Journal of Public Health Sciences (JPHS)
Vol. 2, No. 02, pp. 88-99
journal.iistr.org/index.php/JPHS
DOI: 10.56741/jphs.v2i02.333

Proficiency, Psychological Well-being, and Coping of the College Freshmen of the University of Nueva Caceres

[1]Maria Marietta B. Basbas
Corresponding Author: *maria.basbas@unc.edu.ph
[1] University of Nueva Caceres, Naga City, Philippines

ARTICLE INFO

Article history
Received 27 April 2023
Revised 5 June 2023
Accepted 10 June 2023

Keywords
College freshmen
Coping strategies
Psychological well-being
Skills proficiency

ABSTRACT

The transition to college is one of the significant life adjustments. Students are expected to adapt to this new environment. However, difficulties in school adaptation may result in social, emotional, and learning instability. This quantitative descriptive survey research determined the skills proficiency, psychological well-being and coping strategies of the University of Nueva Caceres first-year college students for the school year 2021– 2022. The study participants consisted of 429 first-year students of the University of Nueva Caceres. The Skills Profiler Test, Ryff's Scales of Psychological Well-being (SPWB), and Brief-COPE Inventory were used to measure the variables. The Statistical Package for the Social Sciences (SPSS) was used to analyze the data. The results indicated that the first-year college students of UNC have a skills gap in math, reasoning, and vocabulary. They reflect positive well-being that may help them pursue college life and obstacles that may come their way. The results further suggest that there is a need for the university to come up with programs or interventions that will develop the first-year students' critical thinking skills to succeed in mathematics and life.

This is an open-access article under the CC–BY-SA license.

Introduction

Transitioning to college is a significant student life adjustment [1]. It involves psychological changes that occur with significant developmental changes in the different aspects of life, such as school, social, and family [2]. Students are expected to adapt to this new environment, affiliate with new groups and networks and assume personal responsibility for the first time. Still, their inability to adapt may result in social, emotional, and learning instability, leading to difficulties in school adaptation [3]. School adaptation, as defined, is the capability of the student to engage in different activities in the school setting freely and to make academic improvements on multiple dimensions.

Meanwhile, psychological well-being is defined as the ability of a person to regulate his/her life and his/her activities [4]. It also suggests optimum psychological functioning and knowledge gained from life experiences [5]. Psychological well-being is also in the context of a sense of happiness and being effective as an individual and a social being. In adults, psychological well-being has been valuable to live a healthy life and has also been an essential spectrum of one's life in the college years [6]. However, psychological well-being issues have steadily increased among college students, mainly undergraduates inclined to psychological problems [4]. Evidence suggests that university students' vulnerability to mental health problems has already been a public concern [1],[2].

There is greater flexibility in where, when and how students learn. Students can pursue learning in the context of their passions; therefore, their skills and proficiency are essential to their transition to college life. Their skills boost their ability to be successful in college and career settings. The literature tells that increased levels of psychological instability among college students can be attributed to academics, which are an integral part of college life [7]. One reason is the need for a healthy attitude toward academic goals, which overwhelms students with disabling bouts of stress.

Although academics are considered to fulfil challenges that develop their capacity and competency, if perceived negatively, stress can be destructive to the student's mental health [8]. Students with limited support and unfavourable poor well-being are more likely to be seen taking misadventures such as alcohol use, sedentary behaviour, and too little or too much sleep. These students are also likely to experience anxiety, dissatisfaction with life, or, worst, even suicidal behaviour [9].

Coping is an influential factor in psychological well-being [5]. Coping strategies curtail or avoid stress-related demands. One's coping strategies account for the degree a stressor could adversely affect physical, psychological and behavioural outcomes [10].

Although psychological well-being and coping strategies among college students have been widely focused on in the literature, these constructs among first-year college students have yet to be explored significantly. To the author's best knowledge, no study has been conducted to assess the skills proficiency and psychological well-being and coping of first-year college students. This study may further contribute to a better understanding the factors that impact these variables. The study aimed to acquire data that may guide in developing appropriate interventions to facilitate the transition of first-year students to college life.

This study determined the proficiency, psychological well-being and coping strategies of the first-year college students of the University of Nueva Caceres for the school year 2021 – 2022. Specifically, this sought answers to the following:

1. What is the student's proficiency level in language, math, reasoning, attention to detail, and vocabulary skills?
2. What is the student's state of psychological well-being?
3. What are the coping styles of the students?
4. What students' characteristics are associated with the mentioned variables?

Methods

A. Research Design

The present research utilized the quantitative descriptive survey to determine the proficiency, psychological well-being and coping of the first-year students of the University of Nueva Caceres school year 2021 – 2022. This study tested the correlation between the student's psychological well-being and coping styles. Further, it concluded the association of the mentioned variables with the demographics of the students in terms of age and gender.

B. Participants

The study participants comprised 37 per cent of the total population of first-year students during the second semester of the school year 2021 – 2022, which yielded 429. The student demographic characteristics are reported in Table 1. As shown in the table, almost the same number of students were categorized under male (212, 49.40%) and female (217, 50.60%). The mean age of the participants was 19 years, with the most oversized bracket in the age range of 19 – 20 years old (329, 76.59%), while the lowest number belonged to 21 years old and above (23, 5.36%). The most significant number of the students belong to the Engineering and Architecture Department (303, 70.60%). It is followed by the College of Arts and Sciences (39, 9.10%), Nursing (37, 8.60%), Education (22, 5.10%), and Computer Studies (21, 4.90%). The least number of student respondents was recorded from the College of Business and Accountancy (7, 1.60%).

Table 1. The Frequency and percentage of the respondents by profile.

Characteristics	Frequency	Percentage
Gender		
• Male	212	49.42%
• Female	217	50.58%
Age (M=19 years old)		
• 18 years old and below	77	17.95%
• 19 – 20 years old	329	76.69%
• 21 years old and above	23	5.36%
Department		
• Engineering and Architecture	303	70.63%
• Arts and Sciences	39	9.09%
• Nursing	37	8.62%
• Education	22	5.13%
• Computer Studies	21	4.90%
• Business and Accountancy	7	1.63%
Overall	429	100%

C. Instruments

The Skills Profiler Test was administered to determine the student's proficiency level in basic skills, namely, language, math and reasoning, attention to detail, vocabulary, and writing skills. The test is composed of a combination of 78 timed and non-timed multiple-choice questions. Ryff's Scales of Psychological Well-being (SPWB) [11] measured the students' psychological well-being. The 42-item instrument included six sub-scales: autonomy, environmental mastery, personal growth, purpose in life, positive relations with others and self-acceptance. The responses were quantified using a 5-point scale (from 1 = strongly agree to 5 = strongly disagree). Brief-COPE (Coping Orientation to Problems Experienced) Inventory [12] measured the students' coping styles. The Brief-COPE is a simplified version of the long COPE Inventory, with 28 questions. The responses were quantified using a 4-point scale (1 = I usually do not do this at all to 4 = I usually do this a lot). The coping strategies measured with this scale were categorized as problem-focused, emotion-focused and dysfunctional. Moreover, the primary coping strategies identified include Approach Coping, which indicates more active coping strategies, or Avoidant, which shows more dysfunctional and maladaptive items [13]. Both classifications of Brief-COPE were adopted in this research.

D. Data Analysis

The data were reported using the frequency distribution and percentage technique to describe the students' proficiency level, state of psychological well-being, and coping styles. The correlation between the student's psychological well-being and coping styles was tested

using the Pearson Product Moment Correlation Coefficient r. Meanwhile, the associations of the students' characteristics among the three variables were tested using the chi-square association test. The Statistical Package for the Social Sciences (SPSS) was used to analyze the data.

Results

A. Proficiency Level of the Students

The student's proficiency level shown in Table 2 revealed that the most significant number had a High Average proficiency level in Attention to Detail (359, 78.90%). Most students also had High Average levels in Language Skills (306, 68.76%) and almost half in Writing Skills (177, 41.26%). Interestingly, more than half of the students had Below Average proficiency skills in Math and Reasoning Skills (264, 58.02%) and vocabulary (261, 57.36%).

Table 2. The proficiency level of the students

Areas	Below Average		Average		High Average	
	n	(%)	n	(%)	n	(%)
Language Skills	46	10.72	92	21.45	291	67.83
Math and Reasoning Skills	249	58.04	100	23.31	90	20.98
Attention to Detail	20	4.66	68	15.85	341	79.49
Vocabulary	242	56.41	73	17.02	114	26.57
Writing Skills	125	29.14	127	29.6	177	41.26

B. Student's State of Psychological Well-being

The students' state of psychological well-being, as shown in Table 3, shows that almost all of the students had a High-level state of psychological well-being when it comes to Personal Growth (409, 95.34%) as well as Positive Relations with Others (407, 90.55%). A large number of students also reported High-level state on the area of Purpose in Life (381, 88.81%) and autonomy (341, 79.49%), and the majority on

Self-Acceptance (294, 68.53%) and Environmental Mastery (288, 67.13%). However, noteworthy in the data that more than a quarter of the students had a Low state of psychological well-being in the areas of Self-Acceptance (135, 31.47%) and Environmental Mastery (141, 32.87%).

C. Coping Styles of the Students

The coping styles of the first-year students are presented in Table 4. As shown, it is apparent that among the approach coping styles, the majority have a High level of Acceptance coping style (313, 72.96%), Planning (308, 71.79%), and Active coping (305, 71.10%). However, it is striking to note that the majority of the students who have Avoidance coping

were recorded to have a High level of Self-distraction (299, 69.70%), and almost half of the students are High on Self-Blame coping style (236, 55.01%).

Table 3. The students' state of psychological well-being.

Areas	State of Psychological Well-being (N=429)			
	Low		High	
	n	(%)	n	(%)
Personal Growth	20	4.66	409	95.34
Positive Relations with Others	22	5.13	407	94.87
Purpose in Life	48	11.19	381	88.81
Autonomy	88	20.51	341	79.49
Self-Acceptance	135	31.47	294	68.53
Environmental Mastery	141	32.87	288	67.13

Table 4. The student's primary coping strategies.

	Levels (N=429)			
	Low		High	
Copying Styles	n	(%)	n	(%)
Avoidant Coping				
• Self-Distraction	130	30.30	299	69.70
• Denial	344	80.19	85	19.81
• Substance Use	407	94.87	22	5.13
• Behavioural Disengagement	354	82.52	75	17.48
• Venting	268	62.47	161	37.53
• Self-Blame	193	44.99	236	55.01
Approach Coping				
• Active Coping	124	28.90	305	71.10
• Emotional Support	269	62.70	160	37.30
• Use of Information Support	276	64.34	152	35.43
• Positive Reframing	158	36.83	271	63.17
• Planning	121	28.21	308	71.79
• Acceptance	116	27.04	313	72.96

D. Correlation Between Psychological Well-being and Coping Styles of the Freshmen Students

It was hypothesized that the areas of psychological well-being would correlate with the coping strategies of first-year students. The Pearson Product Moment Correlation Coefficient r was calculated to determine the relationships. As shown in Table 5, the correlation between student's psychological well-being and coping styles in problem-focused coping was positively moderate at r=.370**, p > 0.01. The correlation in terms of emotion-focused was positively

weak at r=.112*, p > 0.05, and negatively moderate along dysfunctional coping at r=-.234**, p > 0.01.

Table 5. The correlation between psychological well-being correlate and coping strategies

Brief COPE	Psychological Well-being
Problem-Focused	.370**
Emotion-Focused	.112*
Dysfunctional	-.234**
N	429

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

E. Students Students' Characteristics Associated with the Different Measures

Table 6 presents the chi-square test results for the student's well-being and their demographic characteristics that were found associated. Among the areas of well-being, Personal Growth was associated with sex, $\chi 2 = 5.493$, $p = .05$ and age, $\chi 2 = 8.758$, $p = .010$. It means female students are more likely to have a feeling of continued development than male students, although the strength of the relationship, as indicated by the Phi ($\varphi = .113$), is weak. Regarding age, the findings suggest that younger students are more likely to have feelings of continued development than older students. However, the strength of the relationship is weak, as indicated by the Phi value ($\varphi = .133$).

Table 6. The results of the chi-square test for students' well-being and demographic factors

Demographic Factors	Personal Growth		Chi-Square Test of Association
	Low	Average - High	
Sex			$\chi^2 = 5.493$
Male	15	197	$p = .05$
Female	5	212	$\varphi = .113$
Total			
Age			$\chi^2 = 8.758$
19 years old and below	9	300	$p = .010$
Above 19 years old	11	109	$\phi = .133$
Total	20	409	

The chi-square test for the student's proficiency and the demographic characteristics that were found to be associated are presented in Table 7. It was found that Language Skill and sex are significantly associated, $\chi 2 = 7.007$, $p = .05$. This indicates that female students are more likely to have better language skills than male first-year students. However, the strength of the relationship is weak, as indicated by the Phi value ($\varphi = .128$).

Writing Skill and sex are likewise found to have a significant association, $\chi 2 = 8.055$, $p = .05$. This suggests that female students are more likely to have better writing skills than male first-year students. The strength of the relationship, as indicated by the Phi ($\varphi = .137$), is weak.

Meanwhile, Attention to Detail and age are significantly associated, $\chi 2 = 3.869$, p = .05. This indicates that younger students are more likely to have higher Attention to Details Skills than older students. The strength of the relationship, as indicated by the Phi ($\varphi = .095$), is weak.

Table 7. Results of the chi-square test for students' proficiency and demographic factors

Demographic Factors	Language Skill		Chi-Square Test of Association
	Low	Average - High	
Sex			$\chi^2 = 7.007$
Male	81	131	$p = .05$
Female	57	160	$\varphi = .128$
Total	138	291	
	Writing Skill		Chi-Square Test of Association
	Low	Average - High	
Sex			$\chi^2 = 8.055$
Male	139	73	$p = .05$
Female	113	104	$\varphi = .137$
Total	252	177	
	Attention to Details Skill		Chi-Square Test of Association
	Low	Average - High	
Age			$\chi^2 = 3.869$
19 years old and below	56	253	$p = .05$
Above 19 years old	32	88	$\phi = .095$
Total	88	341	

Discussion

The present study investigated the first-year students' proficiency, psychological well-being and coping strategies. The student's proficiency level focused on their language, math, reasoning, attention to detail, and vocabulary skills. On the other hand, psychological well-being included the areas identified by Ref. [11]: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. The students' coping styles were measured using the Brief-COPE (Coping Orientation to Problems Experienced) Inventory developed by Ref. [12].

The results of the present study indicate that the first-year students' proficiency level is High Average in Language Skills, Attention to Detail, and Writing Skills. However, there are skills gaps in Math and Reasoning Skills and Vocabulary. These findings imply that the first-year students have the adequate skills that require them to have the opportunity for success in their chosen program. However, as evidenced in the study, there is a need to fill in the skills gaps in math and reasoning skills and vocabulary.

It has been said that mathematical ability is the critical Skill that allows a student to reflect on solutions to problems and determine whether or not they make sense [14]. First-year students may have difficulty making logical and sense-making decisions, which is essential to helping students become self-reliant and independent mathematical thinkers [15].

The student's psychological well-being reveals High levels of six factors of positive functioning: Autonomy, Environmental Mastery, Personal Growth, Positive Relations with Others, Purpose in Life, and Self-Acceptance.

Their High level of autonomy implies that the first-year students are likely to be independent, can resist social pressures and can regulate themselves by personal standards. Their High level of Environmental Mastery indicates that the students are likely to have a sense of mastery and competence in managing the environment. It means that they can effectively use the surrounding opportunities and can choose or create situations or circumstances that are appropriate to their personal needs and values. Meanwhile, their High level of Personal Growth implies that they feel continued development. It means that they are open to new experiences and have the sense of realizing their potential. Their High level of Positive Relations with Others indicates that they are warm and have trusting relationships with others. They can have intense empathy, affection, intimacy, and understanding, give and take human relationships.

On the other hand, the students' High level of Purpose in Life suggests that the students have goals in life and a sense of direction. They feel there is meaning to present and past life and hold beliefs that give life purpose. Meanwhile, the first-year students' High Level of Self-Acceptance implies a positive attitude toward self. They acknowledge and accept multiple aspects of life, both the good and bad qualities, and they feel optimistic about past life.

Psychological well-being is vital in the life of a college student. Ref. [16] stated that the well-being of university students was destined to be disrupted by stressors stemming from the university environment, like academic assignments and deviations in the learning environment. It also increased with high leisure time physical activity among college students. Therefore, the best well-being and lifestyle was to advocate leisure time and physical activity in universities [6]. The university addresses the betterment of psychological well-being through its motto, "Non-Scholae Sed Vitae" (not for school but for life, we learn). The university believes that for the students to have a good and quality student-life experience, they should be exposed to well-balanced school life. However, measuring psychological well-being regularly to assess the student's overall well-being may also be essential. This kind of survey may further help the university recognize the health needs of its students. This way, more efficient programmes can be designed to improve their well-being.

In terms of coping strategies, first-year students adopt different coping strategies, but primarily, they are likely to adopt an approach to coping mechanisms. Accordingly, approach coping mechanisms result in healthier psychological well-being than avoidant coping mechanisms [16]. The correlations between psychological well-being and coping strategies in terms of problem-focused and emotion-focused were found to be significantly positive. In

contrast, psychological well-being is inversely correlated with dysfunctional coping. The better the students' psychological well-being, the more likely they are to adopt strategies that comprise cognitive and behavioural mechanisms. These mechanisms aim to respond to the stressor actively and straightforwardly change the problem [17].

The study of Ref. [18] suggested that having the capability and skills for effective stress management suggests better psychological well-being. Whereas not possessing such abilities and skills roots low levels of psychological well-being [7]. Moreover, maladaptive and dysfunctional coping had a significant positive correlation with emotional exhaustion and cynicism [4], which are aspects that might have adverse influences on psychological well-being.

The association between well-being and demographics revealed that personal growth is associated with sex and age. Female students and younger students are more likely to have better personal growth. They are more likely to see themselves grow, expand, and have to ability to be open to new experiences. An association was also found to be significant between sex and proficiency in Language and Writing Skills. It indicates that female students are more likely to be better at these skills. On the other hand, younger students are more likely to have better skills in attention to detail. The results of the previous studies proved that male first-year college students do significantly better than female first-year college students in adapting to school in many aspects [3].

According to Ref. [18], female students were more likely to report seeking out and receiving care for psychological issues when likened to their male student counterparts. Compared with girls, boys have to adjust their psychological state to adapt to the new environment as soon as possible to meet this internal role expectation. These findings counter the result of the present study, which revealed that female students are more likely to see themselves grow, be open to new experiences, have a sense of realizing their potential, and see improvement in themselves and their behaviour over time.

Conclusion

The results of this study show that the first-year college students of UNC have a skills gap in math, reasoning, and vocabulary. They reflect positive well-being that may help them pursue college life and obstacles that may come their way. It is evident in the coping strategy that they adopt, which leads to better psychological well-being.

The results further suggest that there is a need for the university to come up with programs that will develop the first-year students' critical thinking skills to succeed in mathematics and life. Adjustments in curricular programs, such as focusing on analysis, interpretations, or critical thinking, may also be advantageous for their development. Guidance

Center interventions may also be substantial to help students manage their emotions and learn how to cope and handle adversity in college.

Limitation and Suggestions

Several limitations of this study should be noted. One of these is the distribution of the students per department which limits the study to determine the measures according to college. Second, the survey was conducted online, leading to unequal departmental distribution. Despite these limitations, some imperative practical inferences and valuable evidence can be derived from the present study. This research provided a clear picture of the psychological well-being of first-year students, which is essential in continuing their goals in life. It evaluated the transition of first-year students and how they cope with college life's uncertainties.

Further studies on effective strategies for guiding first-year students to adapt to college life may be explored. The ultimate goal is for the students to excel and become better at facing challenges in the transition and stressful environment of college life. It also helps to understand the gaps in the proficiency level better if the previous school attended by the students is included as one of the factors to be considered.

Conflict of Interest

The authors declare that there is no conflict of interest.

References

[1] Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D., & Flanagan,C. (2007). Development during adolescence: the impact of stage environment fit on young adolescents' experiences in schools and in families. *Am. Psychol*, *48*, 90–101. doi: https://10.1037/0003-066X.48.2.90

[2] Larose, S., Duchesne, S., Litalien, D., Denault, A. S., and Boivin, M. (2019). Adjustment trajectories during the college transition: Types, personal and family antecedents, and academic outcomes. *Res. High. Educ., 60*, 684–710. doi: https://10.1007/s11162-018-9538-7

[3] Rogers, A., Updegraff, K., Iida, M., Dishion, T., Doane, L., Corbin, W., et al. (2018). Trajectories of positive and negative affect across the transition to college: The role of daily interactions with parents and friends. *Dev. Psychol, 54*, 2181–2192. doi: https://10.1037/dev0000598

[4] Yang, Y. T. T. (2010). *Stress, coping, and psychological well-being: Comparison among American and Asian international graduate students from Taiwan, China, and South Korea* (Doctoral dissertation, University of Kansas).

[5] Deci, E. L., & Ryan, R. M. (2008). Hedonia, eudaimonia, and well-being: An introduction. *Journal of Happiness Studies, 9*, 1–11. doi: https://10.1007/s10902-006- 9018-1

[6] Molina-García, J. J., Castillo, I. I., & Queralt, A. A. (2011). Leisure-time physical activity and psychological well-being in university students. *Psychological Reports, 109*, 453- 460. doi: https://10.2466/06.10.13.PR0.109.5.453-460

[7] Bewick, B., Koutsopoulou, G., Miles, J., Slaa, E., & Barkham, M. (2010). Changes in undergraduate students' psychological well-being as they progress through university. *Studies In Higher Education, 35*(6), 633-645. doi: https://10.1080/03075070903216643

[8] Udhayakumar, P. & Iliango, P. (2018). Psychological well-being among college students. *Journal of Social Work Education and Practice, 3*(2), 79-89.

[9] Chao, R. (2012). Managing Perceived Stress Among College Students: The Roles of Social Support and Dysfunctional Coping. *Journal of College Counseling, 15*(1), 5-21. doi: https://10.1002/j.2161-1882.2012.00002.x

[10] Keyes, C. L. M., Shmotkin, D., & Ryff, C. D. (2002). Optimizing well-being: The empirical encounter of two traditions. *Journal of Personality and Social Psychology, 82*(6), 1007–1022. doi: https://10.1037/0022-3514.82.6.1007.

[11] Ryff, C. D. (2014). Psychological well-being revisited: Advances in the science and practice of eudaimonia. *Psychotherapy and Psychosomatics, 83*(1), 10–28
[12] Carver, C. S. (1997). You want to measure coping, but your protocol's too long: Consider the brief. *International Journal of Behavioral Medicine, 4*(1), 92–100.
[13] NovoPsych. Coping orientation to problems experienced inventory (brief-COPE). (2022). doi: https://novopsych.com.au/assessments/formulation/brief-cope/
[14] New Jersey Mathematics Curriculum Framework (1996). THE FIRST FOUR STANDARDS STANDARD 4– REASONING http://archive.dimacs.rutgers.edu/nj_math_coalition/framework/ch01-04/ch01-04_s4.html
[15] Resnick, Lauren. (1987). *Education and Learning to Think*. Washington, DC: National Academy Press.
[16] Chan, P., Tsang, C., Tse, A., Wong, H., Law, W., Lau, C., Lit, Tsz, Ng, Y., & Ho, M. (2022). Psychological Well-being and coping strategies of Healthcare Students during the Prolonged COVID-19 Pandemic. *Teaching and Learning in Nursing 17*, 482-486.
[17] Freire, C., Ferradas, M., Regueiro, B., Rodriguez, S., Valle, A., & Nuñez, J. (2020). Coping strategies and self-efficacy in university students: A person-centred approach. *Approach Front Psychol, 11*, 841. doi: https://10.3389/fps.2020.00841
[18] Burris, J. L., Brechting, E. H., Salsman, J., & Carlson, C. R. (2009). Factors associated with the psychological well-being and distress of university students. *Journal of American College Health, 57*(5), 536-544.

Authors



Maria Marietta B. Basbas is a lecturer in the Faculty of Arts and Sciences at the University of Nueva Caceres, Phlippines. She has a strong passion for research in the field of community psychology. Her dedication and expertise have been recognized through the prestigious Research Engagement Excellence Awards she has received. Her research focus on community psychology allows her to delve into the intricate dynamics of individuals within communities, studying the factors that contribute to their well-being and social interactions. Her research not only contributes to the field but also provides valuable insights for addressing community issues and promoting positive change. (email: maria.basbas@unc.edu.ph).