

Journal of Education and Practice (JEP)

**Psychological Well-Being as Correlate of Academic Achievement
among Postgraduate Students in Ghanaian Public Universities**



CAR
Journal

Psychological Well-Being as Correlate of Academic Achievement among Postgraduate Students in Ghanaian Public Universities

 ^{1*} John N-yelbi, ² Mary Magdalene Awuku-Larbi

^{1*} Department of Counselling Psychology, Faculty of Applied Behavioural Sciences in Education, University of Education, Winneba, Post Office. Box 25 Winneba, West Africa,

² Education Studies Department, Accra College of Education, Post Office Box LG 221 Legon, West Africa



<https://orcid.org/0000-0000-8210-9787>

Accepted: 14th Apr 2024 Received in Revised Form: 14th Apr 2024 Published: 14th May 2024

Abstract

Purpose: The purpose of the study was to examine postgraduate students' psychological well-being as correlate of their academic achievement in Ghanaian public universities.

Methodology: The study adopted a quantitative approach underpinned by a cross-section design. The population of the study comprised of postgraduate drawn from three public universities in Ghana. A sample of 140 students between the ages of 29 to 45 years were drawn using simple random sampling. Psychological well-being scale and academic achievement questionnaire were employed for data collection. Research hypotheses 1 and 2 were analysed using Pearson correlation and independent sample t-test.

Findings: The study reported a strong positive correlation between the psychological well-being and academic achievement. The study further that reported gender differences exist in psychological well-being and academic achievement. Findings revealed a statistically significant correlation existed between psychological well-being and academic achievement. Also, the study reported a statistically significant gender difference in psychological well-being and academic achievement.

Unique contribution to theory, policy and practice: The study recommends that counsellors and psychologists should integrate psychological well-being theory and academic achievement theory to explain how psychological well-being influence academic achievement. The study recommends that University in collaboration with counsellors and psychologists should institute psychological well-being focused initiatives such as mindfulness training, peer support groups, and counselling services into postgraduate programmes. Also, it was recommended that universities should institute peer mentoring initiatives where students will be paired with train mentors for support and guidance.

Keywords: *Achievement, Academic Achievement, Well-Being, Psychological Well-Being*

INTRODUCTION

Studies have reported that there is a significant positive correlation between the dimensions of psychological well-being which are environmental mastery, personal growth, positive relationship with others, personal goals and self-acceptance with academic achievement (Mustafa et al., 2020). This suggests that when psychological well-being of postgraduate students increases, it leads to a corresponding increase in their academic achievement. However, research space is replete with evidence of most postgraduate students experiencing various degrees of stress and depression due to the strenuous nature of their programme. For instance, a study conducted by Ramachandiran and Dhanapal (2018) revealed that majority of postgraduate students (78.2%) had moderate level of stress, while 12.9% of them were highly stressed with a small number being lowly stressed due to the strenuous nature of their programme.

Moreover, Mustafa et al. (2020) found that most of postgraduate students felt depressed when the learning environment was uncomfortable as well as having relationship problems with parents, friends and lecturers. This has the tendency of reducing their psychological well-being leading to a low academic achievement. In Ghana, research has shown that 31.1% of postgraduate students had mild to moderate depressive symptoms, while 8.1% indicated severe depressive symptoms (Asante & Andoh-Arthur, 2015). Notably, the stressors associated with pursuing postgraduate studies does not just affect students' academic performance, but also their mental and physical well-being (Zegeye et al., 2018). Besides, Azmi et al. (2022) posit that psychological well-being plays great importance in improvement of students' academic performance. A positive psychological well-being of postgraduate students is necessary for them to navigate the challenges of graduate studies, build resilience, and maintain motivation. This will enable them to better cope with academic pressure and stress, develop a growth mindset, leading to increased academic achievement.

The concept of psychological well-being stems from hedonic approach which talks about subjective well-being and it is related to happiness and eudaemonic approach, which is the connection between psychological well-being and human potential development (Panahi et al., 2013). The authors added that psychological well-being refers to the extent to which people feel that they have meaningful control in their life and their activities. Shahira et al. (2018) posited that psychological well-being is a combination of positive circumstances in all spectrums of life such as contentment, both physically and spiritually plus optimal functioning. In addition, psychological well-being refers to how individuals control their life and activities (Udhayakumar & Illango, 2018). Psychological well-being does not just make us feel good all the time but also involves negative emotions such as frustration, failure, and grief which are normal things in life (Stamp et al., 2015). Although there are differences in opinions, psychological well-being has been viewed as a multi-dimensional concept (Ryff & Singer, 2015). Six factors of psychological well-being include self-acceptance, personal growth, purpose in life, positive relations with others, environmental mastery and autonomy (Stamp et al., 2015).

McCulloch (1991) has shown that satisfaction, morale, positive affect and social support are the indicators of psychological well-being. A person high in psychological well-being not only carries higher level of life satisfaction, self-esteem, positive feelings, and attitudes, but also manages tensions, negative thoughts ideas and feeling more efficiently. The psychology of well-being aims to help people live more rewarding lives including close relationships, responsibilities to one's community and enjoyment of one's life. Azmi et al. (2022) postulated that psychological well-being is a subjective feeling of contentment, happiness, satisfaction with life's experiences and of one's role in the world of work, sense of achievement, utility, belongingness and no distress, dissatisfaction or worry.

Research has shown that positive emotional and social support plays a fundamental role in building the psychological well-being (Siddiqui & Khan, 2016). Individuals who have high psychological well-being will lead a happy life and will be satisfied with their professional and personal life, capable and well-supported (Panahi, 2016). Based on the theory of psychological well-being, psychological health of an individual is determined by its function in certain aspects of life (Udhayakumar & Illango, 2018). In the lives of postgraduate students, their academic life cannot be overlooked. Siddiqui and Khan (2016) stated that for people to achieve psychological well-being, there is the need to have a good relationship with others, appreciate the environment, accepting themselves and the past, have a goal in life, strive to develop and make their own decisions. Postgraduate students in their quest for educational attainment is predicated on their academic achievements and academic success which is regarded as one of the major life accomplishment and key determinants of life.

Klapp et al. (2023) found that psychological well-being was negatively related to academic achievement, suggesting that students with lower psychological well-being achieved higher than other students. Hence, higher-achieving students experienced more stress and worries about tests and homework than lower-achieving students. This corroborate Låftman et al. (2013) findings which reported that higher-achieving students experience greater internal and external expectations to achieve well in school. Internal expectations could include aspirations to achieve well to get grades that allow the future success or to maintain an identity that is based on high performance. Additionally, comparison with classmates may also increase the pressure to perform well. External expectations, on the other hand, could include parents' and teachers' expectations.

While findings in many studies indicate that there is gender difference in well-being, where girls tend to experience higher levels of stress in school (Banks & Smyth, 2015; Giota & Gustafsson, 2017; Haugland et al., 2001; Sonmark et al., 2016), others report contradictory or no gender variations (Högberg et al., 2019; Miller et al., 2013; Pietarinen et al., 2014). For instance, Miller et al. (2013) used a relatively large sample of 7–11-year-old students and measured well-being with indicators such as self-esteem, psychological health, school environment, enjoyment of education, and peer relationships. They found no significant evidence for gender difference in well-being. Akhter (2015) argued that gender difference in psychological well-being exists because of biological and psychological differences due to the level of satisfaction with life among males and

females, and when these differences interact with organisational environment or situations, they can lead to different outcomes. The author added that these differences could be because of comfortable and better personal or family life, good interpersonal relationships, and effective communication skills and also like more leniency towards females than the males.

In Ghana, pursuing postgraduate studies in recent times has become increasingly daunting due to the combined nature of academic and social demands where students undergo rigorous taught and examinable courses, writing of dissertations, and in some cases, practicum for students in counselling psychology. In most instances, majority of these students are all adults who are into full time careers, while some are married with children, still others are also into healthy and unhealthy relationships. However, for those who are single, they may be going through loneliness, solitude and adjusting to the demands of daily pressures which can be quite overwhelming.

Although academic achievements are important to postgraduate students, without a positive attitude, students can experience stress in fulfilling their academic goals (Pariat et al., 2014). During postgraduate students' quest for knowledge and academic excellence, they are confronted with various responsibilities and challenges and this could be the main reason and primary source of their stress and anxiety (Turashvili & Japaridze, 2012). Besides, in many instances, the academic demands of postgraduate students may have a serious impact on their psychological well-being. In most instances, majority of these students face challenges such as living far away from home, managing personal finances, building friendships and learning to adapt to the new academic demands (Stamp et al., 2015).

A plethora of studies have been conducted to find out the first-rate predictors either psychological or social or both, of high-quality and excellent academic performance among students (DuPaul et al., 2004; Evans & Rosenbaum, 2008, Aluja & Blanch, 2004; Schwartz Gorman, Duong, & Nakamoto, 2008). In addition, several researchers have investigated the relationship between intelligence, gender and academic achievement (Duckworth & Seligman, 2006; Fraine et al., 2007; Habibollah et al., 2008). In spite of these known factors influencing students' academic achievement, it seems to suggest that there is paucity of studies that has research into students' psychological well-being which also contributes significantly to academic achievement. This has created a knowledge gap which will be filled in this present study by broadening the scope of the study to include correlate of academic achievement among postgraduate students of University of Education, Winneba.

In recent times, mental health studies particularly conducted among postgraduate students has catch the glimpse of many stakeholders due to the greatest new concern society has to faced, which is psychological distress (Shahira et al., 2018; Stallman et al., 2017). Postgraduate studies conceptualised as the highest form of education brings about higher academic stress, reduce the level of academic support, and brings about social segregation from families and friends, potentially resulting in long-term psychological distress (Archuleta et al., 2013). Academic achievements in quizzes, assignments, term papers, presentations, examinations, time management

and the number of subjects taken at one time have proven to be the sources of stress for most students including postgraduate students (Beiter et al., 2015).

More importantly, it appears that in most of the previous studies, their focus has been on undergraduate and college students resulting in the creation of population lacuna. This study intends to bridge this gap by extending the population to postgraduate students. This study will contribute significantly to postgraduate studies programme development and implementation. Furthermore, this study will be useful in the professional fields such as Counselling and Psychology. This is because if students' psychological well-being is good and prosperous, they can function more effectively and efficiently and this might significantly influence their academic achievement. It is in view of the above importance that has aroused the curiosity of the researcher to examine postgraduate students' psychological well-being as correlate of their academic achievement in Public Universities in Ghana.

Research Hypotheses

1. H₀: There is no statistically significant relationship between postgraduate students' psychological well-being and academic achievement.

H₁: There is a statistically significant relationship between postgraduate students' psychological well-being and academic achievement.

2. H₀: There is no statistically significant gender difference in postgraduate students' psychological well-being and academic achievement.

H₁: There is a statistically significant gender difference in postgraduate students' psychological well-being and academic achievement.

Theoretical Framework

The study was underpinned by two theoretical models namely; Ryff's Theory of Psychological Well-Being and Walberg's Theory of Academic Achievement.

Ryff's Theory of Psychological Well-Being (Ryff, 1989)

Ryff (1989) viewed psychological well-being as the optimal psychological functioning and experience. From the theory, individuals' life experiences and their interpretations of these experiences influence their well-being. The six components of the theory include; Autonomy, Environmental Mastery, Positive Relations with Others, Purpose in Life, Personal Growth, and Self-Acceptance. The self-acceptance component explains that an important component of psychological well-being is a positive attitude towards oneself and one's present and past life. In view of this, individuals should be able to celebrate their strengths and weaknesses rather than focusing only on their positive or negative.

The positive relations with others component also highlight the need for valued, satisfying relationships with others as an important component of psychological well-being. The autonomy component also expresses the need for an individual to have a sense of self-determination,

independence, and freedom from norms. They should have the freedom of choice and not feel pressurised to please others or meet the societal expectations. In addition, the purpose in life component also indicates that the individual should have life goals and a belief that one's life is meaningful. The environmental mastery is also another component of psychological well-being that highlights the ability to manage life and one's surroundings. There is also the personal growth component that portrays the need to be open to new experiences as well as having continued personal growth.

Walberg's Theory of Academic Achievement (1981)

Walberg's theory of academic achievement posits that psychological characteristics of individual students and their immediate psychological environments influence educational outcomes such as cognitive, behavioural, and attitudinal (Reynolds & Walberg, 1992). The theory identified student ability/prior achievement, motivation, age/developmental level, quantity of instruction, quality of instruction, classroom climate, home environment, peer group, and exposure to mass media outside of school as the nine key variables that influence educational outcomes (Walberg et al., 1986). Besides, the theory recognises not only individualistic factors that influence academic achievement but also considers the complexity of human learning by espousing on the factors that consistently predict academic achievement (Maina et al., 2020; Rugutt & Chemosit, 2005). In the case of postgraduate students, their immediate environment includes but no limited to quantity of instruction, quality of instruction, type of academic engagement that exist between the students and their instructors and the quality of interaction between students and other college students.

METHODOLOGY

The study employed a cross-sectional survey using quantitative approach. This design was used for this study because the researchers were interested in investigating the current state of postgraduate students' psychological well-being as correlate of their academic achievement in Ghanaian public universities. Postgraduate students who were in the second year of their studies were purposively selected because they had gone through taught courses and would be in a position to provide the relevant information with regards to how their psychological well-being serve as correlate to their academic achievement.

Multi-stage sampling technique was used to sample three Public Universities namely; University of Education, Winneba, University for Development Studies and University of Cape Coast. Simple random sampling technique was then used to sample 140 participants from the three Universities to constitute the sample for the study using the draw and hat method. In all, 140 participants were sampled from these Universities to participate in the study. The sample comprised of 46 students from University of Education, Winneba, and 47 each from University for Development Studies and University of Cape Coast.

Two instruments namely; Psychological Well-Being Scale (PWB-S) and Academic Achievement Questionnaire (AAQ) were adapted and used to collect data for the study. The two

instruments were both piloted at University of Ghana. A Psychological Well-Being Scale (PWB-S) developed by Bhogle and Jaiprakash (1995) was used to measure postgraduate students' psychological well-being. The scale comprised of 28 items with the two alternative response categories – “Yes” and “No”. The score items were scored in a positive or negative direction, and the total score gave the estimation of psychological well-being. Thus, higher score suggested higher psychological well-being while lower scores indicated lower psychological well-being. The alpha coefficient was found to be 0.825 after the pilot study.

Academic achievement questionnaire developed by Vachova and Novotny (2020) was employed to measure postgraduate students' academic achievement. The questionnaire comprised of 13 items which was rated on a 4-point Likert scale with responses of strongly disagree, disagree, agree and strongly agree. After adapting the instruments, it was given to experts in measurement and evaluation who perused it and made corrections, suggestions and recommendation which were duly incorporated in the final version. Anim (2005) argued that content and construct validity are determined by expert judgement. Its Cronbach Alpha (α) coefficient yielded 0.86 signifying that the questionnaire was reliable and capable of obtaining the needed data for the study.

Ethical Consideration of the Study

In order to adhere to the principle of informed consent in social research, consent was sought from the participating Universities before the conduct of the study. The purpose of the study was clearly stated and what was required of the respondents and the schools' authorities. To ensure confidentiality, the respondents were assured that their identities would be concealed. In achieving this purpose, postgraduate students were given numbers that they wrote on their questionnaire sheets instead of their names, which made it difficult for people to identify the respondents. Individual respondents were assured of voluntary withdrawal from the study.

RESULTS

Research Hypothesis 1

1. H_0 : There is no statistically significant relationship between postgraduate students' psychological well-being and academic achievement.

H_1 : There is a statistically significant relationship between postgraduate students' psychological well-being and academic achievement.

This hypothesis sought to find out the relationship between postgraduate students' psychological well-being and academic achievement.

This hypothesis sought to find out the relationship between postgraduate students' psychological well-being and academic achievement. In order to achieve this, a Pearson Product-Moment

Correlation analysis was performed. Table 1 presents the results of the analysis as shown below.

Table 1: Summary of Pearson Correlation of Postgraduate Students' Psychological Well-Being and Academic Achievement

		Psychological Well-Being	Academic Achievement
Psychological Well-Being	Pearson Correlation	1	.349**
	Sig. (2-tailed)		.000
	N	140	140

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

Source: Field Data (2024)

Table 1 indicate that there is statistically significant strong positive relationship between the dependent variable (psychological well-being) and the independent variable (academic achievement) at a significant of 0.00 level. This suggests that a unit increase in psychological well-being of postgraduate students will lead to a corresponding increase in their academic achievement. Positively correlated with academic achievement. Therefore, postgraduate students' psychological well-being has statistically significant association with academic achievement. This results offer enough evidence for the alternate hypothesis which stated that there is a statistically significant relationship between postgraduate students' psychological well-being and academic achievement to be accepted.

Research Hypothesis 2

2. H₀: There is no statistically significant gender difference in postgraduate students' psychological well-being and academic achievement.

H₁: There is a statistically significant gender differences in postgraduate students' psychological well-being and academic achievement.

Research Hypothesis Two sought to examine the gender difference in postgraduate students' psychological well-being and academic achievement. An independent sample t-test was conducted to find out and compare the means and standard deviations of the two sexes (males and females) in relation to their psychological well-being and academic achievement. The results are presented in Table 2 below.

Table 2: Summary of Statistics of Independent Sample t-test

Gender	N	Mean	SD	df	T	Sig.
Males	82	2.26	0.50	138	-2.938	0.004
Females	58	2.04	0.37			

Significant is at 0.05

Source: Field Data (2024)

From Table 2, the results shows that there was statistically significant gender difference in psychological well-being and academic achievement of male and female postgraduate students ($t=2.938$, $p < 0.05$, $df=138$, $p =0.004$) at 0.05 level of significance. By comparing the means and standard deviation of male students ($M=2.26$, $SD=0.5$) and female students ($M=2.04$ $SD=.37$). It can be seen that the male students had higher mean scores compared to female students. This results further provide supportive evidence to accept the alternate hypothesis which states that there is a statistically significant gender difference in postgraduate students' psychological well-being and academic achievement.

DISCUSSION

The results of the study found that there is a strong positive relationship between psychological well-being and academic achievement among students in the sample. This is consistent with the findings of Panahi (2016) who holds the view that individuals who have high psychological well-being will lead a happy life and will be satisfied with their professional and personal life, capable and well-supported. If the psychological well-being of postgraduate students is enhanced, they will have positive acceptance of themselves, gain autonomy where they can have a sense of self-determination, clear purpose in live which will resort to high academic achievement. Relatedly, the results from the study aligns with the findings of Azmi et al. (2022), who posited that psychological well-being is a subjective feeling of contentment, happiness, satisfaction with life's experiences and of one's role in the world of work, sense of achievement, utility, belongingness and no distress, dissatisfaction or worry. In the view of Beiter et al. (2015), when there is enhance psychological well-being, individuals will not worry about academic achievements in quizzes, assignments, term papers, presentations, examinations, time management and the number of subjects taken at one time. Besides, this results further concurs with McCulloch

(1991) assertion that has a person high in psychological well-being not only carries higher level of life satisfaction, self-esteem, positive feelings, and attitudes, but also manages tensions, negative thoughts ideas and feeling more efficiently, hence, having stable mind to score high in academic achievement.

Furthermore, the results reported that differences exist in male and female postgraduate students' psychological well-being and academic achievement with male students scoring high than their female counterparts. This result is consistent with the findings of Akhter (2015) who asserts that gender difference in psychological well-being exists because of biological and psychological differences due to the level of satisfaction with life among males and females, and when these differences interact with organisational environment or situations; they can lead to different outcomes. The author added that these differences could be because of comfortable and better personal or family life, good interpersonal relationships, effective communication skills and also like more leniency towards females than the males. A plausible explanation could be that most male postgraduate students in Ghana are married and have children. Due to role stratification, male postgraduate students are heading families and serve as breadwinners. In the mist of academic, financial and social challenges, they are still expected to provide the basic necessities of their families such as food, shelter, medical expenses and payment of school fees for their wards who are still in school.

CONCLUSIONS

Based on the study's findings, it can be concluded that students with higher psychological well-being tends to achieve better academically and vice-versa. This implies that promoting psychological well-being among postgraduate students could potentially lead to improved academic achievement. Furthermore, the findings revealed that gender plays an important role in postgraduate students' psychological well-being and its corresponding influence on their academic achievement while pursuing postgraduate studies.

RECOMMENDATIONS

Drawing from the conclusions of the study, the study therefore recommends that Public

Universities in Ghana should institute targeted interventions such as providing tailored counselling services to postgraduate students on effective ways to deal with stress and pressures emanating from postgraduate studies, organise regular stress management workshops, and create supportive and inclusive environment that fosters positive psychological health to promote postgraduate students' psychological well-being and to guarantee optimum academic achievement.

Furthermore, since gender plays an important role in postgraduate students' psychological well-being and academic achievement, the study therefore recommends that Public Universities in Ghana should foster positive peer relationships, and create inclusive environment that value diversity and promote equal opportunities which can enhance academic motivation for both genders.

In terms of counselling practice, counselling is an indispensable service in attaining overall students' well-being and serve as an effective means through which excellent academic success can thrive. In order to effectively manage stress associated with postgraduate studies, students upon gaining admissions, should be assigned personal academic counsellors who will closely work

with them to address the many challenges that confront them in the course of their studies, and ensure that they achieve the best in their academics. Also, there should regular workshops, seminars and symposia where postgraduate will have the opportunity to meet with friends and colleagues where there can exchange of ideas and experiences so as to create a positive self-acceptance and promote social cohesion.

REFERENCES

- Akhter, S. (2015). Psychological well-being in student of gender difference. *The International Journal of Indian Psychology*, 2(4), 2349-3429.
- Anim, M. E. (2005). *Social science research: Conception, methodology and analysis*. Kampala: Makerese University Press.
- Archuleta, K. L., Dale, A., & Spann, S. M. (2013). College students and financial distress: Exploring debt, financial satisfaction, and financial anxiety. *Journal of Financial Counseling and Planning*, 24(2), 50-62.
- Azmi, S., Rizvi, K., & Irshad, S. (2022). Influence of psychological well-being on academic performance. *International Journal of Advanced Research*: <https://www.researchgate.net/publication/364647414>
- Beiter, R., Nash, R., Mccrady, M., Rhoades, D., Linscomb, M., Clarahan, M., & Sammut, S. (2015). The prevalence and correlates of depression, anxiety, and stress in a sample of college students. *Journal of Affective Disorders*, 173, 90-96. 10.1016/j.jad.2014.10.054
- Bhogle, S., & Jaiprakash, I. (1995). Development of the psychological well-being questionnaire. *Journal of Personality & Clinical Studies*, 51, 5-9.
- Klapp, T., Klapp, A., & Gustafsson, J. (2023). Relations between students' well-being and academic achievement: Evidence from Swedish compulsory school. *European Journal of Psychology and Education*. <https://doi.org/10.1007/s10212-023-00690-9>
- Låftman, B. S., Almquist, B. Y., & Östberg, V. (2013). Students' accounts of school performance stress: A qualitative analysis of a high-achieving setting in Stockholm. Sweden. *Journal of Youth Studies*, 16(7), 932–949.
- Maina, J. J., Zakari, A. T., Alkali, I. A., & Salisu, R. A. (2020). Academic success predictors for architecture students at Kano University of Science and Technology, Wudil, Kano State, Nigeria. *Bayero Journal of Pure and Applied Sciences*, 13(2), 125-133. <http://dx.doi.org/10.4314/bajopas.v13i2.17>
- Mustafa M. B., Rani, N. H. M., Bistaman, M. N., Salim, S. S. S., Ahmad, A., Zakaria, N. H., & Safian, N. A. A. (2020). The relationship between psychological well-being and university students' academic achievement. *International Journal of Academic Research in Business & Social Sciences*, 10(7), 518-525. <http://dx.doi.org/10.6007/IJARBS/v10-17/7454>

- Panahi, S. (2016). Predictors of Psychological Well-being among Malaysian graduates. *The European Journal of Social and Behavioural Sciences*, 16(2), 2067-2083. 10.15405/ejsbs.186
- Panahi, S., Yunus, A. S. B., & Roslan, S. B. (2013). Correlates of psychological well-being among postgraduate students in Malaysia. *Report and Opinion*, 5(8). <http://www.sciencepub.net/report>
- Pariat, M. L., Rynjah, M. A., Joplin, M., & Kharjana, M. G. (2014). Stress levels of college students: Interrelationship between stressors and coping strategies. *Journal of Humanities and Social Science*, 19(8), 40-46.
- Ramachandiran, M., & Dhanapal, S. (2018). Academic stress among university students: A quantitative study of generation Y and Z's perception. *Pertanika Journal of Social Sciences & Humanities*, 26(3).
- Reynolds, A. R., & Walberg, H. J. (1992). A process model of mathematics achievement and attitude. *Journal of Research in Mathematics*, 23, 306-328.
- Rugutt, J. K., & Chemosit, C. C. (2005). A study of factors that influence college academic achievement: A structural equation modelling approach. *Journal of Educational Research & Policy Studies*, 5(1), 66-90.
- Ryff, C. D., & Singer, B. (2015). Psychological well-being: Meaning, measurement, and implications for psychotherapy research. *Psychotherapy and Psychosomatics*, 14-23.
- Shahira, M. N., Hanisshya, H., Lukman, Z. M., Normala, R., Azlin, C., & Kamal, M. Y. (2018). Psychological well-being among university students in Malaysia. *International Journal of Research and Innovation in Social Science (IJRISS)*, 3(12). www.rsisinternation.org
- Siddiqui, Z. U., & Khan, M. I. (2016). Psychological well-being among university students. *The International Journal of Indian Psychology*, 3(4), 114-118.
- Stallman, H. M., Ohan, J. L., & Chiera, B. (2017). The role of social support, being present, and self-kindness in university student psychological distress. *Australian Psychologist*, 53(1), 1-8.
- Stamp, E., Crust, L., Swann, C., Perry, J., Clough, P., & Marchant, D. (2015). Relationships between mental toughness and psychological well-being in undergraduate students. *Personality and Individual Differences*, 75, 170-174.10.1016/j.paid.2014.11.038
- Turashvili, T., & Japaridze, M. (2012). Psychological well-being and its relation to academic performance of students in Georgian context. *Problems of Education in the 21st Century*, 49.
- Udhayakumar, P., & Illango, P. (2018). Psychological well-being among college students. *Journal of Social Work Education and Practice*, 3(2), 79-89.

- Vachova, L., & Novotny, S. (2020). *New measure of academic achievement: Testing the reliability and factor structure of academic achievement questionnaire (AAQ)*. 13th Annual International Conference of Education, Research and Innovation. University of Olomouc.
- Walberg, H. J. (1986). A psychological theory of educational productivity. In F.H. Farley & N. Gordon (Eds.), *Psychological and Education* (pp.81-110).
- Walberg, M. C., Haertel, G.D., & Walberg, H. J. (1993). Toward a knowledge base for school learning. *Review of Educational Research*, 63, 249-294.
- Zegeye, A., Mossie, A., Gabrie, A., & Markos, Y. (2018). Stress among postgraduate studies and its association with substance use. *J Psychiatry*, 21, 448.



©2023 by the Authors. This Article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>)