

Exploring Learners' Motivation and Identifying Burnout Triggers among Foundation Students

Fadiatul Hasinah Muhammad¹, Nur Asyikin Ahmad Nazri², Siti Nur Yasmin Sheikh Suhaimi³, Suhaiza Ngah⁴, Nurhafizah Saidin⁵, Sharifah Shatrah Syed Hamid⁷, Noor Hanim Rahmat⁶

^{1,2,3,7}Centre of Foundation Studies, Universiti Teknologi MARA, Cawangan Selangor, Kampus Dengkil, 43800 Dengkil, Selangor, Malaysia, ³Foundation in Business Section, Universiti Kuala Lumpur Business School, ⁴Jabatan Matematik, Pusat Asasi UIAM, Kampus Gambang, ²Akademi Pengajian Bahasa, Universiti Teknologi MARA Cawangan Johor, Kampus Pasir Gudang, Johor, Malaysia

Email: fadiatul@uitm.edu.my, asyikin2750@uitm.edu.my, sitinuryasmin@uitm.edu.my, suhaiza@unikl@edu.my, nurhafizahsaidin@iium.edu.my, shatrah@uitm.edu.my, noorh763@uitm.edu.my

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Abstract

The association between motivation and burnout among foundation students in Malaysia is a topic of increasing interest to researchers and educators. This study aims to investigate this relationship by examining specific factors influencing it. Employing a quantitative approach, data is collected from foundation students to explore variables such as value, expectancy, and affective components related to motivation, while also assessing burnout through components of exhaustion and disengagement. Analysis of these factors revealed a moderate correlation between motivation and burnout, indicating the necessity for more focused research to deepen our understanding of their relationship, particularly among foundation students in Malaysia. However, these findings provide evidence that burnout occurs among foundation students, even when they strive with higher motivation. This suggests the need for researchers to develop better instruments to further study the causes of burnout among foundation students.

Keywords: Motivation, Burnout

Introduction

Background of Study

The transition from secondary school to higher education can be both exciting and challenging for students, particularly those entering foundation programs. Foundation students typically undergo a significant adjustment period as they navigate new academic

expectations, learning environments, and social dynamics (Chapman et al., 2024; Alzabidi et al., 2024). Understanding the factors that influence these students' motivation and potential triggers for burnout is crucial for providing effective support and fostering their academic success (Fives et al., 2007).

Understanding motivation among foundation students in Malaysia involves recognizing the interplay between extrinsic and intrinsic components. Extrinsic motivation may stem from external rewards, societal expectations, and the competitive nature of the education system, while intrinsic motivation is driven by personal interests, values, and a genuine passion for learning (Zolkapli et al., 2024; Malek, Sarin, & Haon, 2020). Balancing these motivations requires creating student-centered learning environments that foster autonomy, competence, and relatedness, while also addressing socio-cultural factors such as familial expectations and societal attitudes towards education. By cultivating both extrinsic and intrinsic motivation, educators and policymakers can support foundation students in Malaysia in achieving academic success and overall well-being (Fute, Oubibi, & Kangwa, 2024).

Investigating self-efficacy and control beliefs among foundation students in Malaysia is crucial for understanding their motivation and academic performance. These components influence students' confidence, persistence, and proactive approach to learning tasks, ultimately shaping their success in education. By fostering self-efficacy and control beliefs, educators can empower students to navigate challenges effectively and achieve their educational goals (Alzabidi, Sahari, & Saleh, 2024).

Identifying the specific factors that impact foundation students' motivation and susceptibility to burnout requires a nuanced understanding of their experiences, perceptions, and coping mechanisms. Factors such as academic workload, perceived academic self-efficacy, social support networks, and individual resilience may all influence students' motivation levels and vulnerability to burnout (Einav et al., 2024; Gao, 2023).

By exploring learners' motivation and identifying potential burnout triggers among foundation students, educators, counselors, and policymakers can develop targeted interventions and support mechanisms to enhance students' well-being and academic success. This may include implementing strategies to promote a positive learning environment, providing stress management resources, offering academic support services, and fostering a sense of belonging and community among students (Aithal, 2023).

Statement of Problem

Extensive research conducted in educational settings has consistently indicated that burnout is linked to various negative consequences in students' academic pursuits. A recent comprehensive review study, encompassing a large sample of over 100,000 students, revealed that all three components of burnout—emotional exhaustion, cynicism, and reduced professional efficacy—exert a detrimental impact on academic achievement (Asikainen et al., 2022; Madigan & Curran, 2020).

Within school environments, students who experience higher levels of burnout and cynicism tend to exhibit lower levels of engagement in their schoolwork, resulting in poorer academic performance and diminished appreciation for the overall school experience (Tuominen-Soini & Salmela-Aro, 2014). Moreover, all dimensions of burnout have been consistently associated with reduced dedication to studying, decreased levels of vigor, and diminished absorption among university students (Salmela-Aro & Upadaya, 2017).

Conversely, students who exhibit higher levels of engagement and experience lower levels of burnout demonstrate a greater likelihood of pursuing higher education beyond high

school (Tuominen-Soini & Salmela-Aro, 2014). This suggests that maintaining a positive level of engagement and minimizing school-related burnout can contribute to increased motivation and a higher propensity for further educational pursuits.

In summary, the extensive body of research indicates that burnout in educational contexts has significant implications for students' academic outcomes. Higher levels of burnout are consistently associated with lower academic achievement, reduced engagement, and decreased dedication to studying. On the other hand, students who are more engaged and experience lower levels of burnout exhibit stronger academic performance and are more likely to continue their education at the university level. These findings highlight the importance of addressing and mitigating burnout to facilitate positive educational experiences and outcomes for students. In Malaysia, pre-university students typically aged 18 to 19, undergo a transition from secondary school to pre-university education. This transition period, occurring just months before their first pre-university examinations may expose them to heightened stress and potential burnout due to adjusting to a new academic environment. Hence, this study aims to study learners' motivation and the causes of burnout among foundation students enrolled in various programs within the same institutions. The focused component of this study is derived based on the condition that matches the foundation level, ensuring that the results reflect the specific needs of this demographic.

Objective of the Study and Research Questions

The objective of this study is to investigate learners' perceptions of their use of learning strategies. The study aims to address the following research questions;

- How do learners perceive motivation in learning?
- How do learners perceive their cause of burnout in learning?
- Is there a relationship between motivation and burnout?

The primary focus of this study is to gain insights into learners' perspectives on motivation, burnout, and the potential connection between the two.

Literature Review

Motivation in Learning

According to Mehmet (2020) motivation refers to the state in which an individual feels compelled to engage in specific actions or activities which motivates the desire of a person to be involved in a particular task or activity. In other words, encouraging someone to effectively apply their skills and abilities towards achieving goals can instill the drive for them to actively pursue tasks.

The essence of motivation lies in three key components: firstly, it triggers a fundamental shift in the energy dynamics within each individual. Secondly, it manifests through the emergence of feelings or emotions. Finally, motivation is fueled by the existence of clear goals. With these three elements, it can be said that motivation is something complex. Motivation causes a change in the energy within humans, which in turn affects psychological symptoms, feelings, and emotions, leading to subsequent actions or behaviors. All of this is driven by the presence of needs or desires for something. To summarise, motivation often relates with a strong desire that will strive someone in achieving goals.

Ryan and Deci (2000) defined motivation as the drive to engage in activities, whether intrinsically or extrinsically motivated (Ryan & Deci, 2000). Elliot & Dweck (2005) emphasized

on motivation as a key element in academic learning and achievement from childhood through adolescence. Motivation is essential in directing learners' behaviour towards particular goals. According to Karim (2012), motivation in learning involves an inherent belief that guides individual learning goals, encourages continuous effort in learning behaviours, reinforces cognitive history, and enhances overall learning outcomes (Karim et al., 2012). Similarly, Şahbaz (2012) found that students with higher levels of learning motivation tend to exhibit better learning outcomes. Thus, it can be concluded that students who are motivated have more authority to decide on their learning materials and plan out their learning process (Şahbaz, 2012).

Causes of Burnout

Burnout is an urgent concern that hurts students, compromising their mental health, academic performance, and overall holistic well-being. According to Alkhairi (2023) burnout can be influenced by various factors such as individual, academic, and institutional domains, as well as unique personal characteristics, coping mechanisms, and past experiences (Alkhairi, 2023). Previously, Pines (1980) defined "academic burnout" as students feeling exhausted and losing interest in school due to long-term academic pressure. This leads to disconnection from classmates and a lack of enthusiasm for their schoolwork. However, a study conducted by Xie (2019) showed that students with strong academic adaptability are likely to experience lower levels of education burnout, greater engagement in learning, and improved academic performance. Therefore, a high burnout rate technically can be reduced if the student is equipped with the relevant coping mechanism.

Burnout is a multi-dimensional phenomenon influenced by various factors, such as school-related stress, a reluctance towards learning, and feelings of incompetence. These interconnected factors can have a detrimental effect on students' motivation to learn. Addressing the underlying causes of burnout is crucial for fostering a sustainable learning environment. According to Cilliers et al. (2017), a decrease in academic performance is highly related to high burnout rate. Recognizing and teaching burnout coping strategies is vital for enhancing learning skills and educational quality. Burnout occurrence varies, with academic-related burnouts, initial university experiences, family-related burnout, and financial or work-related burnout being more pronounced at different times. Consequently, high burnout rates can affect students' academic journey and can later affect their career path.

Past Studies on Motivation

Recent research has indicated that in the domains of education and physical education, diverse forms of motivation have distinct impacts on outcomes. It has been observed that exceptional ability alone is insufficient for achieving long-term goals without adequate motivation. Furthermore, while a well-designed curriculum and effective instruction are important, they alone do not offer an assurance of student performance (Ryan & Csizér, 1998).

There have been many past studies on motivation and how it affects learning. A study done by Chang et al (2022) focuses on the correlation between Taiwanese students' achievement motivation, active learning and academic confidence in writing research. 173 respondents completed the questionnaire and results indicated that achievement motivation positively influenced active learning and active learning positively influenced academic confidence. This shows how good motivation enhances academic self-confidence.

Past Studies on Burnout

Extensive research has been conducted on student burnout, consistently revealing a detrimental link between burnout characteristics and students' motivation. Additionally, multiple studies have highlighted the heightened vulnerability of university students experiencing burnout symptoms to the development of eating disorders, sleep disturbances, substance abuse, and mental health issues.

The study by Salgado & Au-Yong-Oliveira (2021) was done to investigate whether the consumption of medication among students is related to academic burnout. This study investigates 207 students in a Portuguese public university. Findings were gathered through a questionnaire and it is found out that the arithmetic mean (course average), the professional situation, participation in extracurricular activities; the practice and frequency of physical exercise, course selection and expectations, uncertainty about the professional future and evaluation of the relationship with colleagues were some of the prominent variables of the study.

Next, Fiorilli et al. (2022) found disparities in burnout experience based on student gender and employment position. The study surveyed 494 Italian university students. Data were collected using the Burnout Assessment Tool Core Dimensions (BAT-C). The findings found that female students had greater degrees of exhaustion, cognitive impairment, and emotional impairment than male students. However, no interaction effects between gender and employment position were detected in the present sample. Overall, gender is an important element in understanding burnout symptoms and should be researched further.

Conceptual Framework

Figure 1 depicts the conceptual framework guiding the present study, which examines the relationship between motivation and burnout among learners. Drawing on the work of Rahmat et al (2021), the framework posits that motivation to learn is derived from learners' confidence. According to this perspective, learners who possess a strong sense of confidence are more likely to exhibit higher levels of motivation in their academic pursuits. However, it is noted that a deficiency in either component of motivation, namely confidence, can potentially lead to stress among learners (Hulleman et al., 2016).

In this study, motivation among learners is explored based on the conceptual framework proposed by (Pintrich and DeGroot, 1990). Pintrich and DeGroot identified several factors contributing to learners' motivation, which may include intrinsic motivation, extrinsic motivation, self-efficacy beliefs, and goal orientation. These factors encompass the internal and external forces that drive individuals to engage in learning activities and strive for academic success.

Additionally, this study examines the causes of burnout among learners, drawing insights from the research conducted by (Campos et al., 2011). Burnout, characterized by emotional exhaustion, disengagement can arise from various factors related to the academic environment and individual experiences. Common causes of burnout among learners may include excessive workload, lack of social support, perfectionism, conflicts with peers or instructors, and a mismatch between personal values and academic demands (Campos et al., 2011).

Through the survey items employed in the study, factors contributing to learners' motivation and causes of burnout was elucidated. Survey items related to motivation may assess participants' intrinsic and extrinsic motivation levels, self-efficacy beliefs, goal orientation (e.g., mastery goals, performance goals), and perceptions of task value (Crippen et al., 2023).

On the other hand, survey items about burnout may inquire about participants' experiences of emotional exhaustion, feelings of cynicism or detachment toward learning, and perceptions of reduced personal accomplishment in academic settings.

By investigating these factors through empirical inquiry, this study aims to gain a deeper understanding of how motivation influences learners' susceptibility to burnout and vice versa. This exploration is essential for informing educational interventions and support strategies aimed at promoting students' well-being and academic success in the context of higher education.

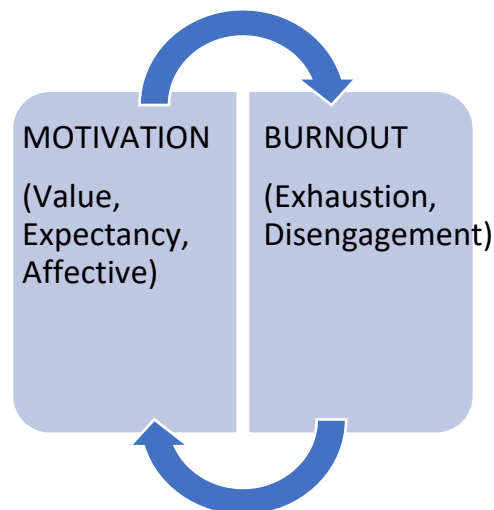


Figure 1- Conceptual Framework of the Study- Learners' motivation and their causes of burnout among foundation students.

Methodology

This quantitative study aims to investigate the motivation factors influencing learning among foundation students. A purposive sample of 218 participants completed the survey, which was administered electronically through platforms like Whatsapp and Telegram. Participants were provided with information regarding the study's purpose, confidentiality, and their right to withdraw. The participants were drawn from a Malaysian institution and represented four distinct programs: Science Foundation, Engineering, Teaching English as a Second Language (TESL), and Law.

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 3 sections. Section A has items on demographic profile. Section B has 12 items Value components. Section C has 16 items. Descriptive statistics will be used to analyze participants' levels of motivation and burnout. Correlational analyses which Pearson correlation will be conducted to examine the relationship between motivation and burnout among the foundation students.

Table 1 also shows the reliability of the survey which similar to the previous study (Nazri et al., 2023). The analysis shows a Cronbach alpha of 0.889 for section value motivation, Cronbach Alpha for section burnout was 0.723, indicating a satisfactory level of internal consistency reliability for the scales used to measure these constructs. This thus reveals 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.

Table 1

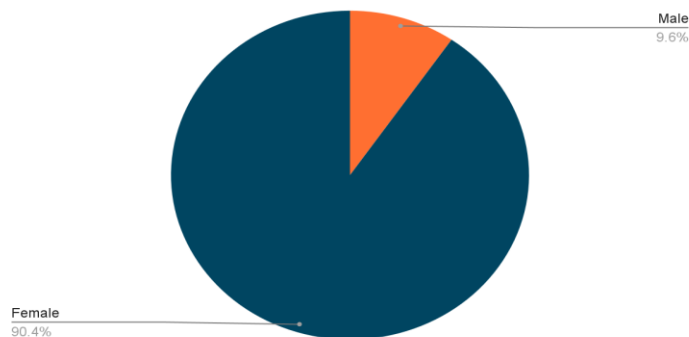
Distribution of Items in the Survey

SECT	CONSTRUCT	MAIN CATEGORY		SUB-CATEGORY		Total Items	Cronbach Alpha	
B	MOTIVATION Pintrich & DeGroot (1990)	VALUE COMPONENT	(i)	Intrinsic Goal Orientation	4	12	0.889	
			(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, et al (2011)	BURNOUT-EXHAUSTION				8	0.702	
		BURNOUT-DISENGAGEMENT				8		
		TOTAL NO OF ITEMS				40		

This quantitative study employs a methodological approach to explore the intricate interplay between motivation and burnout among foundation students. The study seeks to provide valuable insights that can inform the development of interventions and support strategies aimed at enhancing students' well-being and fostering their academic success.

Findings Findings for Demographic Pro

Gender



file

Figure 2-Percentage for Gender

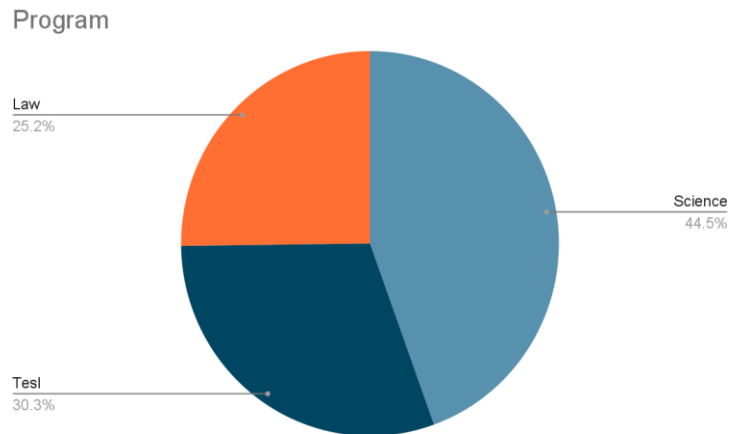


Figure 3- Percentage for Discipline

Figure 2 and Figure 3 depict the demographic profile of the respondents. A total of 218 questionnaires were distributed to the foundation students from the Centre of Foundation Studies, UiTM Kampus Dengkil. According to Figure 2, there are 9.6% of male and 90.4% of female respondents.

Figure 3 demonstrates the percentages of the students from 3 different disciplines where 44.5% of the respondents are from the science program, 30.3% from the TESL program and 25.2% from the Law program.

Findings for Motivation

This section presents data to answer research question 1- How do learners perceive motivation in learning?

MOTIVATIONAL SCALE (12 items)
VALUE COMPONENT

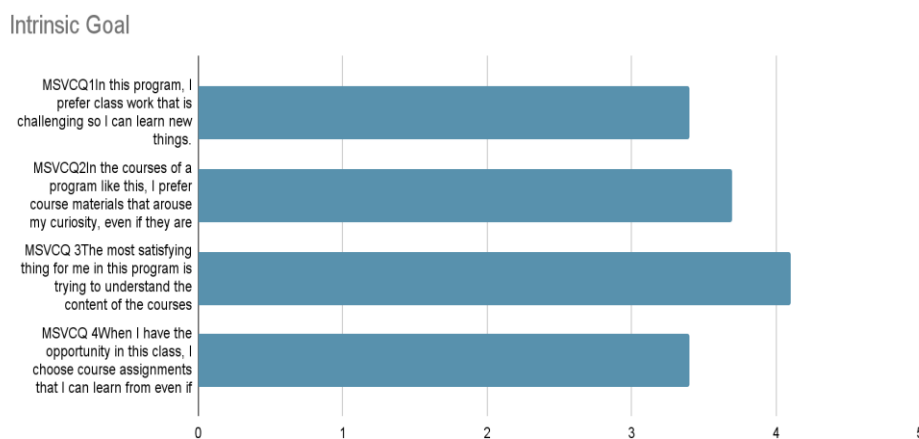


Figure 4- Mean for INTRINSIC GOAL ORIENTATION (4 items)

Within the framework of these studies, value components are determined by intrinsic goal orientation, extrinsic goal orientation, and task value beliefs. Analysis of the findings presented in Figure 4 reveals insightful preferences among students regarding their learning experiences. Notably, students exhibit a preference for challenging classes aimed at acquiring new knowledge, as evidenced by a mean score of 3.4. Moreover, they express a keen interest in course materials that pique their curiosity, reflected in a mean score of 3.7. Additionally, students derive the most satisfaction from the process of comprehending the content of their courses, with a particularly high mean score of 4.1 indicating a strong emphasis on understanding. Furthermore, students prioritize learning from their coursework over solely achieving good grades, as indicated by a mean score of 3.3. These preferences, although slightly varied in mean scores ranging from 3.3 to 4.1, collectively suggest a focus on intellectual stimulation and a willingness to engage with challenging material in pursuit of learning.

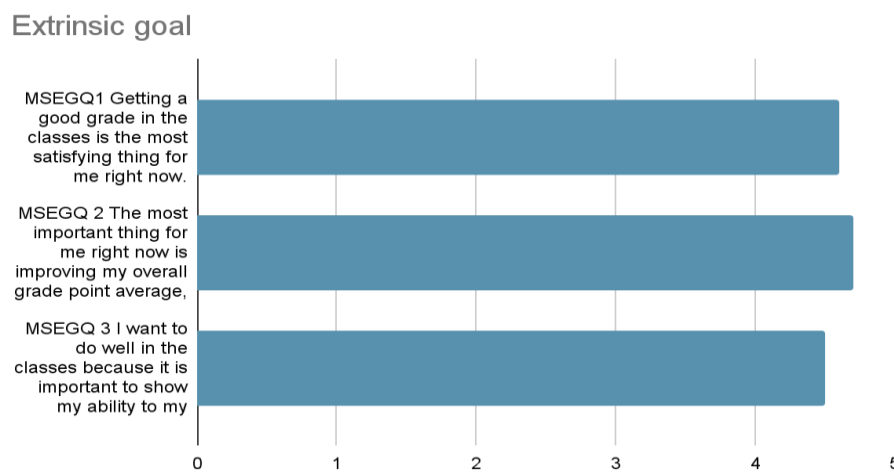


Figure 5- Mean for EXTRINSIC GOAL ORIENTATION (3 items)

According to the findings presented in Figure 5, it is evident that achieving good grades holds significant importance and brings high satisfaction to students, as indicated by the markedly high mean score of 4.6. Furthermore, there is a strong emphasis on improving overall grade point average, reflected by a mean score of 4.7, underscoring the significance placed on academic performance. Additionally, students express a desire to excel in their classes, aiming to showcase their abilities to their family, friends, and others, as evidenced by a mean score of 4.5. The consistently high mean ratings of 4.5 and 4.6 highlight the role of grades not only as a source of personal satisfaction and motivation but also as a means of external validation. It is noteworthy that all items received positive attitudes, indirectly indicating the extrinsic motivation contributing to their overall motivation. This suggests that while students are driven by the desire for academic achievement and recognition from others, they also derive satisfaction and motivation from their performance and accomplishments. This emphasis on external rewards and validation complements the intrinsic motivation observed in their preference for challenging classes and intellectual stimulation, indicating a multifaceted approach to motivation that encompasses both intrinsic and extrinsic factors.

TASK VALUE BELIEFS

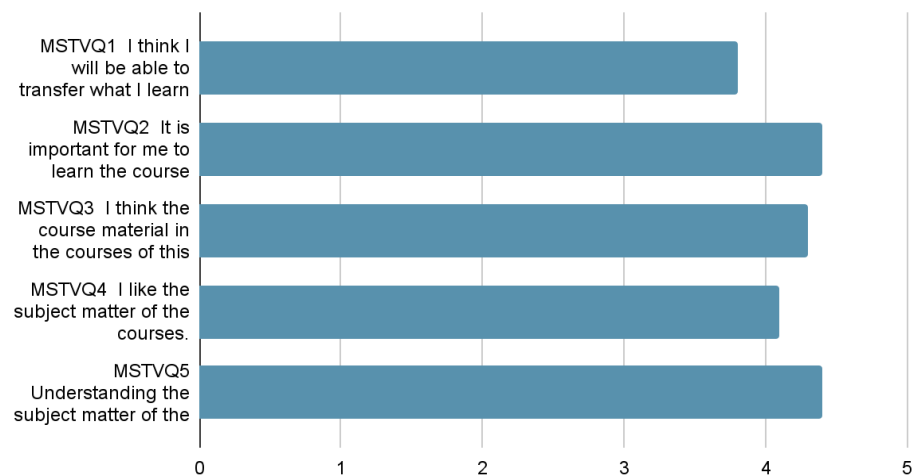


Figure 6- Mean for TASK VALUE BELIEFS

The findings presented in Figure 6 provide valuable insights into students' perceptions of the value inherent in their course materials and subject matter. Overall, students demonstrate a strong sense of confidence in their ability to transfer their learning across different courses, as indicated by a mean score of 3.8. This confidence reflects a belief in the interconnectedness of their education and the applicability of their learning beyond individual courses.

Moreover, students place significant emphasis on the importance of learning the course materials, with a notably high mean score of 4.4. This underscores their recognition of the relevance and utility of the materials for their personal growth and development. Additionally, students express a strong liking for the subject matter, with a mean score of 4.1, indicating a genuine interest and enthusiasm for the content. Furthermore, students highlight the significance of understanding the content, reflected in a particularly high mean score of 4.4.

The range of mean ratings, spanning from 3.8 to 4.4, underscores the substantial value that students perceive in their courses and their content. These findings suggest a high level of motivation among students to actively engage with and derive meaning from their academic experiences. By recognizing the inherent value in their coursework and subject matter, students are motivated to invest effort and attention in their studies, ultimately contributing to their overall academic success and personal development.

Expectancy Component- 5 items



Figure 7- Mean for STUDENTS ' PERCEPTION OF SELF-EFFICACY (5 items)

The data presented in Figure 7 offers valuable insights into students' perceptions of their self-efficacy, reflecting their confidence in various academic tasks. The results reveal that students demonstrate a strong belief in their ability to achieve excellent grades on class assessments, as indicated by a positive mean score of 3.4. This confidence underscores their self-assurance in their academic abilities and their capacity to perform well in all assessments provided for them throughout the semester.

Furthermore, students express confidence in their ability to understand even the most complex lessons taught by their instructors, albeit with a slightly lower mean score of 3.3 indicating a more neutral attitude. However, they showcase their belief in their capacity to master these lessons by expressing confidence in their ability to complete assignments and tests outstandingly, as well as to acquire the skills being taught by their instructors, all sharing a mean score of 3.5. This suggests that while students may approach complex material with a more cautious attitude, they remain confident in their ability to effectively engage with the subject matter and eventually, master the subject.

Moreover, students exhibit a strong belief in their capability to perform well in classes despite facing difficulties or challenges from instructors or their own perceived lack of skills, reflected in a mean score of 3.5. The consistent high mean ratings ranging from 3.2 to 3.5 across various aspects of self-efficacy indicate a prevalent sense of confidence among students.

Overall, these findings suggest that students possess a high level of self-efficacy, enabling them to effectively control their self-motivation and approach academic tasks with confidence and determination. This robust sense of self-efficacy plays a crucial role in shaping students' academic experiences and outcomes, empowering them to navigate challenges and achieve success in their educational endeavors.

CONTROL BELIEFS FOR LEARNING

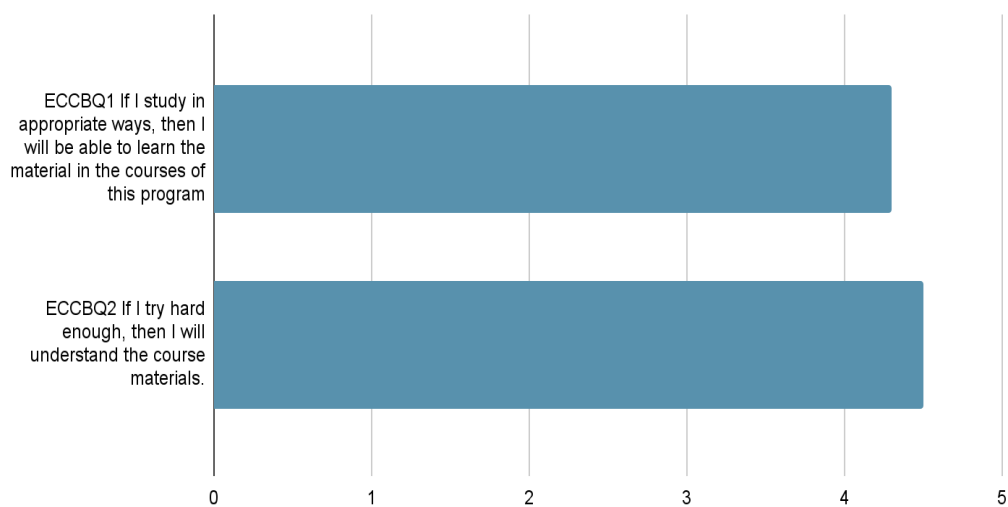


Figure 8- Mean for CONTROL BELIEFS FOR LEARNING (2 items)

The data presented in Figure 8 offers valuable insights into students' control beliefs regarding their learning process. The results demonstrate that students express a strong belief in their ability to control their learning outcomes through effective study strategies. Specifically, they indicate confidence in their capacity to learn the material in their courses when utilizing appropriate study methods, as evidenced by a high mean score of 4.3. This suggests that students recognize the importance of adopting effective study techniques and believe in their ability to employ these strategies to successfully comprehend course materials.

Additionally, students showcase their confidence in their capability to understand the course materials if they exert sufficient effort, reflected in another high mean score of 4.5. This indicates a belief in the power of perseverance and diligence in facilitating learning, emphasizing the role of personal effort both inside and also outside of the classroom, as well as their determination in achieving academic success.

The consistent high mean ratings of 4.3 and 4.5 for both items underscore the prevalent control beliefs among students regarding their learning process. This robust sense of control belief contributes to their learning motivation, as it empowers them to take ownership of their learning journey without depending on the instructor's lesson inside the classroom solely. Furthermore, they also demonstrate active engagement in the pursuit of knowledge and understanding.

Overall, these findings highlight the importance of fostering a sense of control belief among students, as it serves as a key determinant of their motivation and academic success. By instilling confidence in their ability to control their learning outcomes through effective study strategies and personal effort, educators can empower students to become self-directed learners who are motivated to achieve their educational goals.

AFFECTIVE COMPONENT

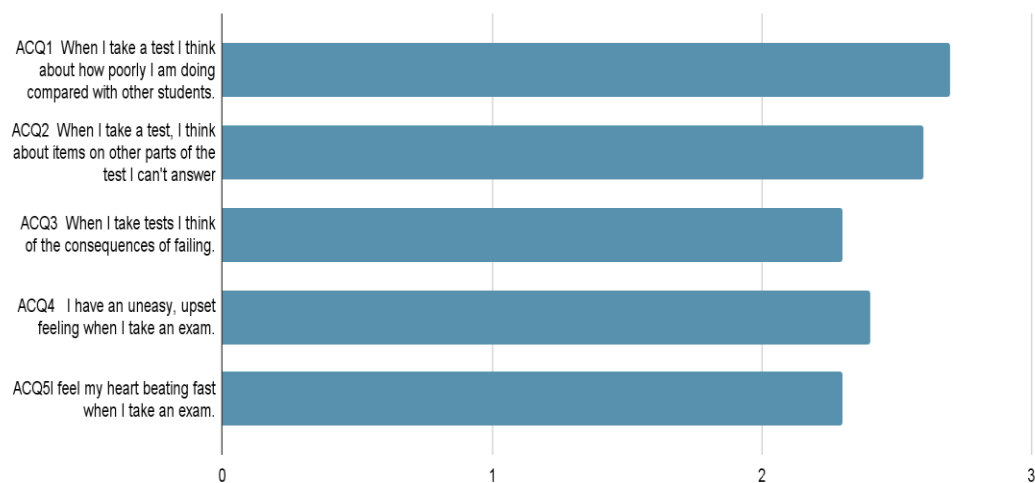


Figure 9- Mean for -AFFECTIVE COMPONENT -reversing (5 items)

The data shown in Figure 9 above shows the larger picture on the affective component regarding the students' learning process. The results demonstrate that students exert their positive emotions of the affective domain towards their peers while performing a test. Specifically, they indicate their positive emotion of not comparing themselves to other students while performing poorly in a test, as evidenced by a low mean score of 2.7. This suggests that students did not compete negatively with other students, they embraced the challenges of performing assessment and did not choose to react negatively towards their own challenges throughout the courses.

Additionally, students showcase their confidence in controlling their emotions while struggling to answer a test. They did not linger on the negative emotions of any part of a test that they failed to answer, reflected in another low mean score of 2.6 in the reversing item. This indicates a belief in the power of controlling the affective component of one's self, being self-motivated and did not react negatively towards difficulties while answering a test.

The consistent low mean ratings of 2.3 for both negative items namely the frightening thought of consequences of failing the course and the fast-beating heart beat when taking a test underscore the prevalent positive affective components towards their assessment journey in a course. Students are mindful of their difficulties while going through a test and are not easily affected by the fact that they are in a pressure state of mind. They embrace the difficulties and do not fall into a state of negative behaviour towards themselves or others. They also demonstrate a positive attitude towards answering a test by not feeling uneasy or upset throughout the journey of performing the assessment. This is evidenced by a low mean score of 2.4.

Overall, these findings acknowledge the importance of instilling a sense of positive attitude towards assessment, as it reflected in their motivation and academic success. By nurturing the understanding of assessment in a course, educators can give the chance to students to acknowledge the function of a test which is the assessment of the curriculum that they have learned in a course and realize that assessment serves as a learning tool for learning. Students with this positive mindset will elevate the negative emotion towards the assessment thus increasing their motivation for learning.

Findings for Burnout

This section presents data to answer research question 2- How do learners perceive their cause of burnout in learning?

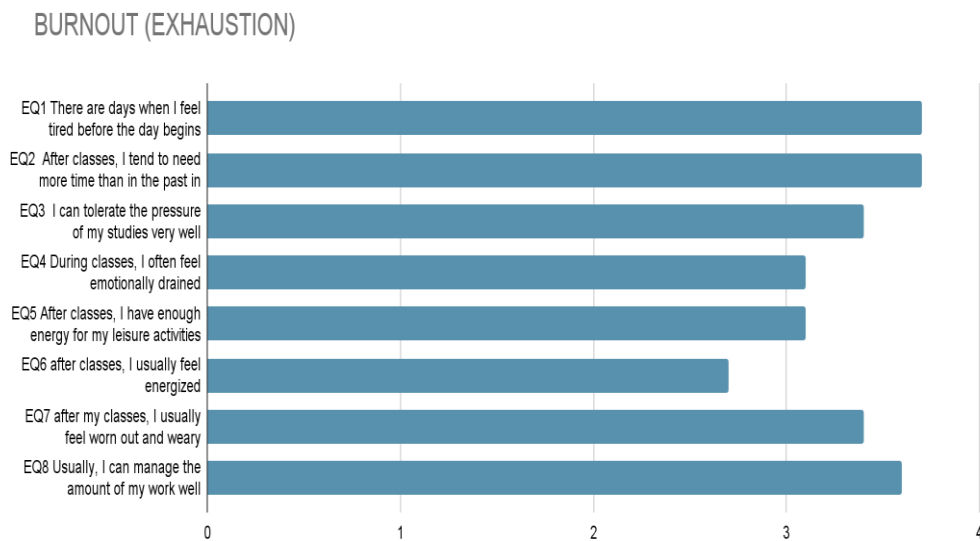


Figure 10- Mean for BURNOUT (EXHAUSTION)

Based on Figure 10, the mean scores associated with various exhaustion-related statements offer valuable perspectives into how learners interpret the roots of burnout within their learning contexts. The findings reveal a recurrent pattern where learners frequently grapple with feelings of exhaustion even before the commencement of their day, as evidenced by a notable mean score of 3.7. Moreover, learners express a heightened need for post-class relaxation and recovery compared to previous experiences, underscored by a mean score of 3.0.

Furthermore, learners often report experiencing emotional depletion during class sessions, as reflected in a mean score of 3.1, followed by feelings of weariness and depletion after classes, as indicated by a mean score of 3.4. These findings collectively underscore the pervasive nature of physical and emotional exhaustion experienced by learners within the learning environment, suggesting potential contributing factors to their perception of burnout.

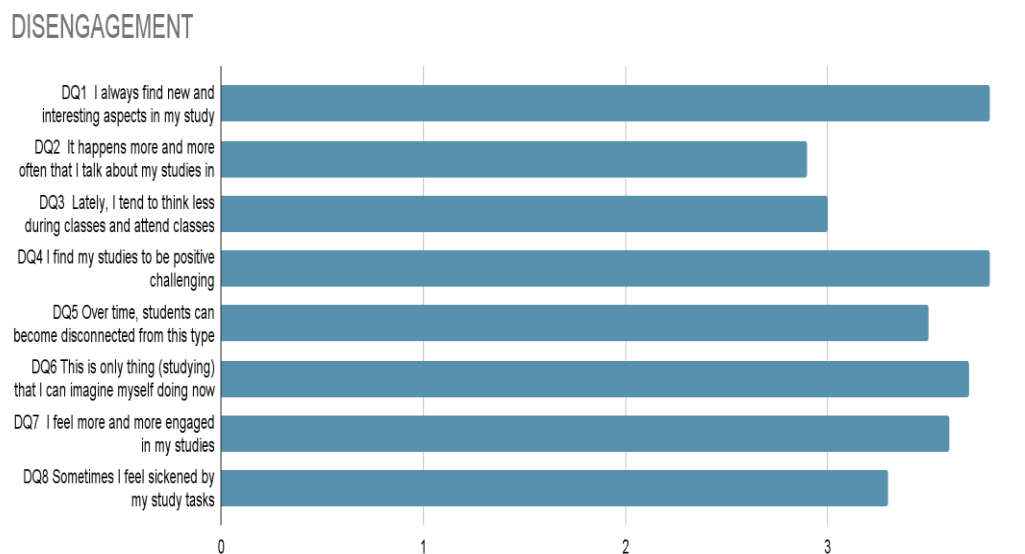


Figure 11- Mean for DISENGAGEMENT

The data presented in Figure 11 offers insights into the level of disengagement experienced by students and its relationship with their motivation to learn. Analysis of the mean scores for each item reveals a nuanced picture, with varying degrees of both engagement and disengagement observed among students.

Students reported engagement with their studies, as indicated by mean scores of 3.8 for finding new and interesting aspects in their studies and feeling more engaged overall. These findings suggest that many students are actively seeking out stimulating and meaningful experiences in their academic pursuits, demonstrating a positive orientation toward learning.

In addition to the positive indicators of engagement mentioned earlier, there were also some negative signs of disengagement that emerged. For example, students reported discussing their studies in a negative manner (mean = 2.9) and feeling a sense of discomfort towards study tasks (mean = 3.3). These findings suggest that despite their active attempts to seek interest and engagement in their studies, students may also experience moments of disengagement and dissatisfaction with the learning process.

The mixed pattern of disengagement and engagement observed among students highlights the complexity of their motivational experiences and the need for further investigation into the factors influencing their motivation to learn. Additionally, these findings underscore the potential impact of burnout on students' educational experiences, as feelings of disengagement and negativity toward studies may contribute to or result from burnout.

Findings for Relationship between Motivation and Burnout

This section focuses on addressing Research Question 3, which explores the relationship between motivation and burnout. To investigate this relationship, the data was analyzed using SPSS to examine the mean scores of metacognitive, effort regulation, cognitive, social, and affective strategies. The objective was to identify any significant associations between these variables. The findings of the analysis are presented in Table 2, which provides a clear overview of the results.

By examining the correlations presented in Table 2, we can gain insights into the relationship between motivation and burnout. The data analysis allows us to determine whether there is a statistically significant association between the different strategies employed by students and their levels of burnout. This analysis helps us understand whether specific motivational strategies have a positive or negative impact on students' well-being and overall experience.

The results presented in Table 2 provide valuable information for understanding the relationship between motivation and burnout. By examining the correlations between metacognitive, effort regulation, cognitive, social, and affective strategies, we can identify patterns and trends that shed light on how these factors influence students' burnout levels. This analysis contributes to a deeper understanding of the complex interplay between motivation and burnout, and its implications for student well-being and academic success.

Overall, the data analysis using SPSS and the presentation of results in Table 2 allow us to explore the relationship between motivation and burnout, providing valuable insights into the factors that influence students' experiences and well-being in the academic context.

Table 2

Correlation between Motivation and Burnout

		MOTIVATION	BURNOUT
MOTIVATION	Pearson Correlation	1	.356**
	Sig. (2-tailed)		<.001
	N	218	218
BURNOUT	Pearson Correlation	.356**	1
	Sig. (2-tailed)	<.001	
	N	218	218

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

The findings presented in Table 2 provide valuable insights into the association between motivation and burnout. The results of the correlation analysis reveal a statistically significant moderate association between motivation and burnout, as indicated by a correlation coefficient of $r = 0.356^{**}$ ($p = 0.000$).

To interpret the significance of this correlation coefficient, we can refer to Jackson's (2015) guidelines. According to Jackson, a coefficient that is significant at the 0.05 level suggests that the association between motivation and burnout is unlikely to have occurred by chance. Moreover, the positive correlation is measured on a scale ranging from 0.1 to 1.0. In this context, a weak positive correlation would fall within the range of 0.1 to 0.3, a moderate positive correlation would be from 0.3 to 0.5, and a strong positive correlation would be from 0.5 to 1.0 (Jackson et al., 2015).

Considering the correlation coefficient of $r = 0.356^{**}$, which falls within the moderate range, it indicates that there is a meaningful and significant positive relationship between motivation and burnout among the participants. This suggests that as motivation levels increase, the likelihood of experiencing burnout also tends to increase moderately.

These findings highlight the importance of considering the impact of motivation on students' burnout levels. The moderate positive relationship suggests that it is crucial to address and foster positive motivation while simultaneously being mindful of the potential risks of burnout. By understanding the association between motivation and burnout, educators and practitioners can develop strategies and interventions to promote healthy levels of motivation and prevent or mitigate burnout among students.

In summary, the results from Table 2 demonstrate a significant moderate positive association between motivation and burnout. These findings underscore the need for further research and the implementation of targeted interventions to support students' motivation and well-being in educational settings.

Conclusion

Summary of Findings and Discussions

Science foundation students often find themselves highly motivated due to the anticipation of their future experiences aligning closely with the courses they are currently undertaking. The relevance of their coursework to their anticipated future endeavors provides a strong motivational factor, as it directly connects their learning to practical applications and real-world scenarios they are likely to encounter. This alignment fosters a sense of purpose and excitement about their studies, driving their engagement and commitment to mastering the material. This was evidenced by the higher mean scores obtained for motivation, indicating a strong inclination towards engagement and enthusiasm among participants. The robustness of these scores underscores the significance of motivation as a driving force in the learning process, highlighting its pivotal role in fostering commitment and dedication among learners. Furthermore, the consistent trend of elevated mean scores across multiple assessments reinforces the reliability and validity of the observed motivational tendencies, further substantiating the importance of cultivating a motivating learning environment.

Research by Eccles and Wigfield (2002) on the expectancy-value theory of motivation has highlighted the importance of perceived task value in influencing students' engagement and achievement outcomes. Similarly, studies by Dweck (1986) on mindset theory have shown that learners with a growth mindset, who believe in the malleability of their abilities and attribute success to effort, are more likely to exhibit higher levels of motivation and academic success (Rosenzweig et al., 2019).

Furthermore, meta-analyses conducted by Hattie and Yates (2014) and Wang and Eccles (2012) have provided robust evidence supporting the relationship between motivation and academic achievement across various educational contexts and age groups. These studies have consistently found that motivated learners tend to demonstrate higher levels of persistence, effort, and academic performance compared to their less motivated peers (Pattal et al., 2024).

The second objective was to determine the causes of burnout among foundation students. This was prompted by the observation that both physical and emotional exhaustion are commonly experienced by foundation students, a phenomenon also prevalent among other learners. Such exhaustion is often attributed to the heavy class workload, which leaves students with limited time for adequate rest.

The correlation analysis conducted among foundation students in Malaysia reveals a noteworthy finding: there exists a moderate but significant association between motivation and burnout. This suggests that variations in students' levels of motivation tend to correspond with changes in their experiences of burnout, indicating a potential interdependency between

these factors. Such insight underscores the importance of addressing both motivation and burnout concurrently in educational interventions and support systems tailored for foundation students in Malaysia. By acknowledging and addressing this relationship, educators and policymakers can implement targeted strategies to enhance students' motivation while mitigating the risk of burnout, ultimately fostering a healthier and more conducive learning environment.

Pedagogical Implications and Suggestions for Future Research

Given the moderate significant association found between motivation and burnout among foundation students in Malaysia, future research could further explore the specific factors that influence this relationship. Exploring additional variables such as academic workload, social support networks, coping strategies, and cultural influences could provide valuable insights into the mechanisms underlying motivation and burnout in this context. Additionally, longitudinal studies could investigate how these dynamics evolve over time and identify potential interventions to mitigate burnout and enhance motivation among foundation students. By expanding our understanding of these factors, future research can contribute to the development of more targeted interventions and support systems to promote student well-being and academic success. The exploration of more specific causes of motivation and burnout may require a more refined instrument. Therefore, researchers need to create a new instrument that explores more thoroughly the causes of burnout occurring among this generation.

As a conclusion, foundation students are more motivated when they find their learning important and useful (value), when they believe they can do well (expectancy), and when they enjoy learning (affective). When students see their tasks as valuable and believe they can succeed, and when they feel positive about learning, they're more likely to be motivated and engaged in their studies. The results of this work show similar findings to other studies. However, to delve deeper into the causes of burnout, it requires respondents to provide more detailed responses, which could necessitate a shift in the study method to qualitative research.

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