

## Motive and Burnout Among Learners: How Do They Relate?

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### Abstract

This research paper investigates the intricate interplay between learners' motives and the phenomenon of burnout within university educational contexts. As education systems evolve, understanding the factors influencing learners' motivation and well-being is crucial to recognize to improve students' learning experiences and mitigating burnout. A higher level of burnout can lead to more absenteeism, less motivation to finish coursework, a higher number of dropouts, and ultimately a negative impact on student performance, satisfaction, and learning productivity. Thus, this study aims to explore the perceptions of learners on their motive for learning and burnout. The study employs a quantitative survey that involves 182 undergraduate students from computer science and mathematical backgrounds to explore the relationship between motives and burnout. The instrument consists of three main sections namely demographic, followed by burnout with 16 items, and motivation section with 24 items. The research reveals moderately significant correlations ( $r=.498^{**}$  and  $p=.000$ ) between the underlying motives for learning and susceptibility to burnout. The findings suggest learners are driven primarily by intrinsic goal orientation, value belief, self-efficacy, and belief in learning that motivates them extrinsically. These insights contribute to the development of positive motivation and mitigate burnout, fostering healthier and more sustainable learning experiences. In conclusion, this research enhances our understanding of

the complex interactions between learners' motives and burnout, offering valuable implications for educators, policymakers, and practitioners striving to enhance the educational journey's quality and impact. Future research should investigate new intervention strategies that address the learners' motivations and coping mechanisms in order to effectively reduce their burnout and improve overall well-being.

**Keywords:** Learning Burnout, Learning Motivation, Undergraduate Students, Educational Psychology.

## **1.0 INTRODUCTION**

### **1.1 Background of Study**

Learning motivation is not just one psychological process but rather a dynamic system made up of various psychological components. Motivation plays such an important role to increase the predisposition and will to learn among learners. Learners' motivation can be considered as a driving factor that guarantees learning occurs and determines what makes learners want to learn. Learners' behaviours and attitudes toward their academic pursuits are significantly shaped by a number of motivational factors, including intrinsic motivation, extrinsic motivation, task value, students' perceptions of self-efficacy, control belief for learning, and affective motivation (Ryan and Deci, 2000; Wigfield & Eccles, 2002; Pintrich & DeGroot, 1990; Smith & Karaman, 2019). Intrinsic motivation refers to a learner's tendency for action and movement in connection with interest and satisfaction associated to studies, relatedness, autonomy, and enjoyment based on their goals, values, and interests while extrinsic motivation relates to behaviour and performance for the purpose of achieving goals and obtaining results as opposed to intrinsic satisfaction (Ryan & Deci, 2000). According to Salgado and Oliveira's research from 2021, some of the internal and external elements that affect learners' motivation are self-efficacy, stress, workload, family expectations, and employability. These factors, in turn, have an impact on learners' academic performance and achievement.

Learning burnout is defined as a type of negative emotion brought on by long-term learning pressure and heavy workloads, which causes students to lose interest in learning activities (Ljubin-Golub et al., 2020). Burnout feelings will eventually manifest when a person's psychological capacity to handle the pressure is exceeded, especially if the person has experienced this issue for a long time. Schaufeli and Greenglass (2001) described burnout as "a state of physical, emotional, and mental weariness caused by prolonged exposure to emotionally stressful job situations."

Researchers have employed many approaches to identify and evaluate burnout. Each of these strategies represents a separate perspective on this phenomenon. Using known self-assessment instruments such as the Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1981), the Copenhagen Burnout Inventory (CBI) (Kristensen et al., 2005), and the Oldenburg Burnout Inventory (OLBI) (Demerouti & Bakker, 2008).

Student burnout is a significant issue in university settings, with most of the studies involving primarily medical students because of its heavy academic workload and longer duration than other programs (Daud et al., 2022). A systematic review and meta-analysis conducted by (Frajerman et al., 2019) examined the prevalence of burnout in medical students before residency and found a clear impact of current burnout on work efficiency, emphasizing the need to improve the well-being of

students to provide better care to patients. In addition to medical students, (MacAulay et al., 2023) examined burnout in oral health students and identified factors contributing to burnout, preventive and coping strategies used by students.

The COVID-19 pandemic has further exacerbated the issue of burnout among university students. A cross-sectional study by (Toubasi et al., 2023) investigated burnout among university students during the distance learning period due to the pandemic. The study found a high prevalence of burnout among students and identified factors associated with burnout during this challenging period. This study highlights the impact of the pandemic on student well-being and the need for support and interventions to mitigate burnout in the context of remote learning. According to Salmela-Aro et al. (2009), students who are exposed to high levels of pressure, perfectionism, or academic demands may experience heightened stress that lowers their willingness to learn. However, students' motivation and desire to participate in educational activities can be diminished by emotional weariness, a key aspect of burnout (Bakker et al., 2005; Felaza et al., 2020; Daud et al., 2020). Emotional exhaustion due to burnout can worsen existing motivational issues. As learners move through their educational journey, they may suffer burnout, which is characterized by exhaustion and disengagement (Norez, 2017; Sugara et al., 2020; Yusof et al. 2023).

According to the Malaysian Qualifications Agency, Malaysia has more than 671 colleges and 154 universities (Malaysian Qualification Agency(MQA), 2023). Considering these figures, student burnout is a significant issue among university students in Malaysia. The prevalence of burnout among medical students in Malaysia ranged from 36.8 to 67.9 percent (Daud et al., 2020), while 67.9 percent of medical students at Universiti Sains Malaysia (USM) reported burnout (Chin et al., 2016). Consequently, this study has a unique background and is anticipated to contribute new knowledge to various fields.

In order to create successful interventions and ways to improve students' learning experiences, educators, policymakers, and researchers must have a clear understanding of the relationship between motivation and burnout. Despite the importance of both motivation and burnout in the learning setting, limited research has been conducted to investigate their interaction in depth. Existing research has primarily focused on either intrinsic motivation, extrinsic motivation, task value, student self-efficacy, control belief for learning, and affective motivation or burnout, particularly in terms of exhaustion and disengagement separately. Most of them fail to provide a comprehensive knowledge of how all of these components interact with one another.

## **1.2 Statement of Problem**

Motivation and burnout are significant issues among learners, and understanding the relationship between these two factors is crucial for educational institutions and educators. Lack of motivation can result in low levels of student engagement, poor academic achievement, and a higher risk of burnout. Meanwhile, burnout can further diminish motivation that negatively impacts on the learner's learning experience.

Students majoring in computer science have so much homework to complete throughout the semester that it might be difficult for them to concentrate. High motivation is necessary to keep them engaged in their work throughout the course

and prevent emotional exhaustion and stress. Students however experiencing excessive academic demands, perfectionism, or high-pressure environments may face increased stress that negatively impacts their motivation to learn. Therefore, students who lack intrinsic motivation due to factors such as task monotony or limited autonomy may lose interest in learning and become less engaged in educational activities over time (Hakanen et al., 2006; Azimi et al., 2014; Pedersen et al., 2021). Low self-efficacy beliefs, along with difficulty finding motivation, might cause students to question their talents and competence can cause burnout due to students feeling useless and overburdened. It supported by study by several research shows that low self-efficacy beliefs, coupled with difficulties in finding motivation, can lead students to doubt their abilities and competence which can contribute to burnout, as students may feel overwhelmed and helpless in the face of challenges (Chang et al., 2014; Felaza et al., 2020; Zalts et al., 2021; Yan et al., 2021;Asikainen et al.2022). On the other hand, emotional exhaustion, a core dimension of burnout, can deplete students' motivation and desire to engage in learning activities (Bakker et al., 2005; Norez, 2017; Sugara et al., 2020; Mohd Isa et al., 2021). The emotional drain of burnout can further exacerbate existing motivational issues.

There are hardly any studies that directly relate the constructs of our study and there are fewer studies that relate them in subjects of computer science and mathematics for undergraduates for traditional methods of education in Malaysia; hence one of the novelties of this study. Felaza et.at. (2020) was a study aimed to capture the association between motivation type and burnout among undergraduate medical programmes at the Faculty of Medicine, Universitas Indonesia. Whereas, Yusof et.al. (2023) in a sample of undergraduate in social science students who learn language that aims to assess the level of learners' motivation, which consists of motivational, expectancy, and affective components towards their perceptions of burnout and reasons for dropout.

Therefore, this study aims to address this research gap by examining the associations between intrinsic motivation, extrinsic motivation, task value, student's perspective of self-efficacy, control belief for learning, affective motivation, and student burnout (exhaustion and disengagement) among learners and vice versa. By utilizing a comprehensive framework, this research will contribute to the existing literature on motivation and burnout in education, providing valuable insights for educators, policymakers, and researchers seeking to enhance students' motivation and well-being.

### 1.3 Objective of the Study and Research Questions

This study is done to explore perception of learners on their motive for learning and burnout. Specifically, this study is done to answer the following questions;

- i. How do learners perceive their motives for learning?
- ii. How do learners perceive the causes of their burnout?
- iii. Is there a relationship between motives and burnout among learners?

## 2.0 LITERATURE REVIEW

### 2.1 Motivation among Learners

Learning motivation among learners is considered essential for effective development of learning activities. Motivation can promote students' learning by boosting their behaviours (Ulstad et al., 2018). Motivation involves the learner's inner source, desire, emotion, reason, need, impulse, or purpose that moves a person to a particular action (Tahaineh & Daana, 2013). Based on educational psychology perspective, motivation contributes to direct internal driving force to promote an individual's activities (Xu et al., 2021). When learners are motivated and have their own motives for engaging in the relevant activities, they will expand their efforts to be part of the activities, show their desire to achieve the goals, and improve their knowledge literacy (Yu et al., 2022; Tahaineh & Daana, 2013; Xu et al., 2021). In addition, Hall et al. (2013) also added that highly motivated learners tend to experience positive emotions as contrasting to emotional exhaustion, engage in learning activities with greater determination, and thus accomplish a better sense of achievement.

Based on Self-determination Theory (SDT), learners may be driven to learn by two types of motivation known as intrinsic and extrinsic motivation (Deci & Ryan, 2012). Intrinsic motivation is driven by an interest or enjoyment that a person feels in a task. Intrinsic motivation is an inner force that motivates students to engage in academic activities, because they are interested in learning, and they enjoy the learning process as well (Chow & Yong 2013). Besides, extrinsic motivation (Ryan & Deci, 2020) is any stimulus that comes from outside of the learner, and which leads the learner in the learning process. In extrinsic motivation, the learner explores in the form of reward, social approval, or appreciation. Extrinsic motivation is related to goal orientation, in which the students do their actions in the best way to achieve a valuable thing.

### 2.2 Burnout among Learners

Burnout is defined as a three-dimensional construct incorporating exhaustion, cynicism, and lack of professional efficacy (Madigan, Kim & Glandorf, 2023; Walburg, 2014; Maslach, Shaufeli, & Leiter, 2001). Exhaustion involves feelings of strain and chronic fatigue. Cynicism consists of an indifferent attitude toward work, losing interest in one's work, or not seeing work as meaningful. Lack of professional efficacy refers to reduced feelings of competence, achievement, and accomplishment. According to Walburg (2014) burnout has important consequences on mental health among learners such as higher risk for depression (Mutkins, Brown, & Thosteinsson, 2011), low self-esteem (Eriksson, Engström, Starring, & Janson, 2011), and higher suicide risk (Pompili et al., 2010). When learners are learning uninterested knowledge under a compulsory condition, the lack of positive motivation will cause learners to feel bored with the behaviour of learning, and finally will lead to learning burnout (Xu et al., 2021).

The occurrence of burnout among undergraduate students has raised more concerns in recent years. Learner burnout is caused by the component of exhaustion and disengagement (Campos et al., 2011). Learners who experience persistent motivational difficulties, such as a lack of task significance or an excessive amount of evaluation pressure, may become emotionally and physically exhausted, which will

lower their motivation (Reinke et al., 2006). Learning burnout also occurs when learners are forced to learn uninteresting material characterized by exhaustion and disengagement, which poses a significant challenge to the educational system due to not enough positive motivation to keep them engaged in the learning process (Rahmati, 2015; Schaufeli, 2001). Burnout is frequently associated with exhaustion and a heavy workload, however this is only one component of understanding burnout. Furthermore, components like cynicism and inadequacy measure the motivational and psychological dimensions of burnout more widely (Leiter & Maslach, 2016). Learners' desire to study may be crucial in preventing burnout and fostering overall wellbeing as they deal with several academic, social, and personal problems. It in line with study by Usán et al. (2022), Güngör et al. (2022), Salgado et al. (2021), Daud et al. (2020), Felaza et al. (2020) that show the negative correlation motivation and burnout.

### 2.3 Past Studies on Motivation for Learning

The success of learning depends on whether the learners are motivated to carry out active learning activities and achieve good learning results (Herlianto et al., 2018; Pratama & Ghofur, 2021). Basically, learning motivation is a driving tool for students who can carry out learning activities and improve their skills and experiences.

According to Lai (2011), research related to motivation normally will emphasize the following fourfold: (a) to explore ways in which motivation has been defined by researchers, (b) to investigate how motivation develops, (c) to learn how teachers can encourage the development of motivation in their students, and (d) to review best practices in assessing motivation. However, most previous research investigates the effect of how motivation becomes a factor to drive individuals to engage in an activity (Mohseni & Ahmadi, 2017; Wartti, 2018).

Based on the research by Isakovna & Kosimov (2023), researchers investigate the role of motivation in enhancing vocabulary acquisition in English as a Foreign Language (EFL) classrooms. The study examines the relationship between 120 EFL students' motivation and their vocabulary development, with a focus on the effectiveness of various motivational strategies employed by teachers. The results indicate that motivation plays a crucial role in students' vocabulary learning and can significantly improve their vocabulary skills.

The next study also was carried out by Diwakar & Francis (2023) to understand the role of motivation in engaging students in laboratory skill education. Participants in this study included students pursuing their bachelor's degrees in chemistry and teachers from 31 higher education universities in states in India. This study examined the key motivational factors impacting the efficacy of teaching students' laboratory skills and tasks. The findings show that the animated graphic learning materials of virtual laboratories had a higher impact on students' intrinsic motivation than the e-book learning materials.

However, both researchers, Isakovna & Kosimov (2023) and Diwakar & Francis (2023) have concluded by emphasizing the role of teachers was crucial in increasing students' motivation levels for performing in the learning activities.

## 2.4 Past Studies on Burnout among Learners

Research on burnout among learners mostly scopes towards investigating the factors associated with burnout (Singh, 2016), its effects on students (Bullock et al., (2017), and the prevalence of professional burnout (Erschens et al., 2019; Almutairi et al., 2022). Among the many studies that have been done related to burnout, research scoping on these two topics (1) student engagement and burnout; and (2) school demand and burnout are considered the most recently recognized as critical factors affecting schools and students (Tunsi & Elbedour, 2023)

Student engagement is defined as the time and effort students dedicate to educationally purposeful activities and the practices that institutions apply to motivate students to participate (Kassab et al., (2023). Pratama & Destyanto (2023) conducted a study to investigate the correlation between burnout and engagement levels. An online survey was conducted among undergraduate Industrial Engineering (IE) students, consisting of 63 from Universitas Atma Jaya Yogyakarta, Indonesia, and 53 from Bulacan State University, Philippines. The research finding found that IE students' efforts to engage in their academic process may help minimize the occurrence of academic burnout.

The demand-resource framework is widely used to predict burnout in occupational context (Bakker & Demerouti, 2007). However, this cross-sectional study aimed to explore the links of school demands and resources to student burnout. Demands refer to study-related workload while resources consist of the perceived support of teachers and the opportunity for personal growth (Cilliers et al., 2017). Six hundred and ninety-six Hungarian students from secondary schools participated in the data collection. The results revealed by making resources like personal development, autonomy and control during studying, and support of both teachers and parents could reduce subjective workload.

## 2.5 Conceptual Framework

Learners learn best if they are motivated and they are in a conducive environment. According to Rahmat (2019), the stimulus in the environment can cause change in behaviour during learning. A positive environment creates a positive learning experience and vice versa. Figure 1 shows the conceptual framework of the study. This study is done to explore the relationship between learners' motives for learning and the causes of burnout. According to Pintrich & DeGroot (1990), there are three motivational constructs and they are (i) value components, (ii) expectancy components and (iii) affective components. Even highly motivated students may not remain positive if they are burnout. According to Compos,et.al (2011) burnout are caused by (i) exhaustion and (ii) disengagement.

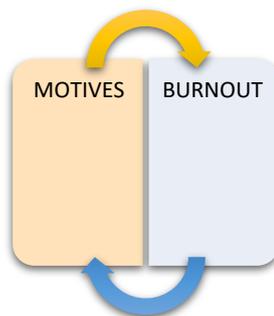


Figure 1-Conceptual Framework of the Study- Relationship between Motives and Burnout

### 3.0 METHODOLOGY

This quantitative study is done to explore motivation factors and causes of burnout among undergraduates. A purposive sample of 182 participants responded to the survey. The instrument used is a 5 Likert-scale survey and is rooted from Pintrich & DeGroot (1990) and Campos, et.al (2011) to reveal the variables in table 1 below. The survey has 4 sections. Section A has items on demographic profile. Section B has 24 items on motives. Section C has 16 items on burnout.

Table 1- Distribution of Items in the Survey

SECT		CONSTRUCT		VARIABLE	No Of Items	Total Items	
B	MOTIVE (Pintrich & DeGroot,1990)	VALUE COMPONENT	(i)	Intrinsic Goal Orientation	4	12	24
			(ii)	Extrinsic Goal Orientation	3		
			(iii)	Task Value Beliefs	5		
		EXPECTANCY COMPONENT	(i)	Students' Perception of Self-Efficacy	5	7	
			(ii)	Control Beliefs for Learning	2		
		AFFECTIVE COMPONENTS				5	
C	BURNOUT (Campos, 2011)	EXHAUSTION				8	16
		DISENGAGEMENT				8	
		TOTAL NO OF ITEMS				40	

Table 2- Reliability of Survey

## Reliability Statistics

Cronbach's Alpha	N of Items
.908	40

Table 2 shows the reliability of the survey. The analysis shows a Cronbach alpha of .908, thus, revealing a good reliability of the instrument chosen/used. Further analysis using SPSS is done to present findings to answer the research questions for this study.

### 4.0 FINDINGS

#### 4.1 Findings for Demographic Profile

##### i. GENDER

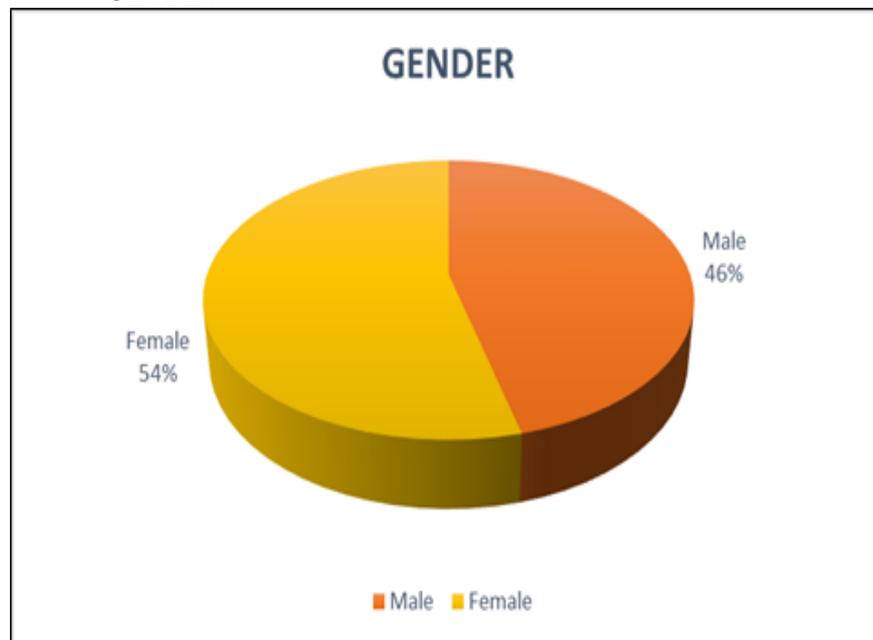


Figure 2- Percentage for Gender

Figure 2 shows that out of 182 respondents, half consisted of female respondents (54%) while the rest were male respondents (46%).

##### ii. COURSE

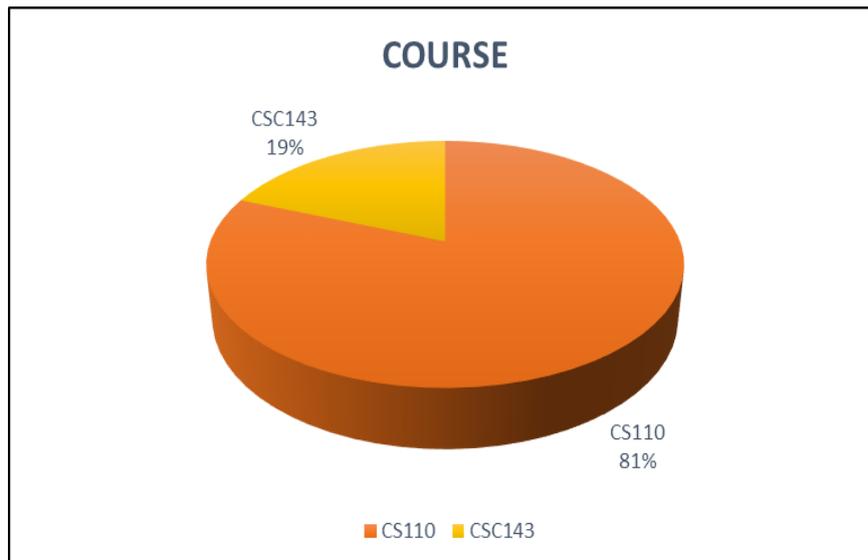


Figure 3- Percentage for Course

Figure 3 presents the percentage of respondents based on their course. Most of them are from the CS110/ Diploma Computer Science course (81%), followed by 19% are from CSC143/ Diploma in Mathematical Sciences.

#### 4.2 Findings for Motives for Learning

This section presents data to answer research question 1- How do learners express their motives for learning?

##### SECTION B- MOTIVATIONAL SCALE (24 items)

##### A. VALUE COMPONENT (12 items)

##### i. INTRINSIC GOAL ORIENTATION (4 items)

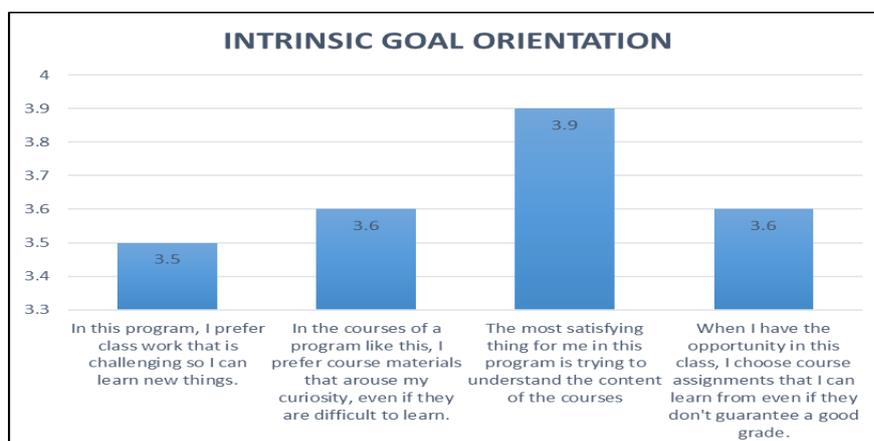


Figure 4 shows the mean for Intrinsic Goal Orientation.

The psychology concept of intrinsic goal orientation describes how much people are motivated by their own internal aspirations, such as self-improvement and control over their lives. High intrinsic goal-oriented individuals are more concerned with learning and improvement than with rivalry or rewards. The highest mean from 4 items in intrinsic goal orientation as value component with score 3.9 shows most students are satisfied in their program when they are trying to understand the content of the courses.

Meanwhile, the lowest mean score of 3.5 for item “In this program, I prefer class work that is challenging so I can learn new things”. Apart from that, mean of 3.6 are “In the courses of a program like this, I prefer course materials that arouse my curiosity, even if they are difficult to learn” and “When I have the opportunity in this class, I choose course assignments that I can learn from even if they don't guarantee a good grade”.

ii. EXTRINSIC GOAL ORIENTATION (3 items)

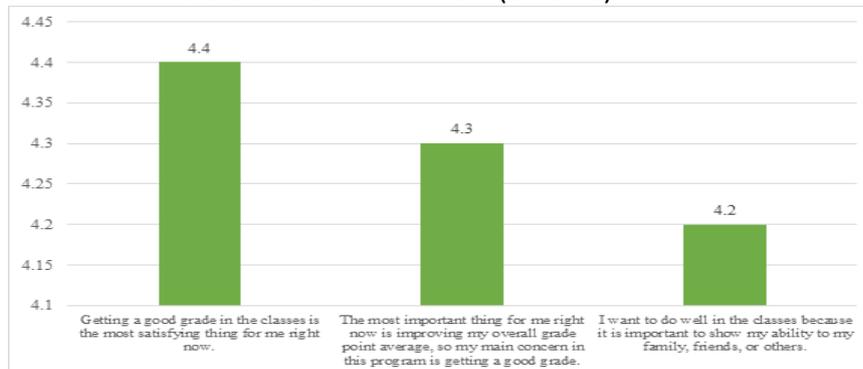


Figure 5- Mean for Extrinsic Goal orientation

Extrinsic goal orientation refers to the person who is motivated by external elements, such as incentives, recognition, or competition, as opposed to internal objectives or wants. Extrinsically motivated people frequently place more importance on the end or outcome of a task than on the process of learning or personal growth. The respondent appears to have a high level of extrinsic motivation rather than intrinsic goal motivation as shown in the mean of 4.4, with the statement of getting a good grade in the classes is the most satisfying thing for me right now. The most important thing for me right now is improving my overall grade point average, so my main concern in this program is getting a good grade obtained with a mean score of 4.3. The item “I want to do well in the classes because it is important to show my ability to my family, friends, or others” has the lowest mean score of 4.2.

iii. TASK VALUE BELIEFS (5 items)

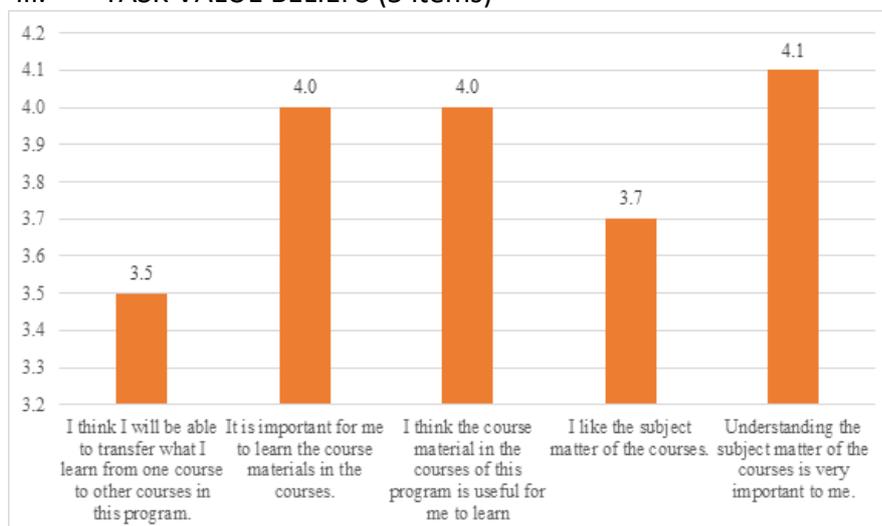


Figure 6- Mean for Task Value Beliefs

Task value belief is learners’ perceptions of how important, how interesting, and how useful a particular task which leads them be motivated to engage in a specific task. Learners highly believe that understanding the subject matter of the courses is very important, with a mean score of 4.1. Learners moderately believe that it is important to them to learn the course material since it is useful to them with a mean score of 4.00. Learners have less confidence in the subject matter in the course and can transfer what they have learned in one course to another, with mean scores of 3.74 and 3.53 respectively.

B. EXPECTANCY COMPONENT (12 items)

i. STUDENTS ‘PERCEPTION OF SELF-EFFICACY (5 items)

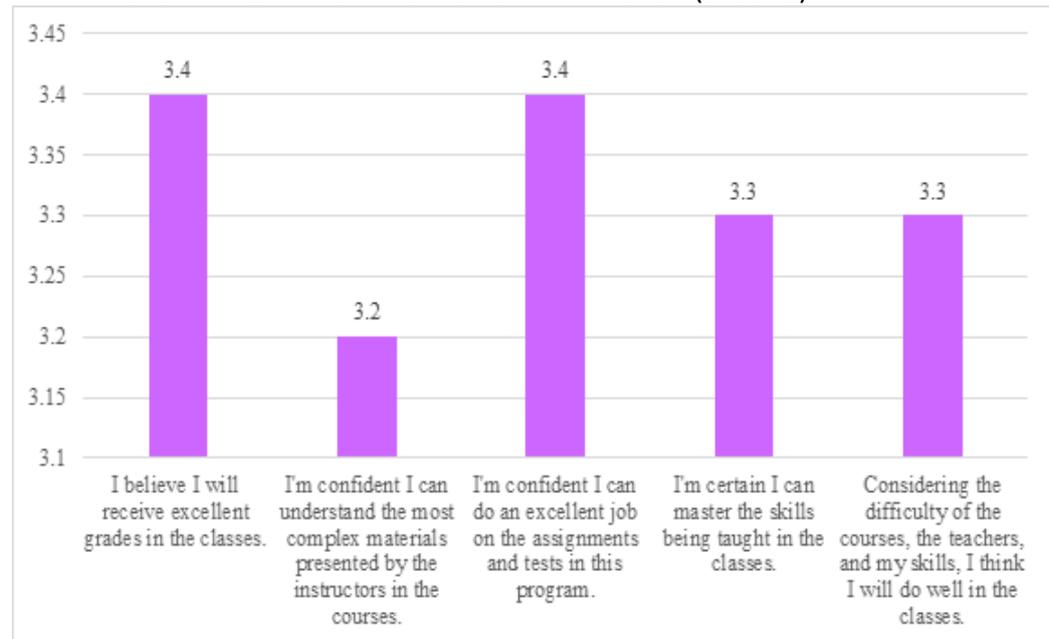


Figure 7- Mean for Students’ Perception of Self-Efficacy

Self-efficacy is a student's belief in their ability to complete a task or achieve a goal encompasses their confidence to control their behaviour, exert an influence over their environment, and stay motivated in the pursuit of their goal. Students are highly believed they will receive excellent grades and can do an excellent job on the assignments and tests in the classes, with a mean score of 3.4. Students moderately believe they can master the skills being taught and do well in the classes despite the course’s difficulty, with a mean score of 3.3. The low mean score of 3.2 shows that students believe they understand the most complex materials presented in class.

ii. CONTROL BELIEFS FOR LEARNING (2 items)

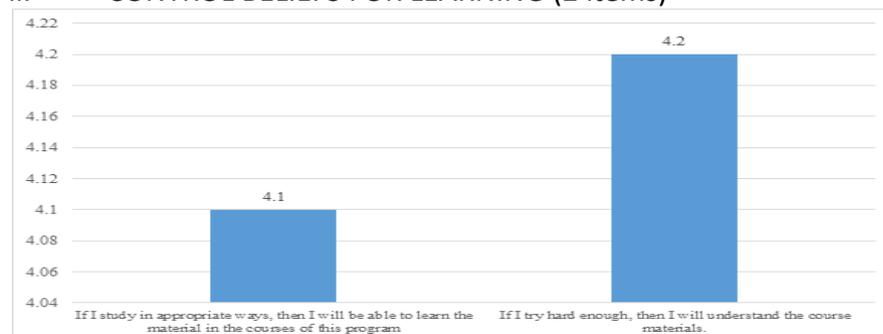


Figure 8- Mean for Control Beliefs for Learning

Control beliefs reflect the degree to which the learners believe that they have control over their intellectual competence necessary to bring about desired outcomes such as their grades, test scores, and overall academic performance. The result of the highest mean shows the learners will understand the course materials if they put more effort with a score of 4.2, followed by the appropriate ways of study that leads to the ability of learners to learn the course materials (mean score of 4.1).

#### C. AFFECTIVE COMPONENT - reversing (5 items)

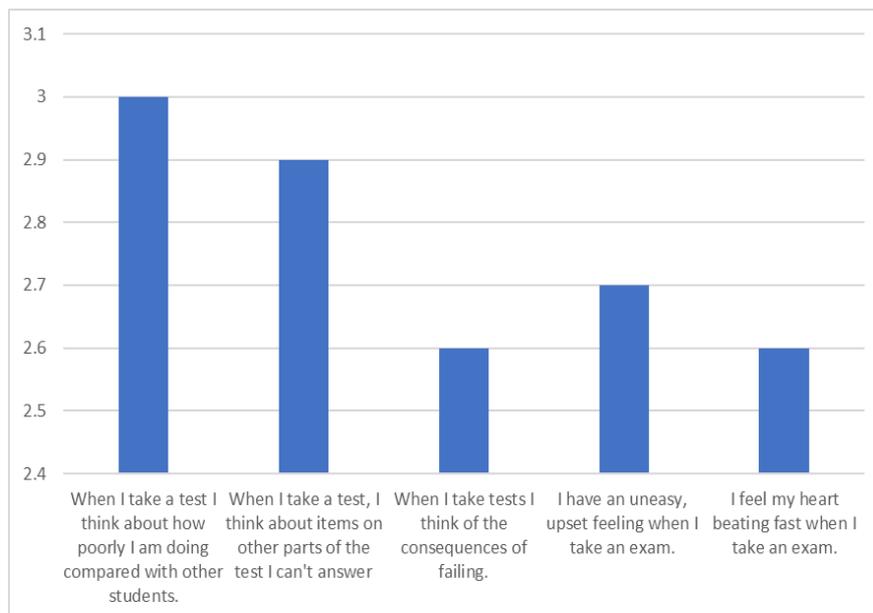


Figure 9- Mean for Affective Components

The affective component is essential for learning since it has a large impact on students' engagement, motivation, and achievement. The term "affective component of learning" refers to the emotional and motivational components of the learning process, which include the attitudes, values, beliefs, and feelings that students bring to their learning experiences. The highest mean score obtained for the question "When I take a test, I think about how poorly I am doing compared with other students" is 3. This score proves that students have the mindset to compare their progress and performance with other students. Additionally, due to weakness to focus and easily get distracted by unanswered questions, their mean score for the question "when I take a test, I think about items on other parts of the test I can't answer" is 2.9. The questions "When I take tests, I think of the consequences of failing" and "I feel my heart beating fast when I take exams" have the same mean score of 2.6, indicating that they feel nervous and worry too much about the consequences of not performing well. The mean score for the question "I have an uneasy, upset feeling when I take an exam" is 2.7, showing students have uncomfortable feelings about not performing well during the exam period.

#### 4.2 Findings for Burnout

This section presents data to answer research question 2- How do learners perceive the causes of their burnout?

SECTION C- BURNOUT (16 items)

A. EXHAUSTION (8 items)

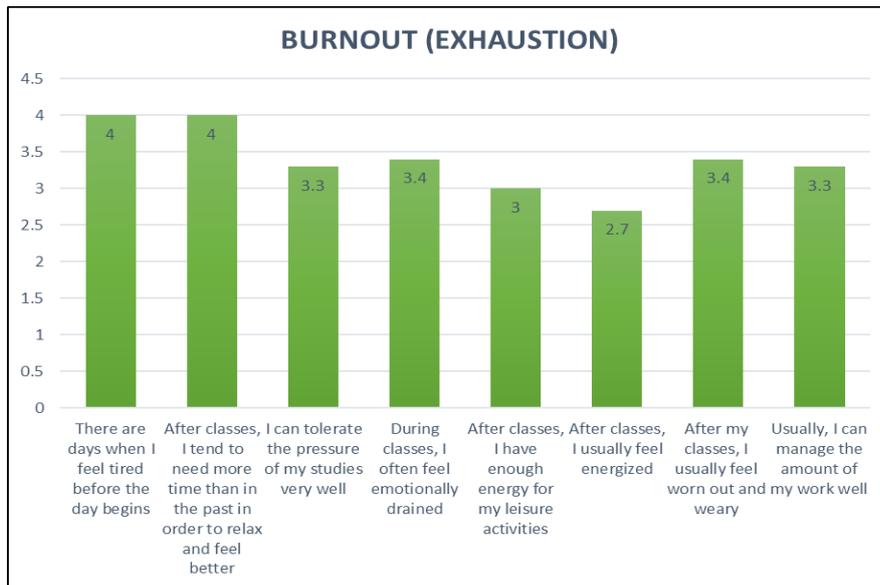
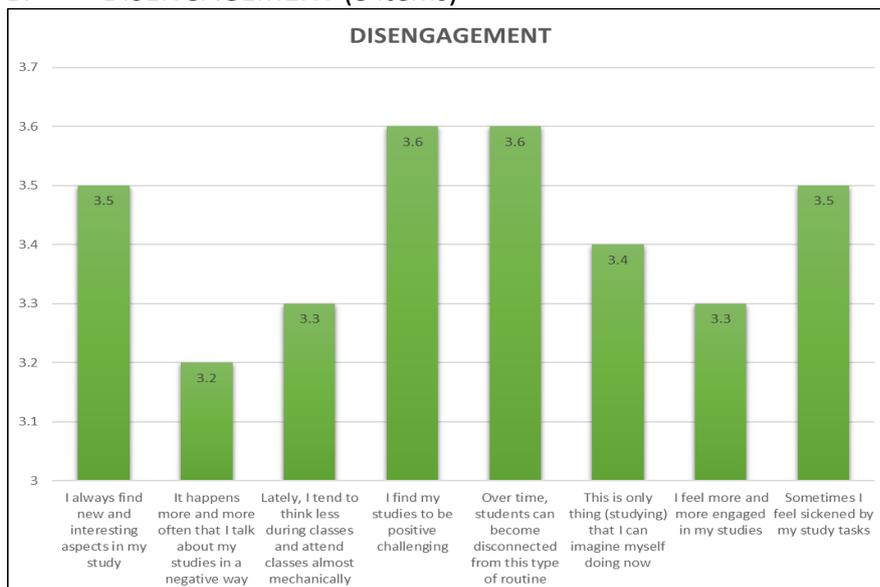


Figure 10- Mean for Exhaustion

Figure 10 shows the mean value for the causes of burnout (exhaustion) among the students. The highest mean value of 4 comes from 2 items, “There are days when I feel tired before the day begins” and “After classes, I tend to need more time than in the past in order to relax and feel better”. Students show tiredness before and after the class session compared to other causes of burnout (exhaustion). Value of 3 in Likert- scale in this questionnaire is referred to very often. Hence, overall mean value in these 5 items of burnout (exhaustion) are 3 which show that the students are moderately affected by burnout (exhaustion). The lowest mean value of 2.7 comes from the item “after classes, I usually feel energized”. There is less or no effect of this item on students’ burnout (exhaustion).

B. DISENGAGEMENT (8 items)



## Figure 11- Mean for Disengagement

Based on the mean value in Figure 11, the highest mean from the eight items in disengagement is from 2 items with 3.6 score; which represents “I find my studies to be positively challenging” and “Over time, students can become disconnected from this type of routine”. This result indicates that the students’ disengagement affects moderately with burnout. The overall mean value in these 8 items of disengagement are 3 which show that the students are moderate in the studies engagement.

## 4.3 Findings for Relationship

This section presents data to answer research question 3- Is there a relationship between motives and burnout among learners?

To determine if there is a significant association in the mean scores between motives and burnout, data is analysed using SPSS for correlations. Results are presented separately in table 3, below.

Table 3- Relationship between Motives and Burnou  
**Correlations**

		MOTIVES	BURNOUT
MOTIVES	Pearson Correlation	1	.498**
	Sig. (2-tailed)		.000
	N	182	182
BURNOUT	Pearson Correlation	.498**	1
	Sig. (2-tailed)	.000	
	N	182	182

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

Table 5 shows there is an association between motives and burnout. Correlation analysis shows that there is a moderate significant association between motives and burnout ( $r=.498^{**}$ ) and ( $p=.000$ ). According to Jackson (2015), coefficient is significant at the .05 level and positive correlation is measured on a 0.1 to 1.0 scale. Weak positive correlation would be in the range of 0.1 to 0.3, moderate positive correlation from 0.3 to 0.5, and moderate positive correlation from 0.5 to 1.0. This means that there is also a strong positive relationship between motives and burnout.

## 5.0 CONCLUSION

## 5.1 Summary of Findings and Discussions

In conclusion, this study explores the complex relationship between learners' motivations for learning and their burnout experiences among computer science and mathematics students. The investigation, which included responses from an undergraduate sample of learners, has revealed insightful patterns. Among the identified motivational factors, understanding course content and the aspiration to achieve good grades emerge as prominent drivers, reflecting learners' dedication to academic excellence. It demonstrates how learners' motivation to learn affects how they learn. The results are in line with those of other studies (Lokman et al., 2021; Lokman et al., 2022; Zainuddin et al., 2021), which discovered that students might be

inspired by both internal and external stimuli despite their challenges in their studies. Motivation plays a crucial role in the relationship between burnout and engagement. Students who experience high levels of burnout may have lower motivation, which in turn affects their engagement in school activities (Yu et al., 2022). In parallel, the study underscores the prevalence of burnout factors, with feelings of exhaustion before and after class, the need for increased relaxation time, and the challenge of maintaining a routine amidst demanding studies emerging as significant contributors to burnout. Interpersonal and environmental factors can impact burnout among medical learners, and proactive approaches are needed to address this issue (Gaston-Hawkins et al., 2020). This intricate balance between motivation and burnout highlights the complex nature of the learner's journey, where aspirations for understanding and achievement coexist with the toll of academic demands. The findings not only emphasize the importance of addressing burnout factors but also underscore the need to align pedagogical strategies with intrinsic motivational drivers. As education evolves, educators and institutions can benefit from leveraging these insights to design more holistic approaches that foster positive motivation while simultaneously addressing burnout challenges, ultimately enhancing the overall well-being and academic experiences of learners. Finally, the study shows a positive relationship between all motivational components and various burnout consequences. This emphasizes the importance of motivation and aims to develop this type of motivation to assist students achieve better results and avoid burnout. Students who are intrinsically motivated would be less likely to have a negative perception of their performance, which would lead to higher self-efficacy, the ability to attain better performance, and a decreased risk of burnout while studying.

## 5.2 Pedagogical Implications and Suggestions for Future Research

Educators must define students' needs during the teaching process and be highly aware of changes in such needs in order to encourage students' interest in the taught subjects, address students' basic knowledge-seeking needs, and stimulate students' learning motivation. Educators should focus on providing adequate academic and emotional support, promoting a healthy work-life balance, and addressing stressors that may contribute to burnout (Gaston-Hawkins et al., 2020). This can be achieved through the use of meaningful and relevant learning tasks, providing opportunities for choice and autonomy, and creating a supportive and inclusive classroom environment (Wang, 2022). Learners' learning motivation can be stimulated, and their learning burnout may be mitigated through the collaborative efforts of all parties. Future research should explore innovative intervention strategies targeting learners' motives and coping mechanisms to effectively mitigate burnout and enhance overall well-being. Exploring the efficacy of tailored interventions that foster intrinsic motivation through personalized learning approaches, collaborative projects, and integrative technology could provide valuable insights into creating sustainable educational environments.

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