**Original Research Article**

**The Impact of Stress, Burnout, Depression, and Anxiety on Student Well-being: Evidence from University Students.**

**Abstract**

*This cross-sectional study investigated the relationships between well-being, stress, burnout, depression, and anxiety at the University of Cape Coast. A sample of a sample of 279 students completed a validated self-report measures assessing well-being, perceived stress, burnout, depression, and anxiety using a comprehensive scale. Well-being was evaluated using a comprehensive well-being scale, while stress, burnout, depression, and anxiety were assessed using standardised instruments. Bivariate correlation and multiple regression analyses were conducted to explore the relationships between the variables. The results indicated significant negative correlations between well-being, stress, burnout, depression and, anxiety. Higher levels of stress, burnout, depression, and anxiety were associated with lower levels of well-being among University of Cape Coast students. The findings of this study highlight the considerable impact of stress, burnout, depression, and anxiety on the well-being of University of Cape Coast students. These results underscore the importance of addressing these factors to support students' mental health and overall well-being. Targeted interventions focused on stress management, burnout prevention, and mental health support may be crucial in promoting a positive and thriving university experience for students. This study contributes to the growing literature on student mental health in Ghanaian higher education and highlights the need for institutional policies promoting holistic well-being.*

**Keywords:** Well-being, stress, burnout, depression, and anxiety.

**Introduction**

Stress, burnout, depression, anxiety, and other issues can have a major impact on university students' academic performance and overall well-being, making their well-being a crucial concern (Wei et al., 2021). Increased academic demands, social difficulties, and changes are common aspects of university life (Borman et al., 2019). Stress is a circumstance that puts pressure on people and makes them feel troubled (Ensel & Lin, 2015). Negative circumstances lead to stress, and stress leads to a variety of physical and mental issues (Ovsiannikova et al., 2024).

According to Lazarus' (1993) psychological stress theory, stress is centred on two ideas: (a) how an individual assesses and copes with events for their own well-being, and (b) how they attempt to think and act in order to manage specific demands from outside sources. From this angle, the person's stress is triggered by an external demand or negativity, which exacerbates the stress . The theory emphasises that stress arises from the interaction between an individual and their environment, focusing on two main processes: cognitive appraisal and coping. Cognitive appraisal involves evaluating whether a situation threatens one’s well-being, while coping refers to the strategies used to manage these demands, either by addressing the problem or regulating emotional responses. Stress, therefore, is not solely caused by external events but by how individuals perceive and respond to them. This theory highlights the personal and adaptive nature of stress, explaining why people react differently to similar situations, and is particularly relevant for understanding how students manage academic and emotional challenges. The theory explains how students’ mental health is shaped by their appraisal of academic and personal challenges, and by the coping strategies they employ . When stress is perceived as overwhelming and coping is ineffective, it can lead to burnout, anxiety, and depression. Conversely, students with strong coping mechanisms tend to maintain better well-being. The theory highlights that individual differences in perception and coping are key to understanding varied mental health outcomes among students.

Managing schoolwork, tests, relationships, financial obligations, and other demands in life can lead to stress (Lovin & Bernardeau-Moreau, 2022). Burnout is a condition of emotional, bodily, and mental weariness that can result from prolonged and severe stress (Prada-Ospina, 2019). Burnout can cause students to feel overburdened, exhausted, and disengaged from their academic work (Fiorilli et al., 2022). The difficulties faced by university students, such as social isolation, adjustment problems, and academic expectations, may put them at risk (Baruah & Sinha, 2023). Excessive concern, fear, and apprehension are symptoms of anxiety disorders (Fiorilli et al., 2022). University students may feel anxious about their future uncertainties, social relationships, or academic success (Wu et al., 2020).

University students' mental health and general well-being have gained more attention in recent years, as they are vital components of academic performance and overall success and overall success (Alam, 2022). Students' mental health may suffer greatly during the difficult transition to university life, which is characterised by social adaptations, academic obligations, and other demands on their time (Alsubaie et al., 2019). Stress, burnout, despair, and anxiety are among the many mental health issues that university students face, and these issues have been shown to negatively impact their academic performance...”and general well-being (Hammoudi Halat et al, 2023). Like many other institutions of higher learning, the University of Cape Coast faces difficulties in preserving the mental health of its student body. Understanding the complex relationships between different mental health issues and recognising potential risk and protective factors that affect students' well-being is crucial as they traverse their academic and personal development.

The presence of chronic stress, caused by the demands of the academic activities at University of Cape Coast, can lead to burnout, a syndrome characterised by three dimensions: emotional exhaustion, dehumanisation (or depersonalisation) and, reduced academic achievement (Farmer,2020). Mental and physical fatigue as well as a sense of incapacity are hallmarks of emotional exhaustion, which can result in anxiety and depressive symptoms (Koutsimani et al., 2019). Dehumanisation, a state in which a person becomes impersonal, cynical, sardonic, and indifferent towards other people as a means of social distance and in an effort to avoid tiredness, is both a result and a cause of burnout (Cazolari et al., 2020). Ultimately, the person experiences a sense of failure and discontent as their actions lose their purpose (Dyrbye et al., 2016). Excessive fatigue, sleep issues, headaches, muscle soreness, gastrointestinal issues, eating problems, and immunodeficiencies are some of the primary physical effects of burnout (Buchanan, 2019). Inhibition, negligence, lack of initiative, tendency to isolate, lack of interest in work and or leisure, and lack of flexibility are examples of behavioural symptoms; difficulty concentrating, memory loss, and slow thinking are examples of cognitive symptoms; and frustration, anxiety, depression, discouragement, and aggression are examples of emotional symptoms (Cazolari et al., 2020).

Anxiety, depression, burnout, stress, and well-being are all intricately related. The interaction of these factors can produce various mental and emotional outcomes and influencing one another (Bogaerts et al., 2021). Overall wellbeing is significantly impacted by stress (Panatik et al., 2012). High levels of stress, particularly chronic stress, can have detrimental consequences on a person's physical and emotional well-being (Panatik et al., 2012). Stress lowers general well-being by causing fatigue, irritability, and difficulty overcoming obstacles (Prasad et al., 2016). Burnout is a condition of physical, mental, and emotional weariness brought on by ongoing stress at work (Prada-Ospina, 2019). Burnout denotes a substantial deterioration in a person's ability to function effectively across various aspects of life and is therefore closely associated with well-being. Detachment from obligations, a decline in general well-being, and a drop in job and personal life satisfaction are all consequences of burnout (Prada-Ospina, 2019).

Depression has a detrimental effect on well-being and can influence social connections, work productivity, and physical health. Improving general well-being requires treating depression (Goodman et al., 2018). Excessive anxiety can be upsetting and can make it difficult for a person to operate normally. Persistent anxiety lowers general life satisfaction and well-being (Goodman et al., 2018). Persistent stress increases the risk of developing anxiety and depression and can lead to burnout (Lopes Cardozo et al., 2012). Conversely, burnout can increase stress levels and play a role in the emergence of mental health conditions mental health conditions such as anxiety and depression (Kakiashvili et al., 2013). Similar, those who are depressed or anxious may be more prone to burnout since they have less drive and energy (Hobfoll & Freedy, 2017). Burnout, stress, anxiety, and depression can all lead to a decline in general well-being and life satisfaction. A person's mental and emotional health may suffer more severe consequences as a result of the interaction of these elements, which can mutually intensify their effects (Hobfoll & Freedy, 2017).

Research from both domestic and foreign sources indicates that students experience higher rates of stress, anxiety, depression, and burnout than the general population (Almeida et al., 2019; Capdevila-Gaudens et al., 2021; Aghajani Liasi et al., 2021). According to earlier research, stress has a detrimental impact on students' academic performance and mental health (Husky et al., 2020; Yang et al., 2021; Ye et al., 2020). According to some, university students' academic stress leads to depression (Peasah et al., 2024; Rehman et al., 2021) and school burnout (Vu & Bosmans, 2021), as well as having a detrimental impact on their subjective well-being (Arslan & Allen, 2021). In this context, the aim of this study is to comprehensively investigate the direct and indirect relationships between well-being, stress, burnout, depression, and anxiety among students of the University of Cape Coast.

Understanding these interconnections would enable the university to design more effective and targeted mental health support services, ensuring that interventions are responsive to the actual needs of students. Improved psychological well-being is closely linked to better academic performance; hence, the findings would inform academic policies and practices that foster a healthier learning environment. This research would also provide empirical data that can guide institutional policy-making and resource allocation, promoting the development of sustainable and evidence-based wellness programs. Beyond the university, the study would contribute to the broader national and global discourse on student mental health, especially by filling gaps in the literature. It would serve as a foundation for future research in mental health, enabling comparative studies across universities in Ghana and in similar educational settings.

**Research Questions**

1. *What is the* *relationship between well-being, stress, burnout, depression and anxiety?*
2. *What is the impact of depression and anxiety, stress and burnout on well-being?*
3. *What is the* *associations between the three burnout facets and well-being?*

**Methodology**

Two hundred and seventy-nine participants completed the present study and gave consent for their data to be included in analyses. The criteria for inclusion were that the respondents be students of the University of Cape Coast, Ghana and aged over 18 years. The ages of participants ranged from 18 to 60 years (*M* = 34.22; *SD* = 20.09); 230(82.4%) participants identified as female, 49(21.3%) identified as male. Participants were categorised as students (100%).

The study employed a cross-sectional, correlational design. Participants were recruited through social media and invited to take part in a study about their well-being, stress, burnout, depression and anxiety. The recruitment message contained a weblink to the questionnaire, which was hosted by Qualtrics, an online survey platform. The questionnaire took around 15 minutes for participants to complete.

The present study was granted ethical approval from the University of Cape Coast Ethical Review Board. To make sure informed consent was given, participants were told before beginning the questionnaire that they would be asked about their thoughts, feelings, and experiences surrounding several topics including their well-being, stress, burnout and depression and anxiety. Participants were asked to provide consent for the use of their data on both the first and final pages of the questionnaire. It was made clear at the beginning pages of the questionnaire that participants had the right to withdraw at any point in the study. Furthermore, all questions within the study (apart from those regarding consent) were optional, to ensure that participants could avoid disclosing information if they wished to. In addition, IP address recording was switched off in Qualtrics, to preserve confidentiality and anonymity

***Materials***

All participants completed the questionnaire, which included measures of the following constructs.

***Maslach Burnout Inventory for Educators Survey (Maslach et al., 1986)***

Burnout syndrome consisted of three dimensions: Emotional exhaustion, depersonalisation/cynicism, and personal accomplishment or efficacy. These three dimensions were measured by separate subscales. For instance, emotional exhaustion (EE) had nine items and assesses a person’s feelings of being emotionally overextended and exhausted by job demands. Depersonalisation (DP) consisted of six items and measures someone’s lack of feelings and impersonal responses to recipients or patients. Personal accomplishment (PA) included eight items and measured feelings of proficiency and successful achievement in an individual’s occupation that pertain to interacting with other people Maslach (1986). The scale was measured on a 7-point Likert scale ranging from 0 (never) to 6 (everyday). The reliability coefficient for the subscales was .92 for emotional exhaustion (EE), .84 for depersonalisation or cynicism and .81 for Personal accomplishment or efficacy.

***Patient Health Questionnaire for Depression and Anxiety (PHQ-4)***

The Patient Health Questionnaire-4 (PHQ-4) was developed and validated by Kroenke et al. (2009) to address the fact that anxiety and depression are two of the most prevalent illnesses among the general population. Because these two mood disorders are frequently comorbid and the nature of these mood disorders can make filling out long questionnaires difficult if patients were suffering from fatigue or loss of concentrating. The PHQ-4 is a four-questionnaire answered on a four-point Likert-type scale. Its purpose is to allow for ultra-brief and accurate measurement of core symptoms/signs of depression and anxiety by combining the two-item measure (PHQ–2), consisting of core criteria for depression, as well as a two-item measure for anxiety (GAD–2), both of which have independently been shown to be effective brief screening tools. The total PHQ–4 score complements the subscale scores as an overall measure of symptom burden, functional impairment, and disability. It has a reliability coefficient of .84.

***Perceived Stress Scale 4 (PSS-4)***

The Perceived Stress Scale (PSS) developed by Cohen (1983) was used. It was designed to measure the degree to which respondents found their lives "unpredictable, uncontrollable, and overloading". The psychometric properties of the PSS indicated that initial reliability coefficients ranged from 0.84 to 0.86. Cronbach's alpha coefficient for the PSS-4 was 0.61. The scale uses a five-point Likert format ranging from 0 (never) to 4 (very often). In this study, the PSS-4 was considered appropriate for use in data collection because of the previously psychometric properties. PSS-4 scores are obtained by reversing the scores on the two positive items (e.g., 0=4, 1=3, 2=2, 3=1, 4=0), and then summing across all items. The positive items are 2 and 3. PSS-4 individual scores range from 0 to 16 with higher scores indicating higher perceived stress.

***WHO-5 Well-being Index***

World Health Organisation (WHO, 1998) developed the WHO-5 to reflects positive affections, and this short scale captures subjective psychological well-being by measuring affective and hedonic dimensions of well-being. This self-rated scale was developed to enable primary healthcare general practitioners to screen patients for signs of depression to reduce symptom relapse and suicide rates and suicide rates. Since its development, the scale has been used to guide clinical practice worldwide. As a generic self-rated well-being scale, previous research on its psychometric properties has focused primarily on students and patients in different settings, such as general practice, private clinics, and hospital settings. In addition, it is increasingly used as a reliable measure to monitor depression, with excellent clinometric cross-cultural sensitivity in detecting depression. It is measured on a six-point Likert scale 0 (At no time) to 5 (All of the time). It has a reliability coefficient of .83.

**RESULTS**

**Preliminary Analyses**

Descriptive statistics for the core study variables relating to burnout and its facets, and well-being, stress, and depression and anxiety are summarised in Table 1.

**Table 1: Descriptive Statistics for Burnout, Burnout Facets, Perceive Stress, Well-being, Depression and Anxiety.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variable | Min. | Max. | *M* | *SD n* |
| Overall Burnout | 7.00 | 95.00 | 53.00 | 15.68 279 |
| Exhaustion | .00 | 30.00 | 20.10 | 7.00 279 |
| Cynicism | .00 | 30.00 | 16.12 | 6.98 279 |
| Personal Efficacy | 2.00 | 36.00 | 16.78 | 6.54 279 |
| Perceive Stress | 3.00 | 20.00 | 9.37 | 2.77 279 |
| Depression and Anxiety | .00 | 12.00 | 6.18 | 3.29 279 |
| Well-being | 5.00 | 30.00 | 15.84 | 4.47 279 |

**Bivariate correlations**

To address the first research question to find the relationship between well-being, stress, burnout, depression and anxiety, a bivariate correlation was conducted. The result of the bivariate correlation revealed that negative a relationship exists between well-being and stress*r* (276) = -.527, p< .01, burnout *r* (276) = -.589, p< .01 depression, and anxiety *r* (276) = -.544, p< .01.Bivariate correlations between these variables are given in Table 2. It can be seen that wellbeing was significantly negatively correlated with perceive stress, burnout, depression and anxiety (all *r*s ≥ .52, all *p*s <.01).

**Table 2: Relationship between well-being****, stress, burnout, depression and anxiety**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **2** | **3** | **4** |
| 1.Well-being | -.527\*\* | -.589\*\* | -.544\*\* |
| 2. Stress |  | .611\*\* | .510\*\* |
| 3.Depression and Anxiety |  |  | .554\*\* |
| 4. Burnout |  |  |  |

\* p ≤ .05, \*\* p < .01,

**Impact of depression and anxiety, stress and burnout on well-being**

To address the second research question on the impactof depression and anxiety, stress and burnout on well-beinga multiple linear regression was conducted with participants’ overall stress scores, burnout scores, depression and anxiety scores being regressed onto overall well-being scores in Table 3. The resultant regression analysis revealed that overall stress, burnout, depression and anxiety accounted for 44% of the variance in overall well-being, *F* (3,273) = 70.69, *p* <.001. Overall stress scores were a significant negative linear predictor of well-being scores (β = -.19, *p* <.001) indicating that higher levels of overall stress had negative impact on well-being. Overall burnout scores were a significant negative linear predictor of well-being scores (β = -.27, *p* <.001) indicating that higher levels of overall burnout had negative impact on well-being. Overall depression and anxiety scores were a significant negative linear predictor of well-being scores (β = -.33, *p* <.001) indicating that higher levels of overall burnout had negative impact on well-being.

**Table 3: *Summary of Impact of depression and anxiety, stress and burnout on well-being***

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Model** | | **Unstandardized Coefficients** | | **Standardised Coefficients** | t | **Sig.** | **Collinearity Statistics** | |
| **B** | **Std. Error** | **Beta** | **Part** | **Tolerance** | **VIF** |
| 1 | (Constant) | 24.552 | 1.193 |  | 20.579 | .000 |  |  |  |
| Stress | -.431 | .096 | -.186 | -4.497 | .000 | -.212 | .626 | 1.597 |
| Depression and Anxiety | -.610 | .084 | -.329 | -7.254 | .000 | -.342 | .578 | 1.732 |
| Burnout | -.023 | .019 | -.266 | -1.247 | .000 | -.159 | .561 | 1.161 |

**a. Dependent Variable: Well-being**

**Exploring Associations Between the Three Burnout Facets and Well-being**

In addition, to explore the second research question, the opportunity was taken to explore which, if any, of the burnout dimensions made a significant unique contribution to the prediction or impact of well-being. A multiple regression analysis was conducted, where well-being scores were regressed onto the three burnout facets. The resultant regression analysis is summarised in Table 4. It was found that collectively the burnout facets accounted for 36.1% of the variance in well-being scores, *F* (3,273) = 51.46 *p* <.001. Furthermore, it emerged that two of the three burnout facets were negatively significant linear predictors of well-being, respectively: Exhaustion (β = -.37, *p* <.001) and Personal Efficacy (β = -.44, *p* <.001). In each instance, higher levels of these facets had negative impact on well-being. Whereas the remaining facet, cynicism, was positively significant linear predictor of well-being (β = .03, *p* <.001).

**Table 4: *Summary of Associations Between the Three Burnout Facets and Well-being***

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Model** | | **Unstandardized Coefficients** | | **Standardized Coefficients** | **t** | **Sig.** | **Collinearity Statistics** | |
| **B** | **Std. Error** | **Beta** | **Part** | **Tolerance** | **VIF** |
| 1 | (Constant) | 14.489 | 1.085 |  | 13.354 | .000 |  |  |  |
| Exhaustion | -.236 | .038 | -.369 | -6.197 | .000 | -.300 | .659 | 1.517 |
| Cynicism | .021 | .040 | .034 | .539 | .000 | .026 | .602 | 1.660 |
| Personal Efficacy | .297 | .035 | -.435 | 8.452 | .000 | .409 | .883 | 1.133 |

**a. Dependent Variable: Well-being**

**Discussion**

***Relationship Between Well-Being, Stress, Burnout, Depression and Anxiety***

The results of the study revealed significant negative relationship between well-being and perceived stress. The finding of a significant negative relationship between well-being and perceived stress among students aligns closely with Lazarus’ (1993) psychological stress theory. According to the theory, stress is fundamentally about how individuals appraise and cope with external demands in relation to their own well-being. When students perceive academic, social, or personal pressures as exceeding their ability to manage, they experience higher levels of stress. This negative appraisal, coupled with ineffective coping strategies, directly undermines their psychological well-being. Lazarus emphasises that stress is not just a reaction to external events but is deeply influenced by how one interprets and responds to those events. Therefore, students who interpret their academic challenges as overwhelming and lack the coping mechanisms to manage them are more likely to report lower levels of well-being. This supports the study's results, showing that as perceived stress increases, overall well-being declines, reinforcing the theory’s view of stress as a subjective and dynamic process that significantly impacts mental health. This confirms that as levels of perceived stress increase, overall well-being tends to decrease. Stress can have detrimental effects on mental and physical health. This finding confirms that stress has negative effects on both the mental health and academic performance of students (Husky et al., 2020; Yang et al., 2021; Ye et al., 2020). The study indicated a significant negative relationship between well-being and burnout. As burnout levels increase, well-being levels decrease. Burnout is characterised by emotional exhaustion, depersonalisation, and reduced personal accomplishment, and it can have a profound negative impact on an individual's overall well-being. This is in consistent with Prada-Ospina (2019) who posited that burnout led to reduced satisfaction with work and personal life, detachment from responsibilities, and a decrease in overall well-being. The study further showed a significant negative relationship between well-being and combined depression and anxiety scores. As levels of depression and anxiety increase, well-being tends to decrease. Depression and anxiety are common mental health disorders that can severely affect an individual's emotional state and overall life satisfaction. This is similar to Goodman et al. (2018) who found that chronic depression and anxiety lead to reduced well-being and overall life satisfaction. All of the correlations between well-being and all other variables—stress, burnout, depression, and anxiety were negatively and significantly correlated

This means that higher levels of stress, burnout, depression, and anxiety are associated with lower levels of well-being. The strength of these correlations is relatively high, indicating a substantial relationship between the variables. The negative correlations suggest that as the negative factors (stress, burnout, depression, and anxiety) increase, positive well-being tendsto decrease. These findings are consistent with existing research on the impact of stress, burnout, depression, and anxiety on overall well-being (Husky et al., 2020; Yang et al., 2021; Ye et al., 2020). They highlight the importance of addressing these negative factors to promote psychological resilience and overall well-being. Interventions aimed at reducing stress, managing burnout, and treating depression and anxiety can have a positive impact on overall well-being and life satisfaction. Additionally, the results emphasise the interconnectedness of these variables, indicating that improving one's well-being may involve addressing multiple aspects of mental health and stress management through holistic student support services.

***Impact of depression and anxiety, stress and burnout on well-being***

The results of the study indicated a strong relationship between stress, burnout, depression, anxiety, and well-being. These factors together accounted for 44% of the variance in well-being scores, which suggests that they play a significant role in determining individuals' overall well-being. Higher scores in stress, burnout, depression, and anxiety were associated with lower well-being levels. This means that as stress, burnout, depression, and anxiety increase, overall well-being decreases. which supports Lazarus’ (1993) psychological stress theory, which emphasises how individuals assess and cope with external demands. When students view challenges as overwhelming and lack effective coping strategies, their mental health is negatively affected. The fact that these factors explain 44% of the variance in well-being highlights how central stress and emotional responses are to overall well-being, reinforcing the importance of institutional support services such as counselling and peer support in managing student mental health (Vu & Bosmans, 2021). Higher levels of stress are associated with lower well-being scores. Prolonged or excessive stress can lead to physical and psychological health issues, affecting an individual's ability to cope with challenges and enjoy life. The findings that burnout had a more substantial negative impact on well-being compared to stress. Burnout is a state of emotional, physical, and mental exhaustion caused by prolonged exposure to stressors. It can lead to feelings of detachment, reduced accomplishment, and a diminished sense of well-being (Rehman et al., 2021). Among all the factors examined, depression and anxiety exerted the strongest negative influence on well-being, underscoring their critical role in students’ mental health. Depression and anxiety can profoundly affect various aspects of a person's life, including mood, energy levels, motivation, and social interactions, resulting in diminished life satisfaction and mental health.

The findings highlight the importance of addressing stress, burnout, depression, and anxiety to improve individuals' well-being. Interventions aimed at reducing these negative factors and promoting mental health can have a positive impact on overall well-being. This may include stress management techniques, workplace wellness programs, therapy, and structured support systems aimed at enhancing individuals' coping capacities.

***Associations between the three burnout facets (Exhaustion, Personal Efficacy, and Cynicism) and well-being***

The results provide valuable insights into the associations between the three burnout facets (Exhaustion, Personal Efficacy, and Cynicism) and well-being. The goal of this analysis was to determine which burnout facets significantly contribute to the prediction or impact of well-being. The exhaustion facet of burnout has a significant negative impact on well-being. This implies that higher levels of exhaustion are associated with lower well-being. Exhaustion is a core component of burnout and represents feelings of physical and emotional depletion, often resulting from prolonged stress or overwork. When individuals experience high levels of exhaustion, it can lead to reduced engagement, motivation, and overall satisfaction with life, ultimately impacting well-being. Among the burnout facets, **low personal efficacy** was found to have the most substantial negative association with well-being. Personal Efficacy refers to an individual's belief in their ability to perform well and effectively handle the demands of their work or life (Fiorilli et al., 2022). When personal efficacy is low, individuals may feel ineffective, powerless, and overwhelmed by their responsibilities, leading to lower levels of well-being. Unlike the other burnout facets, cynicism showed a positive impact on well-being. This finding may seem counterintuitive, as cynicism is typically associated with negative attitudes, skepticism, and detachment. However, it's important to consider the context in which this facet was assessed. It's possible that in this study, a certain level of cynicism might have acted as a coping mechanism or defence mechanism for some individuals. For example, some people may develop cynicism to distance themselves from emotionally demanding situations, which may serve as a psychological buffer against emotional distress. However, further research would be needed to better understand this finding. The collective burnout facets accounted for 36.1% of the variance in well-being scores, suggesting that they play a significant role in **influencing** individuals’ overall well-being. Lazarus' (1993) psychological stress theory, which highlights the importance of stress appraisal and coping in mental health, is supported by the conclusion that burnout components account for 36.1% of the variance in well-being. Burnout occurs when students perceive academic and emotional demands as exceeding their coping **resources**, which lowers their well-being. This finding emphasises the substantial negative effects of ongoing stress on students' mental health and the necessity of support networks, such as **counselling services and peer mentoring**, to assist them in coping with emotional and academic demands.

The negative impact of Exhaustion and Personal Efficacy on well-being aligns with the established understanding of burnout's detrimental effects on mental health and life satisfaction. The positive impact of Cynicism on well-being, although unexpected, might indicate that certain levels of detachment or emotional disengagement are adaptive for some individuals in managing stress and maintaining well-being (Arslan & Allen, 2021). On the other hand, effective stress management and coping strategies can enhance well-being by promoting resilience and emotional well-being. Furthermore, interventions such as therapy, mindfulness, and relaxation techniques are effective in managing anxiety, thereby improving students’ well-being.

**Conclusion**

The study underscores the significant negative impact of stress, burnout, depression, and anxiety on the well-being of students, with these factors collectively explaining a substantial proportion of variance in well-being scores. These findings are consistent with Lazarus’ (1993) psychological stress theory, which emphasises how individuals’ cognitive appraisals and coping mechanisms shape psychological outcomes, the findings highlight the critical role of how students appraise and cope with academic and emotional demands. Burnout, particularly the facets of exhaustion and low personal efficacy, emerges as a strong predictor of reduced well-being while the unexpected positive association with cynicism may suggest that emotional detachment serves as a temporary coping strategy for students. The study reinforces the importance of comprehensive mental health interventions, including stress reduction, burnout prevention, and support for depression and anxiety, to promote students’ well-being and resilience through structured counselling services, stress reduction programs, and academic support.

**Recommendations**

Recommended interventions include professional support (e.g., therapy or counselling), stress management techniques, and fostering a healthy work-life balance and support networks, developing healthy coping strategies, practicing stress management techniques, promoting work-life balance, and fostering a supportive social network. Identifying and addressing these factors early can lead to better outcomes and a higher overall sense of well-being.

To promote well-being and prevent burnout, interventions should aim to address the factors contributing to exhaustion, reduce excessive cynicism while encouraging adaptive coping mechanisms, and **fostering** personal efficacy and a sense of control over one's work and life. Implementing workplace wellness programs, providing support and resources for managing stress, and promoting dialogue and awareness about burnout can contribute to a healthier and more positive work and life experience for individuals. Additionally, seeking professional help, such as counseling or therapy, can benefit individuals facing significant burnout-related challenges affecting their well-being.

Understanding the relationships between these variables is crucial for promoting mental health and well-being. Effective interventions may involve addressing and managing stress, promoting work-life balance, providing support for individuals experiencing burnout, offering appropriate treatment for depression and anxiety, and fostering coping strategies to enhance overall well-being.

**Limitations**

The cross-sectional design used in this study only captures a snapshot of the relationships between variables at a specific point in time. It does not allow for the establishment of causal relationships or the examination of changes in these variables over time. The reliance on self-report measures may introduce response bias and social desirability effects, potentially influencing the accuracy of participants' responses. The study's findings were limited to the University of Cape Coast students, and the generalisability to other student populations or different age groups may be restricted. The use of self-report measures for all variables may lead to common method variance, potentially inflating the associations between the variables. Certain confounding variables, such as personal life events or academic workload, might not have been fully **accounted for**, potentially influencing the results for influencing the relationships between the variables.

**Suggestions for future research**

Conducting longitudinal research can help establish temporal relationships and identify how changes in stress, burnout, depression, and anxiety over time impact students' well-being. Employing experimental designs or intervention studies can investigate the causal relationships between these factors and determine the effectiveness of specific interventions in improving student well-being. Incorporating objective measures alongside self-report questionnaires can provide a more comprehensive understanding of students' mental health, reducing common method variance. Future research should include a more diverse sample of students from various universities and academic disciplines to enhance the generalizability of findings. Future research should investigate potential protective factors that promote resilience and positive well-being in university students, such as social support, coping strategies, and mindfulness practices. Future research should examine well-being from a holistic perspective, considering various dimensions, such as academic well-being, social well-being, and emotional well-being, to gain a comprehensive understanding of students' overall well-being.

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**Originality Statement**

This work is original and that this paper has not been submitted to any other journal for consideration or so ever.

**Disclosure**

The authors have no interest to declare in as much as idea conceptualisation and conducting this study is concerned.

## **Ethics Declaration and Data availability statement**

The authors of this article declare that this study was conducted following ethical principles of research and that all data collected was used solely for research purposes. Data are available upon reasonable request. Request may be submitted to the corresponding author. The data will not be made publicly available because of privacy and ethical restrictions.

COMPETING INTERESTS DISCLAIMER:

Authors have declared that they have no known competing financial interests OR non-financial interests OR personal relationships that could have appeared to influence the work reported in this paper.

Disclaimer (Artificial intelligence)

Authors hereby declare that no generative AI technologies such as Large Language Models (ChatGPT, manuscript.

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