-poblacion-universitaria-del-peru-sufre-de-impactos-en-su-salud-mental-por-presion-academica-noticia-1151266> (accessed January 20, 2022).
- RPP Noticias (2019). *SUNEDU: Bachillerato Automático Solo Aplica Para Quienes Iniciaron Estudios Hasta Fines de 2015*. Available online at: <https://rpp.pe/peru/lima/sunedu-quienes-pueden-acceder-al-bachillerato-automatico-segun-la-nueva-ley-universitaria-noticia-1217112?ref=rpp> (accessed January 20, 2022).
- Schöber, C., Schütte, K., Köller, O., McElvany, N., and Gebauer, M. M. (2018). Reciprocal Effects Between Self-Efficacy And Achievement In Mathematics And Reading. *Learn. Individ. Diff.* 63, 1–11. doi: 10.1016/j.lindif.2018.01.008
- Schönfeld, P., Brailovskaia, J., Bieda, A., Zhang, X. C., and Margraf, J. (2016). The Effects of Daily Stress On Positive and Negative Mental Health: mediation Through Self-Efficacy. *Int. J. Clin. Health Psychol.* 16, 1–10. doi: 10.1016/j.ijchp.2015.08.005
- Sherbourne, C., and Stewart, A. (1991). The MOS Social Support Survey. *Soc. Sci. Med.* 32, 705–14. doi: 10.1016/0277-9536(91)90150-b
- Soman, S., Bhat, S. M., Latha, K. S., and Praharaj, S. K. (2016). Gender Differences in Perceived Social Support and Stressful Life Events in Depressed Patients. *East Asian Archiv. Psychiatr.* 26, 22–29.
- Son, C., Hegde, S., Smith, A., Wang, X., and Sasangohar, F. (2020). Effects of COVID-19 on College Students' Mental Health in the United States: interview Survey Study. *J. Med.Int. Res.* 22:e21279. doi: 10.2196/21279
- Sontag-Padilla, L., Dunbar, M. S., Ye, F., Kase, C., Fein, R., Abelson, S., et al. (2018). Strengthening College Students' Mental Health Knowledge, Awareness, and Helping Behaviors: the Impact of Active Minds, a Peer Mental Health Organization. *J.Am. Acad. Child Adolesc. Psychiatr.* 57, 500–507. doi: 10.1016/j.jaac.2018.03.019
- Superintendencia Nacional de Educación Superior Universitaria [SUNEDU] (2021). *III Informe Bienal Sobre la Realidad Universitaria en el Perú*. Available online at: <https://cdn.www.gob.pe/uploads/document/file/3018068/III%20Informe%20Bial.pdf> (accessed January 21, 2022).
- Torre, J. (2006). *La Autoeficacia, la Autorregulación y los Enfoques de Aprendizaje en Estudiantes Universitarios*. Doctoral tesis. Madrid: Universidad Pontificia Comillas.
- Wada, M., Suto, M. J., Lee, M., Sanders, D., Sun, C., Le, T. N., et al. (2019). University Students' Perspectives on Mental Illness Stigma. *Mental Health Prevent.* 14:200159. doi: 10.1016/j.mph.2019.200159
- Xiaoyou, Y., Weijun, M., Hao, X., Xiaofen, W., Li, X., Zhang, S., et al. (2021). The impacts of coping style and perceived social support on the mental health of undergraduate students during the early phases of the COVID-19 pandemic in China: a multicenter survey. *BMC Psychiatry* 21:530. doi: 10.1186/s12888-021-03546-y

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

Copyright © 2022 Alfaro Vasquez, Carranza Esteban, Mamani-Benito and Caycho-Rodríguez. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.