Impact of Artificial Intelligence based Learning Process on Students' Tendency to Involve in Independent Research at the Higher Secondary School

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Abstract—The integration of artificial intelligence (AI) has become increasingly essential in implementing innovative instructional approaches at Higher Secondary School (HSS). The demand for advanced education that integrates intelligent technologies to improve the overall educational experience is growing. Individuals that actively study artificial intelligence are more equipped to face future difficulties related to technology, society, and the environment. The Knowledge and Attitudes Survey (KAS) lacks empirical evidence regarding the motivation levels of students in their involvement with the field of AI. The main purpose of this study was to examine how students' self-confidence, peer opinions, and personal beliefs affect their willingness to participate in AI education. A comprehensive longitudinal survey covered a total of 707 students who entered in higher secondary school. The survey examined the subjective norms, intentions, and knowledge of the participants, as well as their acquaintance with AI, their attitude towards acquiring knowledge of AI, their inclination towards AI-based learning, and their self-assurance in studying AI. The participants displayed a primarily optimistic perspective on AI education, with 78.1% expressing positivity. Moreover, an overwhelming majority of 73.1 percent of participants exhibited assurance in their capacity to gain knowledge in the realm of artificial intelligence. The data indicate that a substantial majority of respondents, precisely 82 %, recognized the influence of different elements, such as peer pressure, instructors, and families, on their choice to participate in AI courses. The results indicate that students' perception of social norms significantly impacts their motivation to study artificial intelligence. Students must demonstrate a heightened openness to AI learning, especially if they perceive support and approval from their teachers and peers. The desire of pupils to participate in AI learning was discovered to be impacted by their viewpoint, self

Various tactics can be employed to boost students' motivation to engage in the study of AI at a HSS, as indicated by the research results. These tactics encompass the dissemination of knowledge regarding the importance of AI education, fostering favorable views towards the subject, and nurturing students' self-perception of their abilities and control. This study offers significant insights for government authorities, educators, and other stakeholders in KAS and similar educational settings.

Keywords- artificial intelligence; self-study; self-efficacy, Committed to Study; learning interest mindsets; Artificial Intelligence effect amongst Students

I. INTRODUCTION

The rapid advancement of artificial intelligence (AI) carries significant implications for civilization and holds the potential to yield profound outcomes. The capacity of artificial intelligence to effectively evaluate substantial amounts of data and enhance decision-making capabilities holds immense potential for automating mundane tasks and tackling complex problems. The potential lies in the capacity of artificial intelligence to effectively assess vast amounts of data. Given the growing prevalence of artificial intelligence (AI), it is imperious for secondary school pupils to possess a comprehensive comprehension of both the theoretical foundations of AI and its diverse practical applications [1]. Artificial intelligence (AI) is gaining increasing attention within the framework of KAS, mirroring the trend observed in numerous other regions globally. The government and other educational institutions are actively collaborating to enhance the educational opportunities accessible to students in the realm of artificial intelligence. The government of KAS has prioritized the incorporation of technology into the country's educational institutions. This initiative aims to enhance educational standards and develop a workforce that is equipped to tackle the demands of the twentyfirst century. In the immediate future, the higher secondary school is expected to require students to have advanced skills in creativity, analysis, and knowledge with new technology [2]. Enhancing one's proficiency in the domain of artificial intelligence (AI) will facilitate progress towards achieving the objectives specified in the preceding list [3, 4]. However, there has been limited scholarly attention given to the notion of integrating artificial intelligence (AI) training into secondary school curricula [5]. Historically, academic research has mostly focused on exploring the potential applications of artificial intelligence (AI) in the field of education. Further investigation is crucial to examine the inclination of students to pursue education in this field, considering the possible importance of artificial intelligence (AI) in the near future. However, accurately assessing the level of interest in the field of artificial intelligence among students enrolled in higher secondary schools at KAS is challenging. Due to the limited amount of research conducted on the factors that impact students' motivation to study artificial intelligence within the framework of KAS (Knowledge and Artificial Intelligence Systems), our understanding of this issue is incomplete. In light of this situation, it is imperative for educators and policymakers in KAS to possess knowledge pertaining to specific traits. The traits consist of attitude towards enhanced learning artificial intelligence (EATT), confidence in enhanced learning artificial intelligence (ECON), self-efficacy in enhanced learning artificial intelligence (ESEE), and enhanced subjective norms (ESUN). Comprehending this is crucial for effectively promoting the advancement of artificial intelligence education among KAS students in order to accomplish the objective of the KAS.

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II. RELATED WORK

The use of artificial intelligence has become more and more necessary for adopting new ways of teaching at Higher Secondary School. The number of people who want advanced education that uses smart technologies to make learning better overall is rising. People who study artificial intelligence are better prepared to deal with problems in the future that affect society, the environment, and technology. The knowledge and attitudes survey doesn't give any real-world information about how motivated students are to work in the area of AI. The main goal of this study was to look at how students' views, selfconfidence, and the opinions of their peers affect their desire to take part in AI education. The survey looked at the participants' subjective norms, intentions, and information, as well as how much they knew about AI, how they felt about learning about artificial intelligence, how they felt about learning artificial intelligence through intelligence, and how confident they were in their ability to study AI. The scholars have tried to explore on the positive attitude among the students at the higher secondary level. The majority of those who answered the survey admitted that different factors, such as group pressure, teachers, and families, had an effect on their decision to take artificial intelligence classes. The data show that how students think about social norms has a big effect on how motivated they are to study artificial intelligence. Students need to be more open to learning with artificial intelligence, especially if they think their teachers and peers back and approve of them. Researchers found that students' desire to learn artificial intelligence was affected by their point of view, how confident they felt, and how good they thought they were at the subject. Results from the research show that different approaches can be used to get students more interested in studying artificial intelligence at a high school. These strategies include getting the word out about how important artificial intelligence education is, encouraging positive feelings about the subject, and helping students believe in their own skills and control.

A. Intention to Learn Artificial Intelligence

The tactical conduct plan states that persons' behaviors are influenced by their perceptions of their own actions, the prevailing societal norms in their communities, and their personal abilities [6]. Several empirical investigations have shed light on the behavioural objectives that students strive to attain [7]. Intentions are strategic and planned actions that an individual formulates to accomplish a specific objective, and the notion of intentions pertains to these strategies and plans. Specifically, the actions that an individual plans to undertakein the future are known as their "behavioural intentions" [8]. The study conducted by [9] revealed that individuals who held a favorable view of artificial intelligence (AI) in terms of its societal advantages were more likely to have a positive attitude towards AI, in contrast to those who considered AI a potential risk to their jobs. This finding emerged as a prominent conclusion from the conducted research. Due to their resemblance to [8], the present study incorporated the terms EATT, ECON, ESEE, and ESUN in its approach. The aim of this study, within the framework of the Theory of Planned Behavior (TPB), is to determine the level of interest among students enrolled in higher secondary schools in pursuing artificial intelligence.

B. Pupils' Attitude Toward Artificial Intelligence

The objective of this study is to categorize the perspectives of the participants by examining their favorable and unfavorable evaluations of a specific course of action. In the initial phases of artificial intelligence (AI) development, a significant number of industry experts and enthusiasts expressed optimism regarding the field's capacity to enhance human life and usher in an unparalleled era of economic expansion. The Theory of Planned Behavior (TPB) emphasizes the need of investigating the relationship between individuals' perceptions of artificial intelligence (AI) and their subsequent actions and decisionmaking. The utilizations of TPB has been employed in research endeavors to assess individuals' viewpoints on artificial intelligence. The research was conducted with the assistance of TPB. The study [10] reveals a notable correlation between individuals' cognitive processes and their objectives when engaging with artificial intelligence. Participants with a positive attitude towards artificial intelligence (AI) were more likely to show interest in using AI-based technology in the future. This was confirmed when they displayed a heightened level of friendliness towards AI. Furthermore, previous studies conducted by researchers [11], [12], and [13] have demonstrated that Korean high school students who held a favorable attitude towards artificial intelligence (AI) were more inclined to engage in research endeavors related to AI. These findings were discovered in three distinct research. Similarly, [14] found similar results among the students who attended schools in the United States. The study's findings suggest that the Theory of Planned Behavior (TPB) framework can be successfully utilized to understand attitudes towards artificial intelligence (AI) and make predictions about future behaviors [13]. The findings given below were derived from a prior study.

C. Pupils' Self-Confidence in Learning

Pupils with high levels of self-assurance have a cognitive mindset that is characterized by a belief in their capacity to overcome obstacles in difficult circumstances. This cognitive mindset enables individuals to face and conquer the challenges that arise in their lives. Individuals have a cognitive awareness of their capacity to gain new knowledge, skills, and methods [14]. Although people may have varying degrees of confidence in the capacity of artificial intelligence (AI) to gain knowledge, it is widely recognized that personal levels of certainty greatly influence one's reaction to the learning process (15). This phenomenon endures despite the general belief that individuals may have different levels of faith in the ability of artificial intelligence to gain knowledge. This phenomenon is widely accepted. The findings described in [16] demonstrate a significant link between the belief in one's ability to acquire knowledge in artificial intelligence (AI) and the inclination to pursue AI study among undergraduate students in India. Moreover, the level of self-confidence that students have is reflected in their views towards the incorporation of technology in teaching and learning methods [17]. The level of faith an individual places in contemporary technology is the key driver of their tendency to seek the development of abilities connected to artificial intelligence [18].

D. Independent Model for Study

"Subjective norms" is the phrase used to describe the cultural influences and expectations that affect an individual's behavior. "Subjective norms" encompasses the societal influences and expectations that significantly influence an individual's behavior. A student's inclination to pursue the study of artificial intelligence (AI) can be influenced by various elements, such as the impact of classmates, the dynamics of the student's home life, and the guidance provided by teachers. If someone perceives artificial intelligence (AI) as beneficial or impactful in their personal or professional spheres, they can feel compelled to attain proficiency in the field of AI. This feeling of duty may be accompanied by a sense of responsibility. If an individual strongly feels that emphasizing their ability to successfully integrate socially will prevent them from lagging behind their peers, it is probable that this situation will occur. Having a supportive family member or a highly regarded mentor can significantly contribute to the cultivation of a young person's interest in the field of artificial intelligence. Examining an individual's subjective criteria can potentially provide valuable insights regarding their aptitude for acquiring new knowledge in the realm of artificial intelligence. Individuals who perceive the exploration of artificial intelligence (AI) as a societal responsibility are more inclined to invest the necessary exertion to engage in studies of this kind. If an individual perceives a lack of recognition for their abilities from their social environment, they may have reduced motivation to pursue further study in the field of artificial intelligence (AI), especially if they feel that their capabilities are not valued by those folks. Several diverse research projects have been conducted to examine the influence of subjective norms on an individual's inclination to pursue education in the field of artificial intelligence (AI). The study [19] revealed that subjective factors significantly impacted the preferences of Chinese undergraduate students in choosing a career in artificial intelligence. The data provided in reference [20] indicate that high school pupils in Taiwan exhibited a strong correlation between their aspirations for a profession in artificial intelligence and subjective norms. Furthermore, [21] revealed that subjective norms had an impact on the correlation between the attitudes and intentions of undergraduate students towards studying artificial intelligence (AI). This was discovered to be true regarding the correlation between the attitudes and intentions of undergraduate students. An inquiry into the correlation between attitudes and intents resulted in the identification of this phenomena. If an individual perceives significant peer pressure to pursue the study of artificial intelligence, this can amplify the influence of their mindset on their motivation to engage in such studies. According to the available studies, it may be inferred that people's subjective norms influence their decision to participate in AI learning.

Individuals are more likely to engage in activities relevant to the research of artificial intelligence (AI) when they experience strong social pressure from their peers. Promoting education and training in AI is advantageous, considering both societal context and the impact of subjective criteria on individuals' motivation to pursue AI research. These aforementioned elements can influence an individual's choice to pursue academic pursuits in the subject of artificial intelligence.

E. Self-study and its Effectiveness

The level of self-efficacy an individual possesses serves as a reliable measure of their confidence in their ability to accomplish their self-determined goals. In this approach, self-efficacy pertains to the extent to which an individual possesses confidence in their own skills to acquire new knowledge and effectively utilise artificial intelligence. The person in question possesses self-confidence, which is a crucial factor in attaining this level of certainty. Utilising TPB in the realm of artificial intelligence education offers valuable insights into the objectives and actions of students as they develop and enhance their AI skills. The attainment of this objective is facilitated by the use of the Theory of Planned Behavior (TPB) within the given context. Several research have investigated the potential correlation between an individual's self-perception of their abilities and their inclination to participate in AI learning. The study found that self-efficacy may be used to predict the level of interest that undergraduate students in Taiwan have in learning artificial intelligence [17]. The researchers reached this conclusion following the completion of their study. According to a study conducted by [18], it has been observed that undergraduate students in China who show an interest in studying artificial intelligence (AI) have higher levels of self-efficacy compared to their peers who do not show an interest in this field. These data are derived from a study conducted by [13]. Enrolled students at Western educational institutions have observed a connection between their perceived level of self-efficacy and their inclination to pursue studies in the field of artificial intelligence (AI) [12]. An association was discovered to exist between the two variables. The study conducted by [19] allows for the determination of the level of interest that high school pupils possess towards learning artificial intelligence. This can be accomplished by assessing the students' self-perceived proficiency in this domain. Hence, the level of self-efficacy an individual has regarding their ability to gain knowledge in the field of artificial intelligence, as per the Technology Acceptance Model, greatly influences their inclination to participate in learning endeavors related to it. There is potential for a more efficient and extensive incorporation of skills and knowledge related to artificial intelligence (AI), contingent upon educators and politicians fully comprehending and embracing this concept.

III. METHODOLOGY APPLIED

A. Participants and its Members

The research endeavor necessitated the participation of HSS students who were in their senior year of high school during the study. The individuals under investigation are students enrolled at an educational institution that offers instruction at the Higher Secondary level. The course curriculum has included the

introduction of the theoretical foundations of artificial intelligence, as well as its practical applications in the actual world, to the students. Furthermore, they have been had the chance to actively participate in practical experimentation utilizing state-of-the-art AI tools, such virtual enhanced reality and smart boards, which have been provided to them. Furthermore, students have received guidance on the theoretical foundations of artificial intelligence and its practical implementation in real-life scenarios. Between January 10th and February 28th, 2023, we gathered 950 valid surveys from male and female students attending Higher Secondary schools in different educational environments, such as public and private institutions. Based on the gathered data, there were 550 responses from male students, constituting 57.89% of the total responses. Conversely, the number of responses from female students amounted to 400, or 42.11% of the overall total. The participants in this activity consist exclusively of individuals aged 16 to 18, encompassing both adolescents and young adults.

B. Instruments and Apparatuses

The majority of the scale objects employed in prior study were reused in this examination, albeit with some modifications. The aforementioned items were obtained from published sources that are widely acknowledged for their high level of reliability [21, 22]. The credibility of these sources has been widely recognized. The questionnaire comprises a total of 19 inquiries, including a subset of questions specifically intended for collecting demographic data. The forthcoming ideas will be assessed based on the viewpoints of the individuals involved in the activity. The user has provided the following responses: 1. OBSERVE (three items: "I am confident in my ability to achieve success in the AI course") 2. The individual expresses a sense of obligation to acquire knowledge concerning artificial intelligence. 3. CON (four sentences expressing my confidence in my ability to understand the fundamental principles and practical applications covered in the AI course) 4. EATT (three items: "I enjoy utilising AI technology") 5. EINT (consisting of five items: "I will persist in acquiring knowledge in the field of Artificial Intelligence") I shall persist in acquiring knowledge in the field of Artificial Intelligence (AI). To elucidate: 1. I possess unwavering confidence in my ability to excel in the AI course, and I strongly maintain this conviction. 2. I feel compelled to acquire knowledge about AI due to the significant amount of pressure I am under. 3. I am confident in my ability to understand the basic ideas and practical uses that have been taught in the AI class. 4. Employing AI-driven technologies provides me with a feeling of fulfilment. 5. I have prioritised the expansion of my understanding in the field of AAI and have committed to continuous learning throughout my life. All of the aforementioned assertions are accurate in their distinct manners. An extensive inquiry was conducted to ascertain the impact of expert evaluations on students' understanding of AI principles and the practical implementation of those ideas. The data indicates that the content validity level was judged to be 0.84. The participants were provided with a Likert scale that included a range of response possibilities. The range of options spanned from 1 (indicating significant disagreement) to 6 (indicating substantial agreement). Subsequently, students were assigned the responsibility of assessing the degree to which they concurred with each of the six assertions offered. Table 1 displays the alpha coefficients for the various components of

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Benchmark's evaluation, which range from 0.806 to 0.928. Furthermore, the evaluation's overall reliability varies from 0.875 to 0.949, with a maximum score of 1.00. The data indicates that the variables demonstrate a notable level of internal consistency, as was observed.

C. Analytical Measurement Based on Available Data

The entire investigation was conducted using AMOS version 26, which was employed. In the beginning, descriptive statistical approaches were utilized in order to investigate the patterns, asymmetry, and peak values of the data. The values 100 and 30 were the most important ones, as was mentioned in reference number 27. In the subsequent step, confirmatory factor analysis (CFA) was utilized in order to investigate the notion in addition to other surveys. The utilization of a route model, which is a strategy that has been proposed, is one of the potential approaches that might be utilized in order to investigate the effects of variables such as EATT, ESEE, CON, and ESUN.

D. Investigational Analysis Based on Data

The investigation was carried out using AMOS which was used. In the beginning, descriptive statistical methods were utilized in order to conduct an analysis of the data's unilabiate regularity, skewness, and kurtosis. It was mentioned in [24] that the numbers 3.0 and 10.0 were the most important ones. After that, the technique known as Confirmatory Factor Analysis (CFA) was utilized in order to investigate the structure of the questionnaire as well as its validity. It has been demonstrated that a route model can be used to investigate the effects of EATT, ESEE, ECON, and ESUN.

IV. PERFORMANCE ANALYSIS

A. Statistical Descriptor for Analysis

Following the completion of each individual survey question, an analysis of the median, the skewness, and the kurtosis was carried out. There was a value that fell somewhere in the range of 3.0 to 5.0 that was considered to be the center value, which is also referred to as the median. It was shown that the vast majority of respondents had positive feelings regarding the various characteristics. Specifically, the skewness of these items was - 2.304, and the kurtosis was -1.207. The values of their skewness and kurtosis, on the other hand, were 2.185 and 8.085, respectively. It is reasonable to draw the conclusion that the data belong to the unilabiate normal distribution. This is due to the fact that the values of skewness and kurtosis are either lower than or equal to the allowed limits of 3.0 and 10.0 [28], respectively.

TABLE I.	CFA RESULTS
INDEL I.	CITARESOLIS

Items	FL	α	CR	AVG	Median	a3	α4
ESEE1	0.915	0.923	0.951	0.860	4.49	-	5.368
						2.11	
ESEE2	0.945	4.49				0.95	4.49

ESEE4	0.928				4.49	-	6.493
FOIDI	0 (11	0.000	0.075	0.640	4 40	2.31	2 (12
ESUN1	0.641	0.806	0.875	0.640	4.49	- 1.62	2.643
ESUN2	0.743				4.49	-	4.461
200112	017 10					1.73	
ESUN3	0.890				3.0	-	7.386
						2.19	
ESUN4	0.898				3.0	- 2.26	7.365
EATT1	0.921	0.887	0.93	0.817	3.5	2.20	8.085
LAIII	0.921	0.007	0.93	0.017	5.5	2.29	0.005
EATT2	0.926				4.0	-	6.135
						1.66	
EATT3	0.863				4.49	-	3.864
EATT4	-1.64	3.864	4.49	-1.64	3.864	1.64 4.51	-1.64
ECON2	0.851	5.804	4.49	-1.04	4.49	4.51	4.007
LCOIL	0.051	116		Sec. 1	1.12	1.56	1.007
ECON3	0.913		1775		4.49	-	7.333
			LI 10	1		2.21	
ECON4	0.929		100		4.49	- 1.82	3.932
EINT1	0.869	0.929	0.956	0.779	5.1	1.82	6.446
LINII	0.009	0.929	0.950	0.779	5.1	2.12	0.440
EINT2	0.878			1000	5.1	_	7.063
				1.5		2.18	
EINT3	0.891				4.49	-	3.593
EINT4	0.892		-		3.0	1.41	3.641
EIN14	0.892				5.0	1.46	3.041
EINT5	0.884				3.5	-	4.425
112			10			1.66	
1.1.1							

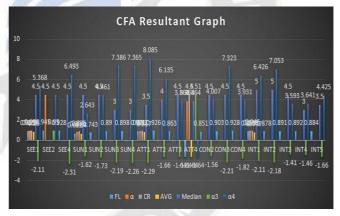


Figure-1 CFA Result Analysis Graph

Abbreviations are as follows: FL= Factor Loads, α = Benchmark alpha, CR = Combined reliability, AVG = Average variance, MD = Median, α 3 = Skewness, α 4 = Kurtosis

B. Analysis Assessment based on Positive Factor

During the course of this investigation, I took into account five distinct aspects: ESEE, ECON, ESUN, EATT, and INT. There are numerous fit indices that can be utilized, including RMSEA(Root-Mean-Square-Error Approximation) GFI(Goodness-Fit-Index),TLI(Tucker-Lewis Index), SRMSR(Standardized-Root-Mean-Square Residuals) & CFI(Comparative-Fit-Index). According to Hu_&_Bentler values of TLI, GFI, and CFI that are greater than 0.9 are indicative of a model fit that is good. There was an RMSEA that was less than 0.06 and an SRMR that was less than 0.08. The values X2 value is 4805.076, df value is 1491, TLI value is 0.951, GFI value is 0.902, CFI value is 0.936, RMSEA value is 0.0231, and SRMR value is 0.0412 for all point to an evaluation model that is satisfactory and satisfies the requirements.

 TABLE II.
 CORRELATIONS AMONG VARIABLES WITH SQUARE ROOTS OF AVGS

Measuring Factor (Variable)	ESEE	ESUN	EATT	ECON	EINT
ESEE	0.9272				C7.111
ESUN	0.7383	0.8132			S.U.V.
EATT	0.6971	0.79001	0.9041	11117	a second
ECON	0.5617	0.62073	0.7101	0.8563	
EINT	0.6772	0.66832	0.7966	0.7953	0.8817
Mean	15.5051	20.2435	15.3522	19.5282	25.5931
SD	3.0155	3.1889	2.4002	3.4291	4.0661

All of the factor loadings, which were estimated using the confirmatory factor analysis (CFA) method, were found to be greater than 0.60, as indicated by the findings that are presented in Table 1. A range of 0.641 to 0.945 was observed for these loadings. For the benchmark variables, the alpha scores were found to range from 0.0919 for ESEE to 0.887 for ESUN, 0.875 for EATT, and 0.928 for EINT. The range of these values was determined to be quite significant. One possible explanation for the high reliability of the questionnaire is that the factor items have been found to have a high degree of internal consistency. It is possible to draw the conclusion that the variables that were used have a valid range for convergence, as demonstrated by an average (AVG) that falls within the range of 0.640 to 0.860 [19]. This conclusion may be reached on the basis of the findings of this investigation. The finding that the square roots of the average variances extracted (AVGs) are greater than their corresponding correlation coefficients is the source of the evidence that supports the discriminant validity [20] (which is displayed in Table 2).

In addition, the mathematical model's fit was considered satisfactory according to the outcomes of the structural model's fitting test. The test yielded a chi-square value of 4875.039, a Tucker-Lewis Index (TLI) of 0.967, a Goodness of Fit Index (GFI) of 0.947, a Comparative Fit Index (CFI) of 0.969, a Root Mean Square Error of Approximation (RMSEA) of 0.0371, and a Standardized Root Mean Square Residual (SRMR) of 0.0521. To assess the suggested hypotheses, the researchers utilized the bootstrap methodology. The evidence given earlier substantiated the four working hypotheses. The study findings suggest that several factors, namely ESEE (β is 0.1221, SE is 0.0151, t is 7.994, p < 0.051), ESUN (β is -0.5221, SE is 0.0281, t is -3.0931, p < 0.051), EATT (β is 0.849, SE is 0.051, t is 10.355, p < 0.051), and ECON (β is 0.4721, SE is 0.0351, t is 13.4821, p < 0.051), have a significant impact on students' motivation to learn artificial intelligence. The primary determinant of students' inclination to participate in AI education was their positive disposition towards AI learning, with subjective norms and confidence levels being significant factors as well. Together, these theories explained 96.0% of the observed variability in EINT scores.

V. CONCLUSION

Although students in HSS's 11th grade receive education on artificial intelligence, there is a lack of information about this subject. HSS is a nascent nation situated in the African continent. Assessing students' reasons for their interest in artificial intelligence is crucial, given the imminent rise of the job market influenced by AI. This study utilized the TPB (Theory of Planned Behaviour) as a theoretical framework to assess the level of AI motivation exhibited by 11th-grade pupils. In this study, the researchers hypothesized that factors such as selfconfidence, mindset, and personal standards would strongly predict a person's tendency to gain information in the field of enhanced artificial intelligence method. The decision to pursue an education in artificial intelligence was affected by a group of 950 high school students in relation to their belief in their own abilities, levels of confidence, attitudes, and personal benchmarks. This study presents empirical evidence that supports the suitability of the Theory of Planned Behaviour (TPB) in identifying the factors that encourage the adoption of technology [13-15]. According to the findings of this study, it has been concluded that an effective way to share this knowledge is via educating students about the importance of artificial intelligence (AI) in education. To optimize AI learning, the curriculum must consider the attitudes, levels of confidence, and subjective criteria of the students. The findings of this study indicate that encouraging a more positive outlook on artificial intelligence (AI) may enhance individuals' drive to gain knowledge about this topic. Moreover, the process of instructing individuals about artificial intelligence has the capacity to amplify their drive to gain expertise in this domain. An artificial intelligence-powered learning environment that takes into account students' objectives and impacts can potentially improve educators' ability to effectively meet the demands of their diverse student population. In future periods, scholars will be able to gather data on students' opinions towards AI learning, enabling them to compare their research findings. The interviews performed with students may uncover other variables that contribute to the favorable attitudes and ambitions towards artificial intelligence that are held by these individuals.

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