Proceeding Paper

High School Students' Motivation Needs and Their Intentions to Pursue Tertiary Education †

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Abstract: The study investigated the motivational needs of secondary school students and their intentions to pursue higher education. The descriptive survey method was utilised. This study's sample was comprised of 137 students in grades four and five in secondary schools in Langkawi Island, Malaysia. For data analysis, descriptive and inferential statistics were utilised. The results indicated that these students have high educational aspirations concerning physiological needs, safety needs, social needs, self-esteem needs, and self-improvement needs. The survey also revealed that the need for self-improvement influences the educational ambitions of students pursuing tertiary education. Other motivational elements, including physiological needs, safety needs, social needs, and self-esteem needs, have no statistically significant relationship with students' plans to pursue postsecondary education.

Keywords: motivation needs; secondary school students; tertiary education

1. Introduction

In Malaysia, it is exceedingly difficult for a student to acquire admission to post-secondary education, particularly in public higher education institutions. The dilemma arises because the current tertiary education options are insufficiently able to meet societal demands and the country's expanding needs [1]. Furthermore, studies on access to higher education institutions are critical in assisting underprivileged students in improving their academic performance and social position. Secondary school students must be encouraged to aspire to higher levels of study and advancement.

Motivation is the engine that drives achievement. Students perform their best academically when they are motivated. According to [2], motivation reinforces and sustains classroom activities. Motivation is viewed as satisfying human wants or demands in order to attain individual primary objectives or organisational objectives [3]. Motivation stimulates, activates, and propels conduct [4]. Students' motivational demands are those things that they require in order to exert greater effort in their academic work. They may have physical, emotional, social, or material needs, among others. Motivation can be internal (intrinsic) or external (extrinsic). Intrinsic motivation refers to all components of motivation that might boost students' self-determination to see the need to thrive in their academic pursuits. According to [5], intrinsic motivation places control in the hands of the individual who controls learning based on his or her own preferences. A learner who is intrinsically driven maintains a quality of academic endeavour because his or her motivation for success originates from within. Extrinsic motivation refers to motivation that comes from external sources. It takes external variables to provide such incentive. External variables that are required for extrinsic motivation include the students' teachers, parents, families' peers,

and counsellors. Extrinsic motivation might come in the form of prizes, tokens, or money. Motivation enables pupils to push themselves in order to earn high grades [6]. Studies have indicated, for instance, that students from poor socioeconomic status households have low aspirations to continue their education [7,8]. They are therefore at risk of dropping out of higher education institutions.

A higher education institution (HLI) is primarily responsible for educating students according to specific prerequisites at a higher level, with an emphasis on practical and technical skill sets [9]. Education is a tool for reforming a country's economy, raising people's living standards, and reducing poverty issues [10]. Previous research has demonstrated that students are motivated and choose to enrol in universities because of a promising future profession [11,12]. In addition, research indicates that education helps students improve or requalify themselves as their future living circumstances change [7,13–16].

The theory focuses mostly on motivation. The study's central topic is Maslow's hierarchy of needs. According to the theory [17], individuals attempt to meet their wants in accordance with the hierarchy of those requirements. Needs are met in accordance with their relative importance. He ordered these requirements from lowest to highest priority. The order is as follows: physiological needs, safety needs, belonging and love needs, esteem needs, and self-actualization wants. Maslow stated that these requirements determine an individual's conduct, since behaviour stems from an individual's efforts to satisfy their needs. According to this idea, physiological needs relate to insufficiencies and necessities, while higher-order needs relate to human growth. The physiological demands include food, water, sleep, and sex. Safety needs relate to protection from physical and mental threats, as well as security of life, property, and employment. The purposes of the needs for belonging and love are to be accepted by others, to be liked, to enjoy a social circle of friendship, and to belong to a group. Respect is linked to self-esteem, accomplishment, position, and acknowledgment. Self-actualization demands relate to an individual's creativity, potential, and talent utilisation. Maslow recognised that these wants cannot be totally satisfied, and that when they are, they cease to inspire the individual.

Maslow's hierarchy of requirements postulated that individuals have needs and that these needs are structured in a hierarchy, beginning with the most basic or physiological needs which no one can live without. Such needs include food and shelter, among others. When the physiological needs are met, other needs, such as the need for safety, belonging, love, self-esteem, and self-actualization, will be satisfied. These needs must be addressed in order for students to be motivated to study; however, if these needs are not met, students will not be driven to learn. If these demands are addressed, however, they will move towards self-actualization. Therefore, students must be provided with an environment that encourages them to excel in their studies, thereby fostering their self-actualization.

Academic achievement [18], college experience [19], and demographic traits have been the subject of a number of earlier studies focusing on students [8,20]. Numerous studies on academic achievement, college experience, and demographic features of secondary school students have been conducted in western nations. Unfortunately, fewer studies have been undertaken, particularly in developing nations, on the motivations or variables that drive secondary school students, particularly those from rural areas, to enrol in higher education institutions. Based on Maslow's theory of the hierarchy of needs, the purpose of this study was to determine the motivation level of secondary school students in terms of their physiological, safety, social, esteem, and self-actualization needs, and to examine the ranking of their needs. This study also was conducted to examine the relationship between the influencing factors of secondary students' intentions to study at a higher education institution.

2. Material and Methods

Secondary school students in Malaysia comprised the population of this study, with its sampling frame comprising of students of two secondary schools in Langkawi. They include Sekolah Menengah Kebangsaan Pulau Tuba, which is a school in a rural island, and

Sekolah Menengah Kebangsaan Tunku Putra, Langkawi. Langkawi schools were selected because they are part of the requirements for the research grant obtained for the research to be conducted in Langkawi and the sample is believed to represent the population. The Pejabat Program Pra Pendidikan Tinggi, Universiti Teknologi MARA collected data from students over the course of three days in November 2021 as part of its corporate social responsibility (CSR) initiatives to help and provide a second chance to underprivileged youths of Malays, Sarawak origin descendant, Sabah origin descendant, and Orang Asli to enrol in institutions of higher education. The objective of this programme is to provide the B40 students with the option to pursue higher education through its pre-diploma programmes [21]. The B40 category is comprised of families with gross monthly incomes of less than MYR4849 [22]. There were 137 surveys distributed and analysed. For this study, fifth- and fourth-grade students from both schools who attended the motivational talk and programme were asked to complete the questionnaire. As the primary source of primary data for the study, a self-administered survey was utilised. The questions are composed of two portions and written in Bahasa Melayu. They include Part A (demographic portfolio) and Part B (students' perceptions on motivation factors to further their studies at HLI). Five elements were adopted from [23] for the demographic profile's questions. According to [23], motivation consists of five factors: physiological needs, safety needs, social needs, self-esteem needs, and self-improvement needs. Five items were utilised to measure each of the five motivational elements, for a total of 25 items. As the ultimate dependent construct, this study included two-item measures to examine secondary school students' behavioural intentions to continue their education at a higher education institution. Descriptive analysis, correlation analysis, and regression analysis were used to investigate the strength of the link between five motivational factors and students' plans to pursue higher education.

3. Results

3.1. Descriptive Analysis

Table 1 shows the total mean value for each motivation factor. Based on Table 1, the overall mean score for motivation is high, m = 4.42 (a mean score between 4.01–5.00, according to [24]). The highest total mean value for motivation is for safety needs (m = 4.60), followed by physiological needs (m = 4.60), self-esteem needs (m = 4.49), and self-improvement needs (m = 4.40), respectively. The least important factor is social needs (m = 3.99).

Table 1. Mean, SD, and Rank for Maslow Hierarchy of Needs.

Factor	Mean	Standard Deviation (SD)	Rank	N
Physiological needs	4.60	0.424	2	137
Safety needs	4.63	0.419	1	137
Social needs	3.99	0.635	5	137
Self-esteem needs	4.49	0.489	3	137
Self-improvement needs	4.40	0.483	4	137
Total	**4.42**	**0.490**		

This reveals that the students have the greatest motivation for safety needs. The hierarchical order of the remaining needs is psychological needs, self-esteem needs, self-improvement needs, and social needs.

Table 2 shows the important aspects for each of the motivation factors for the students in deciding to pursue their intentions to study at a higher education institution. Based on Table 2, the highest mean value in motivating secondary school children for physiological needs is to help family in improving living standards, m = 4.81. For the security needs factor, the most important aspect is to avoid being troublesome to others (m = 4.72), while for the social needs aspect it is the ability to meet new friends (m = 4.38). In the self-esteem factor, obtaining knowledge (m = 4.74) and the self-improvement needs factor of fulfilling dreams and aspirations (m = 4.71) are the most important parts for the secondary students

in motivating them to pursue their studies at a higher learning institution. According to these group of students, the least important factor is social needs (wanting to be noticed by other friends).

Table 2. Motivation Aspects of Students in Secondary School in Langkawi.

Items	Mean	Standard Deviation	N
Physiological (to get a better job)	4.66	0.474	137
Physiological (to buy food and clothing necessities)	4.37	0.642	137
Physiological (to help families achieve a better standard of living)	4.81	0.446	137
Physiological (learning and continuing learning is important)	4.61	0.560	137
Physiological (to get a high paying job)	4.54	0.630	137
Safety (to obtain a permanent job after graduation)	4.66	0.585	137
Safety (to obtain a more secure life in the future)	4.74	0.470	137
Safety (to be a good example to other siblings)	4.62	0.516	137
Safety (to avoid being left behind by a friend who constantly achieves success)	4.61	0.670	137
Safety (to avoid bothering others)	4.72	0.499	137
Social (to avoid a boring life)	4.21	0.790	137
Social (To participate in various activities of the association)	4.07	0.720	137
Social (meet more friends)	4.38	0.677	137
Social (to get the attention of the teacher)	3.77	0.923	137
Social (want to be noticed by other friends)	3.53	0.932	137
Self-esteem (to increase self -confidence)	4.61	0.518	137
Self-esteem (to acquire knowledge)	4.74	0.442	137
Self-esteem (appreciated by others)	4.18	0.813	137
Self-esteem (respected by others)	4.28	0.764	137
Self-esteem (to earn an academic excellence award)	4.63	0.582	137
Self-improvement needs (to develop one's potential)	4.58	0.525	137
Self-improvement needs (to fulfill dreams and achieve personal ambitions)	4.71	0.487	137
Self-improvement needs (to understand your own weaknesses and strengths)	4.53	0.570	137
Self-improvement needs (to improve social status)	4.10	0.750	137
Self-improvement needs (to get more wealth in the future)	4.08	0.849	137

3.2. Correlation Analysis

Table 3 exhibits the Pearson Correlation Matrix for all the independent variables of this study, namely motivation factors such as physiological needs, safety needs, social needs, self-esteem needs, and self-improvement needs. The results of the correlations between the variables are statistically significant. There is a moderate to high association between all the elements of motivation among secondary school children (r = 0.540 to r = 0.750, $p < 0.01$), which also means that there is a positive relationship between the variables. Among all the elements, the physiological and safety needs element achieved the highest range (r = 0.70, $p < 0.01$). However, there is a low association between physiological needs and social needs (r = 0.39, $p > 0.01$), since the r-values are less than 0.40.

Table 3. Pearson Correlation Matrix.

	Physiological Needs	Safety Needs	Social Needs	Self-Esteem Needs	Self-Improvement Needs
Physiological needs	1	0.750	0.399	0.547	0.593
Safety needs	0.750	1	0.540	0.709	0.693
Social needs	0.399	0.540	1	0.662	0.684
Self-esteem needs	0.547	0.709	0.662	1	0.727
Self-improvement needs	0.593	0.693	0.684	0.727	1

3.3. Regression Analysis

To see whether there is a significant relationship between secondary school children and their motivation intentions to further their studies at HLI, a single step multiple regression was conducted. The 25 items in the independent (motivation) dimension and two items in the dependent dimension (behavioural intention) were collapsed and entered into the equation. The outcomes demonstrated that there is a significant relationship between secondary school children's motivation towards behavioural intentions. The secondary school children's perception of motivation was able to explain 40% (R^2 = 0.400, F—change = 17.481, $p < 0.000$) of the variance in behavioural intentions to pursue studies at a higher education institution. It evidently shows that secondary students' perception of motivation is found to significantly and positively influence their intentions to pursue tertiary education. Besides that, Table 4 shows the value of beta coefficients for this study. In [24] it is stated that the beta coefficient indicates which variable(s) are important to the model by looking at the largest value while ignoring the negative signs. This study suggests that, among the factors of motivation, self-improvement needs (0.332) is the strongest influence on the behavioural intention to continue studying. However, other factors of motivation, such as physiological needs, safety needs, social needs, and self-esteem needs, have statistically insignificant relationships towards students' behavioural intentions.

Table 4. Coefficient Behavioural Intentions.

Model	Unstandardized B	Std. Error	Standardized Beta	t	Sig.
(Constant)	0.508	0.547		−0.929	0.355
Physiological needs	0.157	0.166	0.098	0.945	0.346
Safety needs	0.138	0.201	0.086	0.688	0.493
Social needs	0.044	0.105	0.042	0.420	0.675
Self-esteem needs	0.230	0.158	0.166	1.455	0.148
Self-improvement needs	0.466	0.163	0.332	2.858	0.005

4. Discussion and Conclusions

This study's findings indicate that the physiological needs element is the most essential factor for respondents' motivation to pursue studies at a higher education institution (HLI), while the social needs factor is the least important factor. The results of the regression analysis reveal that the independent variable, students' perceptions of their motivational needs, has a substantial impact on their intention to pursue higher education. Among all motivational elements, the need for self-improvement has the greatest influence on their behavioural intention.

Students' desires to continue their education at HLI is primarily motivated by their physiological requirements. After graduation, the desire for a better career is the primary physiological needs factor. These findings confirm the findings of [12], which discovered that students' motivations for pursuing related subjects closely resemble their desire to obtain employment after earning a degree. In addition, the desire to improve the family's level of living is a big motivation for students to continue their education at colleges. This finding is consistent with the majority of findings from prior studies indicating that students intend to continue their education at colleges and universities to help their family better their living conditions and escape poverty [7,14–16]. In addition, security standards are the second most significant criterion that inspires students to continue their education

at an institution of higher learning. The desire for a more secure life in the future is intimately tied to students' safety demands. The findings indicate that many pupils desire a permanent position following graduation. It is not surprising given that a survey of the relevant literature revealed that students wish to continue their studies at HLI in order to secure a job. The results of this study indirectly corroborate the findings of [13], which concluded that students will not attend college if they believe it will not improve their lives in the future.

The need for self-esteem is also an incentive for first-generation students to continue their studies at HLI. According to [17], once individuals have satisfied their basic needs and been accepted by others, they desire to be liked, respected, and appreciated by others. This study demonstrates that first-generation students are advancing their studies to HLI in order to receive academic excellence awards while continuing their education at HLI. They are doing so in order to gain respect and appreciation for their elevation. These findings are consistent with those of [25], which found that children want their parents to be proud of them. This demonstrates that the students' incentives to continue their education at HLI are closely tied to their desire to be praised by others, particularly their parents.

Additionally, students choose to continue their education at HLI due to the urge to achieve self-actualization. Students desire to attain their objectives and ambitions in order to satisfy their need for self-fulfilment. This finding is consistent with the findings of [12], which discovered that the primary reason students enrol in college is to attain personal and career goals, in particular, to get a degree. Additionally, [15,16] discovered that a student desires to attend college to increase social mobility.

Social needs, which is the final aspect that drives students to continue their studies at HLI, has the lowest mean scores. New friendships are not the driving force behind their decision to continue their studies at HLI. This is likely due to the fact that children already have numerous friends in secondary school. Consequently, they will not prioritise this factor when pursuing higher education at HLI in the future.

This study's findings also indicate that secondary students' perception of motivation was found to significantly and positively influence their intentions to pursue tertiary education. It was concluded that all five factors of needs, which are based on Maslow's theory of motivation, were considered motivators by secondary school students, invariably. It exhibited that there was a ladder in the motivational needs of secondary school children in Langkawi. The need for self-improvement was the greatest motivation for these students, which was followed by physiological needs, safety needs, social needs, and self-esteem needs.

This research will be useful and serve as a guide for authorities in the ministry of education and schools, as well as school counsellors, in recognizing the needs of their students. For these students' desires to continue their education at HLI to be achieved, the school must continually motivate or encourage them. For this reason, the school's counselling unit must concentrate on programmes that improve students' motivation and desire to continue their education at HLI. For instance, school counsellors are advised to arrange motivational programmes and invite universities such as the CSR teams from Pejabat Program Pra Pendidikan Tinggi (PPT), UITM to their individual schools. The purpose of PPT's programme is to expose students to the educational and employment opportunities available at HLI. Students in rural areas, such as Pulau Tuba, are only exposed to parental employment and other potential employment opportunities in their environment. Furthermore, it can be one of the effective techniques to help students succeed in their studies, particularly those from the B40 group, and provide them with the possibility to increase their family's future income [26]. In addition, with the career exposure programme for these students, it is hoped that these students' futures would be realised and secured by obtaining desired and better professions in the future.

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