



Relationship between academic performance and subjective, material, and occupational psychological well-being of undergraduate nursing students

Relación entre el rendimiento académico y bienestar psicológico subjetivo, material y laboral de los estudiantes universitarios de Enfermería

González Calle, Byron Horacio; Vicuña-Palacios, Andrea Alexandra; Latacela, Gloria Alexandra; Godoy Durán, Elvia Narcisa

Byron Horacio González Calle

hora_gonzalez@gmail.com
Universidad Nacional del Ecuador (UNAE), Ecuador

Andrea Alexandra Vicuña-Palacios

andrea.vicuna@ucacue.edu.ec
Catholic University of Cuenca, Career in Nursing,
Ecuador

Gloria Alexandra Latacela

galatacelall@ucacue.edu.ec
Catholic University of Cuenca, Career in Nursing,
Ecuador

Elvia Narcisa Godoy Durán

engodoyd@ucacue.edu.ec
Catholic University of Cuenca, Career in Nursing,
Ecuador

Pro Sciences: Revista de Producción, Ciencias e Investigación

CIDEPRO, Ecuador
e-ISSN: 2588-1000
Periodicidad: Trimestral
Vol. 6, No. 43, 2022
editor@journalprosciences.com

Recepción: 16 Abril 2022
Aprobación: 28 Mayo 2022

DOI: <https://doi.org/10.29018/issn.2588-1000vol6iss43.2022pp248-255>



Esta obra está bajo una Licencia Creative Commons Atribución-NoComercial-SinDerivar 4.0 Internacional.

Abstract: The relationship that students in educational institutions have with the perception of psychological well-being is related to the study of the purposes they project towards meaningful learning. The main objective was to analyze the relationship between psychological well-being and academic achievement. A descriptive and correlational non-experimental design was used. The sample of participants was 300 students (61 men and 239 women) of the undergraduate nursing program at the Catholic University of Cuenca, Azogues, with an average age of 22 years old. The Psychological Well-Being Scale, a Likert-type test, was applied, consisting of 65 items, administered individually, and the following stages were evaluated: Subjective Psychological Well-Being, Material Well-Being, and Labor Well-Being. The results indicated that the higher their psychological well-being, the better their academic performance.

Keywords: psychological well-being, academic performance, nursing.

Resumen: La relación que tienen los estudiantes de los establecimientos educativos con la percepción de bienestar psicológico está relacionada con el estudio de los propósitos que proyectan hacia el aprendizaje significativo. El principal objetivo fue analizar la relación entre bienestar psicológico y rendimiento académico. Se utilizó un diseño no experimental de tipo descriptivo y correlacional. La muestra de participantes es de 300 estudiantes (61 hombres y 239 mujeres) universitarios del pregrado de la carrera de enfermería de la Universidad Católica de Cuenca sede Azogues, con una media de edad de 22 años. Se aplicó la Escala de Bienestar Psicológico, prueba de tipo Likert, constituida por 65 ítems, su administración es de manera individual y se valoró los siguientes estadios: Bienestar Psicológico Subjetivo, Bienestar Material, Bienestar Laboral. Los resultados indicaron que cuan mayor sea su bienestar psicológico mejor será su rendimiento académico.

Palabras clave: bienestar psicológico, rendimiento académico, enfermería.

Cómo citar: González Calle, B. H., Vicuña-Palacios, A. A., Latacela, G. Al., & Godoy Durán, E. N. (2022). Relationship between academic performance and subjective, material, and occupational psychological well-being of undergraduate nursing students. *Pro Sciences: Revista De Producción, Ciencias E Investigación*, 6(43),248-255. <https://doi.org/10.29018/issn.2588-1000vol6iss43.2022pp248-255>

INTRODUCTION

Academic performance (AP) according to Novaez (1986) is the set of grades obtained by the person in activities of an academic nature. For Ryff and Keyes (1995) the AP is the result achieved from the educational process, which has previously been set out with its learning objectives and purposes. For this reason, "The AP is a set of skills linked to affective factors" (Velásquez, et al., 2008, p. 143). The competencies proposed are those that reflect positive responses to the educational objectives set (Ryff, 1989, p. 1069). Therefore, the competencies acquired are those that will reflect the level of goals achieved by students according to the objectives set out in the curriculum.

On the other hand, Navarro (2003) mentions that the AP is the ability to measure the learning acquired in the educational process or program, in short, the AP is the result of academic or educational stimuli (Cooke, Bewick, Barkham, Bradley, & Audin, 2006). Academic performance is the capacity of the student to acquire the objectives established in the teaching and learning process, which makes it possible to verify the level obtained by the individual (Rodríguez, Fita, & Torrado, 2004, p. 402).

High levels of motivation for learning are necessary to achieve excellent academic performance (Bray & Born, 2004). The relationship that students in educational establishments have with the perception of psychological well-being is related to the study of the purposes that they project towards significant learning, and, in turn, they consider the fulfillment of academic goals (Correa, Cuevas, & Villaseñor, 2017).

Academic performance (AP) can be affected by numerous variables. In the study carried out by Aliaga (2001) at the National University of San Marcos in the city of Lima - Peru, he affirms the relationship between motivation and learning strategies. Later, Reyes (2003) affirmed in his investigation that the AP and the personality traits do not exist a significant relation. According to the study by Velásquez et al (2008), they stated that in both women and men, there is a positive correlation between psychological well-being and assertiveness (p. 150).

On the other hand, psychological well-being in most cases is characterized by life satisfaction or state of happiness, it is also identified as quality of life, which contains behavioural competencies, external environment contexts, beliefs and options about the satisfactions received (Castro Solano & Casullo, 2001).

In the traditional studies of the psychological well-being two links have been called: one linked to happiness as a predictor of life satisfaction and one linked to potential development (Velásquez, et al, 2008, p. 141).

The Psychological well-being is illustrated as the level at which an individual judges his life in favorable terms (Morales & Gonzalez, 2014, p. 217). According to Diener (1994) he affirms the association of GS with positive mood, high self-esteem, and low depressive symptoms. On the other hand, Castro (2010) establishes that psychological well-being contains three basic components: cognitive component, negative component, and positive component. To produce the psychological

well-being, it is necessary to link, cognitive judgment (directed to the goals set) and behavior (about objectives and purposes).

The individual with high levels of psychological well-being can achieve the proposed goals, which will provoke happiness and satisfaction (Barrón, Castilla, Casullo, & Verdú, 2002; Bermúdez, Álvarez, & Sánchez, 2003; Vivaldi & Barra, 2012; Correa, Cuevas, & Villaseñor, 2017). The element that determines the RA is the BP (Morales & González, 2014).

Álvarez (2007) mentions that in university students there is a level of complexity in both the adaptation process and the procedure for staying in the academic program; and the factors that predominate in the academic environment are the following: psychological well-being, family dynamics, emotional intelligence, self-concept, and self-esteem.

Previous research indicates that university students between the ages of 18 and 29 show a high level of self-acceptance (García, 2013). While university students between the ages of 30 and 55 show a high degree of self-acceptance, personal growth, and mastery of their surroundings (Morales, 2016).

There are also several studies that investigate the correlation between psychological well-being and other factors that determine the life of a university student such as anxiety (Moreno & Moreno, 2016), stress (Matalinares, & others, 2016), religious orientation (Morales, 2016; García & Bernabé, 2013), social support (Rodríguez, Negrón, Maldonado, Quiñones, & Toledo, 2014) and the couple's relationship (Arias, Navarrete, & Flor, 2013).

In the approach of the problem around the correlation of the academic performance and the psychological well-being, knowing that the Academic Performance is the result of the qualifications obtained in the process of teaching and learning and the psychological well-being is the state satisfaction or happiness, in this investigation it will be determined if a significant relation exists between the variables mentioned in the in undergraduate students of the career of infirmary of the Catholic University of Cuenca seat Azogues.

The general objective of this research is to analyze the relationship between psychological well-being and academic performance in undergraduate nursing students at the Universidad Católica de Cuenca Azogues. The hypothesis that is raised in this study is to establish if the undergraduate students of infirmary to greater psychological well-being greater academic yield.

METHODS

A non-experimental, descriptive, correlational, quantitatively oriented study was conducted to analyze the relationship between academic performance and psychological well-being. The population is 490 undergraduate students of the nursing career and we worked with a sample of 300 students (61 men and 239 women), to determine the sample we applied the formula of finite populations, then we carried out a non-probabilistic sampling. The criteria for inclusion are the following: students from the Universidad Católica de Cuenca, Azogues campus, undergraduate students in the career of Nursing, and students who have agreed to complete the survey. And as Exclusion Criteria are the following students from other Universities, students who do not belong to the Nursing career, people who do not wish to participate in the research.

The instrument used was the following: The Psychological Welfare Scale (Sánchez-Cánovas, 2013), Likert type, constituted by 65 items, its administration or application is individual and its answers from 1 = "totally disagree" to 6 Totally agree, the following stages: Subjective Psychological

Welfare, Material Welfare, Work Welfare and Relationship with the Couple. These subscales can be applied separately (except for the first two, which will always be applied together) or together. In this way, the PBS allows to obtain in a quick and brief way a specific evaluation of the level of general happiness of the person and the level of satisfaction with their economic income and material goods, with their work and with their relationship with their partner, all of which are intimately related to the general psychological well-being of a person. And, for academic performance, the final grade of each student was requested.

The following procedure was carried out: in the first instance, a meeting was held with the director of the nursing degree at the Catholic University of Cuenca, Azogues, in order to request permission to carry out this investigation. Then, the final grade (overall grade) of the educational process of all the students who are studying the undergraduate degree in nursing was requested, and with this, the academic performance of the student body was obtained. The Psychological Well-Being Scale was then administered individually in a quiet environment. It was run in an individualized session with a duration of 30 minutes per participant. Finally, the informed consent was signed and presented with the guarantee of anonymity and confidentiality.

A descriptive analysis of frequencies and percentages was established, and the Kolmogorov-Smirnov test was applied to demonstrate the distribution. Subsequently, the correlation analysis between the variables with the Spearman's Rho correlation was performed since this test is adequately vigorous in the face of apparent non-parametric compliance. For the analysis of the data, we used the SPSS version 26 statistic with original license (N/S:59326190518).

RESULTS

Of the 300 students who conducted the survey, 61 students were men, worth 20 per cent, while the number of women who conducted the survey was 239, belonging to 80 per cent of the total students. The female sex predominated with a percentage of 79.7 per cent, while the male sex had a percentage of 20.3 per cent. In terms of age, the average was 22 years old, with a median and fashion of 21 years old. In terms of marital status, it showed that 67.0% of the students surveyed were single; 17.7% of students were married; 6.7% were divorced and 8.7% lived in a union. The highest percentage of psychological well-being is 49 per cent (149) of students have average psychological well-being; while 39.7 per cent (119) have high psychological well-being and 10.7 per cent (32) of students have low psychological well-being. Most of the academic performance is 61% (183) have an outstanding average; 32% (96) have a very good average; 1.3% (4) have a good average and 5.7% (17) have a regular average (Table 1).

Most students; 90% have outstanding academic performance and average psychological well-being; 74% have outstanding academic performance and high psychological well-being; 53% have very good academic performance and average psychological well-being; 35% of students have very good academic performance and high psychological well-being; 19% have outstanding academic performance and low psychological well-being; 9% have fair academic performance and high psychological well-being; 8% have very good academic performance and low psychological well-being; 5% have fair academic performance and average psychological well-being; 3% have fair academic performance and low psychological well-being; 2% have good academic performance and low psychological well-being; 1% have good academic performance and average psychological well-being and 1% have very good academic performance and high psychological well-being.

Table 1. Psychological well-being and academic performance

		n	%
<i>Psychological well-being</i>	Under	32	10,7
	Average	149	49,7
	High	119	39,7
<i>Academic performance</i>	Regular	17	5,7
	Well	4	1,3
	Very Good	96	32,0
	Outstanding	183	61,0
	Total	300	100,0

Table 2 of Spearman’s Rho correlation shows that there is a statistically significant relationship between psychological well-being and academic performance, given that the p-value is .018; therefore, the alternative hypothesis is confirmed, that is, the greater the psychological well-being the better the academic performance.

Table 2. Correlations between psychological well-being, material well-being, work, and academic performance

ACADEMIC PERFORMANCE		
PSYCHOLOGIST	Spearman’s Rho	.837*(.018)
	<i>p</i> -value	
MATERIAL	Spearman’s Rho	.183 (.107)
	<i>p</i> -value	
LABOUR	Spearman’s Rho	.233 (.293)
<i>p</i> -value <0.05		

DISCUSSION

There are studies that show similar results as the one carried out by Carranza, Hernandez and Alhuay (2017) in the city of Tarapoto in Peru, with psychology students, aged between 16 and 30 years, where the results showed a statistically significant relationship ($p < .01$). Another study is related to the previous ones by Velázquez, et al. (2008) in Lima - Peru, with university students from the faculties of medicine, law and administration; the results showed that there is a statistically significant relationship in gender (male $p = 0.031$ and female $p = 0.01$); as for the faculties, in medicine the correlation between psychological well-being and academic performance shows a statistically significant relationship ($p = 0.03$); the correlation between psychological well-being and academic performance of the law faculty shows significant relationship ($p = 0.034$); the correlation between psychological well-being and academic performance of management faculty students similarly shows statistically significant relationship ($p = 0.13$); the correlation of youth and adults showed significant relationship ($p = 0.01$ and $p = 0.05$). This means that the good self-acceptance of the student affects the development within the university, this type of students demonstrates to have better relations with society, they persist and struggle to achieve their goals, they are able to solve problems without difficulties.

Similarly, a study conducted in Medellin, Colombia by Garcia (2014) proposes that psychological well-being and academic performance were evaluated, and a statistically significant relationship was established given that the p-value was 0.03 with incidence in adults in the field of Engineering.

Another study is related to the previous ones, this one was conducted by Ferragut and Fierro (2012), a statistically significant relationship was established between emotional intelligence and academic performance with a p value of 0.04 in school students. On the other hand, Chavez (2006) in Mexico City, at the Universidad Iberoamericana de Psicología conducted a study of men and women where the results showed that there is no statistically significant relationship with a p value of 0.08 in men, but in women the correlation showed a significant relationship ($p < 0.05$). If a student is emotionally well, he or she will set goals and know what he or she wants for his or her future, so he or she will strive to have goals met.

With the results of this study, the hypothesis was confirmed. Based on this, the university authorities will believe it is pertinent to make decisions to be able to intervene in different ways in the resolution of psychological problems to rescue, maintain or potentialize capacities that influence the correct academic development of the students.

Future research could be directed towards the study of personal well-being and its relationship with emotional intelligence and social skills (Ramírez-Coronel, Martínez, Cabrera, Buestán, Torracchi-Carrasco, & Carpio, 2020); academic performance in relation to neuropsychological functions (Ramírez-Coronel, 2018; 2019), with anthropometric measurements (Ramírez-Coronel, Ordoñez, Sigüencia, & Abad-Martínez, 2020; Romero-Sacoto, & Ramírez-Coronel, 2020; Romero-Sacoto, González León, Abad-Martínez, & Ramírez-Coronel, 2020). It would be interesting to ask, as other authors have done, whether an indirect relationship can be established between IQ and performance, mediated by the effects on psychological balance (Extremera & Fernández-Berrocal, 2003).

The study presents the limitation of having applied Perceived Emotional Intelligence tests; in this sense it would be interesting to be able to compare these results with measures of evaluation of the execution of this construct in addition to self-perception. This study carried out with university students of the nursing career showed results of a significant moderate relationship between psychological well-being and academic performance.

REFERENCES

- Aliaga, J. (2001). Variables psicológicas relacionadas con el rendimiento académico en matemática y estadística en alumnos del primer y segundo año de la Facultad de Psicología de la UNMSM. *Revista de Investigación en Psicología*, 4 (1). 35-52.
- Álvarez, Y. (2007). *Actitudes hacia las matemáticas de los estudiantes de ingeniería de las universidades venezolanas*. (Doctoral dissertation, Tesis doctoral). Departamento de Psicología y Metodología de las ciencias del comportamiento Facultad de Psicología. Universidad de Málaga, España.
- Arias, G. C., Navarrete, F. & Flor, M. S. (2013). Factores asociados al bienestar psicológico de los estudiantes de la Escuela Académico Profesional de Odontología de la Universidad Nacional Jorge Basadre Grohmann. *Revista Médica Basadrina*, 7(2), 28-30.
- Bermúdez, M. P., Álvarez, I. & Sánchez, A. (2003). Análisis de la relación entre inteligencia emocional, estabilidad emocional y bienestar psicológico. *Universitas Psychologica*, 2(1).

- Barrón, R., Castilla, I., Casullo, M. & Verdú, J. (2002). Relación entre estilos y estrategias de afrontamiento y bienestar psicológico en adolescentes. *Psicothema*, 14(2), 363-368.
- Brown, K. W. & Ryan, R. M. (2003). The benefits of being present: mindfulness and its role in psychological well-being. *Journal of personality and social psychology*, 84(4), 822.
- Bray, S. & Born, H. (2004). Transition to university and vigorous physical activity: Implications for health and psychological well-being. *Journal of American College Health*, 52(4), 181-188.
- Caballero, C. C., Li, R. A. & Palacio, J. (2007). Relación del burnout y el rendimiento académico con la satisfacción frente a los estudios en estudiantes universitarios. *Avances en psicología latinoamericana*, 25(2), 98-111.
- Cabrera-Darias, M. E. (2016). Motives, personality and subjective well-being in volunteering. *Anales de psicología*, 31(3), 791-801.
- Castro, A. C., & Casullo, M. M. (2001). Rasgos de personalidad, bienestar psicológico y rendimiento académico en adolescentes argentinos. *Interdisciplinaria*, 18(1), 65-85.
- Carranza, R., Hernández, R. & Alhuay, J. 2017. Bienestar psicológico y rendimiento académico en estudiantes de pregrado de psicología. *Revista Internacional de Investigación en Ciencias Sociales*, 13(2), 133-146.
- Cooke, R., Bewick, B. M., Barkham, M., Bradley, M. & Audin, K. (2006). Measuring, monitoring and managing the psychological well-being of first year university students. *British Journal of Guidance & Counselling*, 34(4), 505-517.
- Chávez, A. (2006). *Bienestar psicológico y su influencia en el rendimiento académico de estudiantes de nivel medio superior*. Facultad de Psicologías, Universidad de Colima, Colima.
- Díaz, D., Rodríguez-Carvajal, R., Blanco, A., Moreno-Jiménez, B., Gallardo, I., Valle, C. & Van Dierendonck, D. (2006). Adaptación española de las escalas de bienestar psicológico de Ryff. *Psicothema*, 18(3), 572-577.
- Diener, E. (1994). *El bienestar subjetivo*. Barcelona: Paidós.
- Extremera, N. & Fernández-Berrocal, P. (2003). La inteligencia emocional en el contexto educativo: hallazgos científicos de sus efectos en el aula. *Revista de educación*, 332(2003), 97-116.
- Ferragut, M. & Fierro, A. (2012). Inteligencia emocional, bienestar personal y rendimiento académico en preadolescentes. *Revista latinoamericana de psicología*, 44(3), 95-104.
- García, J. (2014). Psicología positiva, bienestar y calidad de vida. En-claves del pensamiento, 8(16), 13-29.
- López-Mero, P., Barreto-Pico, A. & Del Salto-Bello, M. (2015). Bajo rendimiento académico en estudiantes y disfuncionalidad familiar. *Medisan*, 19(9), 1163-1166.
- Martín-Albo, J., Núñez, J. L., Navarro, J. G. & Grijalvo, F. (2009). Un modelo motivacional explicativo del bienestar psicológico en la universidad. *Revista Mexicana de Psicología*, 26(1), 41-50.
- Matalinares, M. L., Díaz, G., Arenas, C., Raymundo, O., Baca, D., Uceda, J. & Yaringaño, J. (2016). Afrontamiento al estrés y bienestar psicológico en estudiantes universitarios de Lima y Huancayo. *Revista de Investigación en Psicología*, 19(2), 123-143. Obtenido de <http://revistasinvestigacion.unmsm.edu.pe/index.php/psico/article/view/12894>
- Morales, M. & González, A. (2014). Resiliencia-Autoestima-Bienestar psicológico y Capacidad intelectual de estudiantes de cuarto medio de buen rendimiento de liceos vulnerables. *Estudios pedagógicos*, 40(1), 215-228.
- Navarro, R. (2003). Factores asociados al rendimiento académico. *Revista Iberoamericana de educación*, 33(1), 1-20.
- Novaez, M. (1986). *Psicología de la actividad escolar*. México: Iberoamericana.

- Ramírez-Coronel, A. A. (2018). Relación entre los movimientos sacádicos, lateralidad y proceso lector. *Espirales Revista Multidisciplinaria de investigación*, 2(17).
- Ramírez-Coronel, A. A. (2019). Laterality and reader process: correlational study. *Espirales Revista Multidisciplinaria de investigación*, 3(27), 105-117.
- Ramírez-Coronel, A. A., Ordoñez, C. E., Siguencia, D. C., & Abad-Martínez, N. I. (2020). Madurez neuropsicológica e indicadores antropométricos en niños de Escuela Básica. *Sinergias educativas*, 5(2), 407-424.
- Ramírez-Coronel, A. A., Martínez, P. C., Cabrera, J. B., Buestán, P. A., Torracchi-Carrasco, E., & Carpio, M. G. (2020). Habilidades sociales y agresividad en la infancia y adolescencia. *Archivos Venezolanos de Farmacología y Terapéutica*, 39(2), 209-214.
- Reyes, Y. (2003). Relación entre el rendimiento académico, la ansiedad ante los exámenes, los rasgos de personalidad, el auto-concepto y el asertividad en estudiantes del primer año de psicología de la UNMSM. *Universidad Nacional mayor de San Marcos*, Tesis para optar el Grado de Psicólogo, UNMSM, Lima.
- Reyes, A. S., Cuevas, M. & Villaseñor, M. (2016). Bienestar psicológico, metas y rendimiento académico. *Revista Especializada en Ciencias de Salud*, 19(1), 29-34.
- Rivers, S. E., Brackett, M. A., Reyes, M. R., Mayer, J. D., Caruso, D. R. & Salovey, P. (2012). Measuring emotional intelligence in early adolescence with the MSCEIT-YV: Psychometric properties and relationship with academic performance and psychosocial functioning. *Journal of Psychoeducational Assessment*, 30(4), 344-366.
- Rodríguez, S., Fita, E. & Torrado, M. (2004). El rendimiento académico en la transición secundaria-universidad. *Revista de educación*, 334(1), 391-414.
- Romero-Sacoto, L. A., Gonzáles León, F. M., Abad-Martínez, N. I., Ramírez-Coronel, A. A., & Guamán Gañay, M. I. (2020). El zinc en el tratamiento de la talla baja. *Revista Universidad y Sociedad*, 12(2), 341-349.
- Romero-Sacoto, L., & Ramírez-Coronel, A. (2019). Calidad de vida, hábitos alimenticios y adherencia al tratamiento de los pacientes con VIH-Sida. *Killkana Salud Y Bienestar*, 3(3), 27-34. https://doi.org/10.26871/killcana_salud.v3i3.528
- Robles-Ojeda, F, Sánchez-Velasco, A. & Galicia-Moyeda, I. (2011). Relación del Bienestar Psicológico, Depresión y Rendimiento Académico en Estudiantes de. *Psicología Iberoamericana*, 19(2), 27-37.
- Ryff, C. D. (1989). Happiness is everything, or is it. Explorations on the meaning of psychological well-being. *Journal of personality and social psychology*, 57(6), 1069.
- Ryff, C. D. & Keyes, C. L. (1995). The structure of psychological well-being revisited. *Journal of personality and social psychology*, 69(4), 719.
- Sánchez-Cánovas, J. S. (2013). *EBP: Escala de bienestar psicológico*. TEA Ediciones.
- Velásquez, C., Montgomery, W., Montero, V., Pomalaya, R., Ch, A. D., Velásquez, N. & Reynoso, D. (2008). Bienestar psicológico, asertividad y rendimiento académico en estudiantes universitarios sanmarquinos. *Revista de investigación en psicología*, 11(2), 139-15.
- Vivaldi, F. & Barra, E. (2012). Bienestar psicológico, apoyo social percibido y percepción de salud en adultos mayores. *Terapia psicológica*, 30(2), 23-29.