Factors influencing Malaysian students' choice of diploma programs: Analysing their interrelation with interest and satisfaction

Nor Hazizah Julaihi[1] and Mohammad Isa Mohamadin[2*]

[1,2]Universiti Teknologi MARA, Cawangan Sarawak, 94300 Kota Samarahan, Sarawak, Malaysia.

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ABSTRACT

This study explores the factors influencing the choice of diploma programs among undergraduate students at Universiti Teknologi MARA (UiTM), Sarawak Branch, Malaysia, and their interrelation with interest and satisfaction. Data were collected from 715 first-semester diploma students across three UiTM Sarawak campuses during the October 2023 – February 2024 session, via a questionnaire. The findings highlight the significant impact of personal decisions and family influence in shaping students' choices of diploma programs. Employment opportunities, career aspiration, and academic qualifications emerged as the most influential factors. Nonetheless, students who enrolled in their first-choice programs report high satisfaction, demonstrating that strong interest plays a crucial role in fostering a positive educational experience. Additionally, intrinsic factors are the most significant determinants of students' interest and satisfaction, while extrinsic factors significantly influence interest but have a lesser impact on satisfaction. In contrast, interpersonal factors were found to have minimal effect. This study establishes a comprehensive conceptual model explaining the factors influencing students in choosing their diploma programs and their interrelation with interest and satisfaction. It highlights the importance of intrinsic and extrinsic factors in educational decision-making and suggests that a supportive environment enhances satisfaction and educational outcomes. The insights can inform policies to enhance student experiences and support informed programs choices in higher education. At the same time, they can contribute to ensure inclusive and equitable quality education, in alignment with Sustainable Development Goal 4 (SDG4), which promotes lifelong learning opportunities for all.

[2*] Corresponding author. *E-mail address*: misa@uitm.edu.my

1.0 INTRODUCTION

Upon completing secondary school, students have several options for higher education, either to enroll in a pre-university program, such as a university foundation course or A-levels, to qualify them for a degree program, or they can choose a diploma program, which allows them to enter the workforce or continue their degree studies. Diploma and degree programs differ primarily in duration and objectives. A diploma program typically lasts up to three years and focuses on skill development, providing the minimum educational requirements for job opportunities. On the contrary, a degree program takes longer, lasting up to four years, and aims to provide students with in-depth knowledge of their field.

Due to its shorter duration and career-oriented nature, many students opt for a diploma program. However, choosing a specific program at a higher educational institution (HEI) has become increasingly complex. The decision-making phase is crucial as it shapes a student's entire career. Students do not make these choices randomly, as they have a lasting impact on their future. According to Dimali et al. (2023), a poor decision can negatively affect motivation and career trajectory. Edirisinghe et al. (2021) reported that employers prefer hiring graduates from relevant disciplines and many students remain unemployed due to poor choices in their academic field.

This study analyzes the factors influencing students' choice of diploma programs at Universiti Teknologi MARA (UiTM), Sarawak Branch, Malaysia. Specifically, this study is conducted to achieve the following objectives:

1. To identify the people influencing students' decisions in choosing diploma programs.

2. To examine the intrinsic, extrinsic, and interpersonal factors that affect students' choice of diploma programs.

3. To evaluate the students' interest and satisfaction with their enrolled programs.

4. To determine the relationship between intrinsic, extrinsic, and interpersonal factors and students' interest and satisfaction.

5. To construct a comprehensive conceptual model that specifies the significance of intrinsic, extrinsic, and interpersonal factors in predicting the students' interest and satisfaction with their enrolled programs.

Using a quantitative approach, data were collected through a questionnaire. Both descriptive and inferential statistics were employed to analyze the data, providing a comprehensive understanding of the factors influencing students' program choices and their interrelation with interest and satisfaction. This study is conducted not only to bridge the gap in understanding the interplay between intrinsic, extrinsic, and interpersonal factors on students' choice of educational programs, and their interrelation with satisfaction and interest, specifically in the context of Malaysian diploma students, but also to add significant value to the existing knowledge on the factors influencing students' choice of diploma programs.

By integrating intrinsic, extrinsic, and interpersonal factors into a comprehensive conceptual model, this study provides a more nuanced understanding of the complex decision-making processes of students. Furthermore, the study's context-specific insights into Malaysian diploma students' choices at UiTM Sarawak extend the applicability of global findings to local settings, thereby enriching the existing literature with culturally relevant data and practical implications. This holistic approach ensures that the study offers valuable theoretical contributions and insights for educators and policymakers, ultimately enhancing the educational experience and outcomes for students. Additionally, this study contributes to the Sustainable Development Goals (SDGs), particularly SDG 4, which aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

2.0   LITERATURE REVIEW

Numerous influential factors associated with the students' choices have been discussed extensively in past studies. Nevertheless, the findings vary due to different contexts and approaches. In this study, the investigated factors (independent variables) proposed by Mohamadin and Julaihi (2023), are classified into three categories: intrinsic, extrinsic, and interpersonal factors. This classification is based on the tri-dimensional model of career choice proposed by Carpenter and Foster (1977), as outlined in Table 1. These categorizations provide insight into how various factors influence a student's decision-making when choosing a higher education program, balancing internal motivations, external practicalities, and social influences.

Table 1. Categories of influential factors: intrinsic, extrinsic, and interpersonal

Intrinsic Factors (internal motivations and personal attributes)		
Factor	Description	Justification
Career Aspiration	The student's personal goals and ambitions regarding his future profession.	It reflects the individual's internal drive and personal career goals.
Personal Interest	The student's genuine interest and passion for a particular subject or field of study.	It is an internal factor driven by what the student enjoys and is passionate about.
Personal Expectation	The student's expectations of what he wants to achieve or experience through his education.	It relates to the individual's internal standards and what he hopes to gain personally from the program.
Extrinsic Factors (external influences and often involve practical considerations or external rewards)		
Factor	Description	Justification
Academic Qualification	The degree or certification that can be earned from the program.	It is an external credential that influences employability and is often necessary for specific career paths.
Employment Opportunities	The potential job prospects and career opportunities available after completing the program.	It is an external factor influenced by the job market and economic conditions, focusing on practical and financial outcomes.
Program Recognition	The recognition of the program within industries and academic communities.	It is an external factor based on how the program is perceived by others, impacting the values and opportunities it can provide.
Interpersonal Factors (involve the influence of social relationships and interactions)		
Factor	Description	Justification
People Influences	The opinions, advice, and expectations of people around the student, such as friends, mentors, and teachers.	It is a social factor influenced by the student's interactions and relationships with others.
Family Business	The influence of the family's business interest or the expectation to join the family business.	It involves social and familial expectations and pressures, making it an interpersonal factor.

2.1 Intrinsic Factors

Intrinsic factors such as personal interest and expectation, as well as career aspiration, play a significant role in influencing students' choice of programs at HEI (Mohamadin & Julaihi, 2023). Studies have shown that students often select their programs based on an intrinsic interest in the subject matter (Sarkodie et al., 2020). Research by Schelfhout et al. (2021) highlights how the fit between a student's interest and the chosen program significantly impacts his ability to succeed in his studies. Moreover, a study by James (2007) emphasizes that factors like interest, enjoyment, and career aspiration heavily influence students' choices.

Apart from that, Mohamadin and Julaihi (2023) revealed that students are the most influential factor in choosing higher educational institutions and diploma programs, emphasizing the strong impact of intrinsic motivations on educational choices. Similarly, Briones and Bueno (2019) reported that students enrolled in their chosen HEI program primarily based on their preferences. Pascual (2014) also found that the student's course preferences were minimally influenced by others' decisions.

These findings collectively underscore the crucial influence of intrinsic factors on students' decisions when selecting diploma programs, enhance student engagement and thus contribute to better outcomes in diploma programs.

2.2   Extrinsic Factors

Extrinsic factors such as employment opportunities, academic qualification, and program recognition also impacted students' program selection. Employment opportunities are the dominant factor influencing students' choice of diploma programs (Mohamadin & Julaihi, 2023). Geiger and Ogilby (2000) found that job opportunities in the pursued program significantly impact students' decisions. In addition, Pascual (2014) highlighted that students prioritize the availability of work when selecting a course.

According to Briones and Bueno (2019), academic records and subject combinations at the high school level also impact students' decisions regarding their choice of programs. On top of that, recognition of the program significantly affects students' decisions in choosing a diploma program (Mohamadin & Julaihi, 2023). In addition, the availability of the required program also contributes to students' decision in selecting a higher educational institution, indicating that students are well-informed about their institution of choice and have already decided on the programs they want to pursue (Sarkodie et al., 2020; Sia, 2010).

In brief, these findings underscore the substantial influence of employment prospects, academic qualification, and program recognition on students' program selection, thus emphasizing the importance of career pathways in shaping educational decisions.

2.3   Interpersonal Factor

Interpersonal factors such as the influence of family members, especially parents, significantly impact students' choice of HEI programs, with teachers and friends also playing crucial roles. According to Mohamadin and Julaihi (2023), those who influence students the most are individuals closest to them, such as family members and friends. This is supported by Johnston (2010) who indicated that parents, along with other family members and friends, are the most influential sources of information on students' university choices. Parental influence, particularly in maintaining high educational expectations and being involved in education matters, is noted to motivate and guide students in their decision-making processes. This highlights the pivotal role of family dynamics in shaping students' choices (Sarkodie et al., 2020; Pascual, 2014). Moreover, parental involvement and influence are crucial factors in students' educational and career decisions, with parents being deeply involved and influential in high-achieving children's college choices (Sarkodie et al., 2020).

Studies show that family tradition or business ranks low in influencing students' choices, with recommendation by family members being among the least influential factors. Additionally, parents' aspirations and financial support are highlighted as crucial influences in guiding students toward specific professions or programs, emphasizing the significant role of family members in students' decisions. In short, family businesses may have some impact. Yet, they are not among the primary factors in guiding students' choice of diploma programs (Mohamadin and Julaihi, 2023; Sarkodie et al., 2020; Sia, 2010).

Understanding and addressing these interpersonal factors are essential for educational institutions and policymakers to guide students toward making informed and suitable diploma choices.

2.4 Interest and Satisfaction

Interest plays a significant role in influencing students' course choices. According to Briones and Bueno (2019), students exhibited a high-interest level in their chosen degree programs. Nyamwange (2016) highlighted that students are likely to choose programs that align with their interests, considering the fit between interests and potential programs (Vulperhorst et al., 2020). Quinlan and Renninger (2022) found that students' interest was a significant predictor of career decidedness, driven by their desire to pursue their interest in future careers. The relationship between students' interest in academic programs and overall satisfaction is well-documented. Harackiewicz et al. (2016) found that a genuine interest in studies could lead to higher engagement, motivation, and satisfaction. Pekrun et al. (2002) showed that interest drives students to positive emotions like enjoyment and hope, enhancing their satisfaction. Student satisfaction is crucial for individual success and institutional performance (Weingarten et al., 2018). Institutions that align programs with student interest, as shown by the National Student Survey 2023 in the United Kingdom, see higher satisfaction rates (Jack, 2023).

2.5 Integration of Theories

Based on the above literature, the study integrates theoretical frameworks by Carpenter and Foster (1977), Briones and Bruno (2019), and Mohamadin and Julaihi (2023). Carpenter and Foster's tri-dimensional model categorizes career choice factors into intrinsic (internal motivation, personal interest, career aspiration, personal expectation), extrinsic (academic qualification, employment opportunities, program recognition), and interpersonal (social relationships and interaction) dimensions, which facilitates a structured exploration of the complex decision-making process. Briones and Bruno reinforced the importance of intrinsic (personal interest, internal motivation) and extrinsic factors (career prospects, institutional reputation) in educational choices. Expanding further, Mohamadin and Julaihi contextualized these factors within the Malaysian educational setting and validated the significant impact of intrinsic factors such as personal interest and career aspirations on students' program choices. Furthermore, they underscored the relevance of extrinsic factors like employment opportunities and program recognition. While they noted that interpersonal factors (e.g., family and peer influences) have a lesser impact, these social elements still play a crucial supportive role in the decision-making process. The integration of these theories into the study provides a comprehensive framework for understanding the multifaceted factors influencing students' choice of diploma programs.

3.0 METHODOLOGY

3.1 Research instrument

Quantitative data were gathered through a Google Form questionnaire which was designed to investigate the factors influencing students' choice of diploma programs. The questionnaire was divided into three sections. Section A collected demographic profiles of the respondents, including gender, campus, diploma program, SPM subject package, and household income. Section B obtained feedback on the factors influencing the choice of diploma programs. Section C gathered feedback on respondents' interest in their enrolled diploma programs. The instruments for sections B and C were adapted from Mohamadin and Julaihi (2023) and Briones and Bruno (2019), respectively. These instruments were chosen for their relevance and comprehensive approach to understanding students' decision-making processes. Their validation ensures robust data collection and reliability. Both sections used a 6-point Likert Scale: 1=Strongly Disagree, 2=Disagree, 3=Slightly Disagree, 4=Slightly Agree, 5=Agree, and 6=Strongly Agree. This scale was chosen to eliminate a neutral option, encouraging respondents to lean towards either a positive or negative response, thereby enhancing the quality of the data collected. A copy of the questionnaire, approved by the UiTM Research Ethics Committee, can be accessed at: https://drive.google.com/file/d/1N7ZtKoxsUdPPwJ5LoZzKqXIV1LPwQfpM/view?usp=drive_link

3.2 Pilot Test

A pilot test was conducted on 42 students of the Diploma in Accountancy from the UiTM Sarawak campus to assess the feasibility of the research design. The reliability test of the domain was examined using Cronbach's Alpha which ranged in value from 0 to 1. As shown in Table 2, the reliability coefficients for all domains ranged between 0.795 to 0.858 (>0.70), suggesting good internal consistency reliability for all domains.

Table 2. Cronbach's alpha of all domains

Domain	Num of Items	N	Mean	SD	Cronbach's Alpha
Influence of People on Students' Decision	8	42	35.76	7.303	0.847
Influencing Factors to Students' Choice of Program	8	42	36.05	6.000	0.795
Students' Interest in Choice of Program	7	42	34.38	4.184	0.858

3.3 Data Sampling

Convenience sampling was employed in this study primarily due to practical constraints such as time, cost, and accessibility. Collecting data across three UiTM Sarawak campuses during the October 2023 – February 2024 session was facilitated by the ease of access to this specific group, with the Google Form link distributed via WhatsApp. Besides, convenience sampling enables the collection of a substantial amount of data quickly. This approach provided a sufficient basis for identifying key trends and relationships among intrinsic, extrinsic, and interpersonal factors influencing students' program choices. Furthermore, UiTM was chosen as the unit of analysis due to its extensive range of diploma programs and large, diverse student population, making it representative of Malaysian higher education. This allows for a comprehensive examination of factors influencing students' program choices. A sample size of 715 first-semester diploma students across three UiTM Sarawak campuses is adequate for this study as it provides a robust basis for statistical analysis and ensures the reliability and generalizability of the findings to represent the diverse student population.

3.4 Data Analysis

The data were analyzed using the Statistical Package for Social Sciences (SPSS), in which both descriptive and inferential statistics were employed. Descriptive statistics, including frequency, percentage, mean, and standard deviation, were used to summarize and present the data. Inferential statistics, specifically the Pearson Chi-Square Test and Linear Regression analysis, were used to investigate associations between variables. The Pearson Chi-Square Test was used to assess the relationship between categorical variables, such as students' satisfaction and their level. Linear regression analysis was used to explore the predictive relationships between ordinal variables, such as how intrinsic, extrinsic, and interpersonal factors influence students' interest and satisfaction. This method helps quantify the strength and direction of these relationships, offering detailed insights into how various factors impact educational outcomes. Additionally, to analyze the level of students' interest toward the enrolled diploma programs, the mean scores of the construct items were evaluated based on the range of intervals, as shown in Table 3.

Table 3. The level of students' interest in the 5-point Likert scale

Range of interval	Level of Interest
1.00 – 1.80	Very Low
1.81 – 2.60	Low
2.61 – 3.40	Moderate
3.41 – 4.20	High
4.21 – 5.00	Very High

3.5 Testing for Assumptions

Before conducting the inferential tests, the key assumptions were tested to ensure the validity of the results. For the Pearson Chi-Square Test, the assumptions include independence of observations, categorical data, expected frequencies, and a large sample size. For linear regression analysis, the assumptions are linearity, independence of observations, homoscedasticity, normality of residuals, and no multicollinearity.

3.6 Hypothesis for Inferential Statistics

Following are the hypotheses for the inferential statistical tests, allowing for a comprehensive examination of the relationships and predictive power of various factors influencing students' program choices, interests, and satisfaction.

Pearson Chi-Square Test Hypotheses:
H1: There is a significant association between students' satisfaction with their enrolled diploma programs and their level of interest.

Linear Regression Analysis Hypotheses:
H2: Intrinsic factors significantly predict students' interest in their chosen diploma programs.
H3: Extrinsic factors significantly predict students' interest in their chosen diploma programs.
H4: Interpersonal factors significantly predict students' interest in their chosen diploma programs.
H5: Intrinsic factors significantly predict students' satisfaction with their chosen diploma programs.
H6: Extrinsic factors significantly predict students' satisfaction with their chosen diploma programs.
H7: Interpersonal factors significantly predict students' satisfaction with their chosen diploma programs.

4.0 RESULTS AND DISCUSSION

4.1 Respondents' Profiles

A total of 715 undergraduate students from Universiti Teknologi MARA (UiTM), Sarawak Branch, Malaysia participated in this survey. Data were collected via a Google Form and disseminated to the diploma students from Semester 1 of the October 2023 – February 2024 session. Table 4 presents the demographic profiles of the respondents.

As illustrated in Table 4, 505 respondents (70.6%) are females, and the remaining 210 (29.4%) are males. With regards to the campus of study, 317 (44.3%) of the respondents are from the Samarahan campus, 316 (44.2%) are from the Samarahan 2 campus, and 82 (11.5%) are from the Mukah campus. Based on the program of study, 122 respondents (17.1%) are from Business and Management, 94 (13.1%) are from Public Administration, 85 (11.9%) are from Architecture, Planning and Surveying, and 83 (11.6%) are from Applied Sciences.

In terms of family income, 402 respondents (56.2%) are from B40 families, with a total monthly household income of less than RM4851 (Department of Statistics Malaysia, 2020). On the other hand, 254 respondents (35.5%) are from the M40 group and 59 respondents (8.3%) are from the T20 group.

Table 5 outlines the four SPM subject package options taken by respondents in 2023. As shown in the table, 246 respondents (34.4%) were enrolled in the Arts and Humanities Package, 206 respondents (28.8%) were in STEM Package A, 194 respondents (27.1%) were in STEM Package C, while the remaining 69 respondents (9.7%) were in STEM Package B. The results show that 434 respondents (60.3%) indicated that their package was decided by their school, 249 respondents (34.7%) chose the package themselves, and the remaining 32 respondents (4.5%) managed to change their package by appealing to the school.

Table 4. Profiles of the respondents

Profiles	Total
Gender (n=715)	
Female	505 (70.6%)
Male	210 (29.4%)
Campus of Study (n=715)	
Samarahan	317 (44.3%)
Samarahan 2	316 (44.2%)
Mukah	82 (11.5%)
Diploma Program (n=715)	
Business and Management	122 (17.1%)
Public Administration	94 (13.1%)
Architecture, Planning and Surveying	85 (11.9%)
Applied Sciences	83 (11.6%)
Accountancy	62 (8.7%)
Computer Sciences	51 (7.1%)
Engineering	50 (7.0%)
Environmental Health	39 (5.5%)
Hotel and Tourism	38 (5.3%)
Art and Design	29 (4.1%)
Plantation and Agrotechnology	21 (2.9%)
Information Management	18 (2.5%)
Islamic Studies	15 (2.15%)
Sports Science and Recreation	8 (1.1%)
Family Income Household (n=715)	
Less than RM4851 (B40)	402 (56.2%)
RM4851 to less than RM10971 (M40)	254 (35.5%)
RM10971 or more (T20)	59 (8.3%)

Table 5. SPM subject package taken by respondents

About SPM Subject Package		
SPM Package	**Core**	**STEM Electives**
STEM Package A	Bahasa Melayu, English, Mathematics, History, Islamic Studies/ Moral	Physics, Chemistry, Biology & Additional Mathematics
STEM Package B		Any 2 pure science subjects (Physics/ Chemistry/ Biology), Additional Math and one elective (STEM/non-STEM)
STEM Package C	Bahasa Melayu, English, Mathematics, History, Islamic Studies/ Moral	At least 2 applied Science & Technology or Vocational subjects
Art & Humanities Package		Combination of language, Islamic studies and humanities & art electives

Chosen SPM Subject Package (n=715)	
Arts and Humanities (non-STEM)	246 (34.4%)
STEM Package A	206 (28.8%)
STEM Package C	194 (27.1%)
STEM Package B	69 (9.7%)

Decision on SPM Subject Package (n=715)	
School's Decision	434 (60.3%)
Student's Decision	249 (34.7%)
Approval of Appeal	32 (4.5%)

4.2   People influencing students' Choice of the diploma program

Table 6 presents the feedback from 715 respondents on the people who influenced their choice of diploma program. The top four influences were oneself (M=5.21; SD=0.991), parents (M=5.14; SD=1.097), relatives/siblings (M=4.70; SD=1.316), and friends/peers (M=4.52; SD=1.290). This finding aligns with Mohamadin and Julaihi (2023), indicating that most students chose their diploma program based on their own decisions, followed by the influence of parents, relatives/siblings, and friends/peers. This reveals that the most influential people in students' decisions are those closest to them, such as family members and friends.

Table 6. People who influenced the students in choosing the diploma programs

People influence	6-Point Likert Scale						Mean	SD
	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree		
Oneself	10 (1.4%)	6 (0.8%)	26 (3.6%)	78 (10.9%)	259 (36.2%)	336 (47.0%)	5.21	0.991
Parents	16 (2.2%)	14 (2.0%)	24 (3.4%)	71 (9.9%)	267 (37.3%)	323 (45.2%)	5.14	1.097
Relatives/ Siblings	34 (4.8%)	35 (4.9%)	31 (4.3%)	113 (15.8%)	298 (41.7%)	204 (28.5%)	4.70	1.316
Friends/ Peers	37 (5.2%)	35 (4.9%)	39 (5.5%)	149 (20.8%)	316 (44.2%)	139 (19.4%)	4.52	1.290
Teachers	44 (6.2%)	45 (6.3%)	56 (7.8%)	138 (19.3%)	285 (39.9%)	147 (20.6%)	4.42	1.389
Community	58 (8.1%)	60 (8.4%)	61 (8.5%)	153 (21.4%)	271 (37.9%)	112 (15.7%)	4.20	1.456
School Counsellors	58 (8.1%)	61 (8.5%)	66 (9.2%)	153 (21.4%)	272 (38.0%)	105 (14.7%)	4.17	1.451
Social Media Influencers	55 (7.7%)	61 (8.5%)	66 (9.2%)	158 (22.1%)	273 (38.2%)	102 (14.3%)	4.17	1.432

This finding is consistent with Johnston (2010) who noted that parents, along with other family members and friends, are the most influential sources of information on students' university choices. This is supported by Hoyer and MacInnis (2007) who reported that the reference groups with direct and extensive contact exert the greatest influence. Apart from that, Yamamoto (2006) found that most students selected their university based on their own decisions, with parental influence significantly impacting their choice.

4.3   Factors influencing students' choice of diploma program

Table 7 presents the findings from 715 respondents on the factors influencing their choice of diploma program. The mean values indicate that employment opportunities (M=5.08, SD=0.914) were the most influential factor. This was followed by career aspiration (M=5.07, SD=0.961), academic qualification (M=5.07, SD=0.890), personal interest (M=4.91, SD=1.108), personal expectations (M=4.86, SD=1.081) and program recognition (M=4.84, SD=1.046). Conversely, people influence (M=3.77, SD=1.551) as discussed in Table 6, and family business (M=3.63, SD=1.481) were the least influential factors in the student's choice of the diploma program.

Table 7. Factors that influenced the students in choosing the diploma program

Items	6-Point Likert Scale						Mean	SD
	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree		
Employment opportunities	9 (1.3%)	3 (0.4%)	21 (2.9%)	102 (14.3%)	337 (47.1%)	243 (34.0%)	5.08	0.914
Career aspiration	10 (1.4%)	6 (0.8%)	24 (3.4%)	98 (13.7%)	322 (45.0%)	255 (35.7%)	5.07	0.961
Academic qualification	9 (1.3%)	4 (0.6%)	19 (2.7%)	89 (12.4%)	370 (51.7%)	224 (31.3%)	5.07	0.890
Personal interest	17 (2.4%)	11 (1.5%)	32 (4.5%)	141 (19.7%)	272 (38.0%)	242 (33.8%)	4.91	1.108
Personal expectations	16 (2.2%)	14 (2.0%)	32 (4.5%)	145 (20.3%)	310 (43.4%)	198 (27.7%)	4.84	1.081
Program recognition	14 (2.0%)	16 (2.2%)	34 (4.8%)	119 (16.6%)	355 (49.7%)	177 (24.8%)	4.84	1.046
People influence (as in Table 6)	97 (13.6%)	73 (10.2%)	84 (11.7%)	177 (24.8%)	210 (29.4%)	74 (10.3%)	3.77	1.551
Family business	94 (13.1%)	75 (10.5%)	125 (17.5%)	183 (25.6%)	186 (26.0%)	52 (7.3%)	3.63	1.481

The finding confirms the result reported by Mohamadin and Julaihi (2023) showing almost 100% similarities. The finding is also consistent with other studies (such as Sarkodie, 2020; Pascual, 2014; Sia, 2010) which revealed that job opportunities, academic qualification, personal interest, and program recognition were significant factors influencing students' program choices at HEI. Perera and Pratheesh (2018) emphasized that decision-making in higher education is crucial, as course selection directly impacts students' job prospects.

Table 8 reveals that extrinsic factors, such as employment opportunities, academic qualification, and program recognition, are the most influential in students' choice of diploma programs, followed closely by intrinsic factors like career aspiration, personal interest, and personal expectation. Interpersonal factors, including peer recommendations and family influence, are the least impactful. This trend is attributed to the direct impact of extrinsic factors on career prospects, financial security, and the perceived value of education. Employment opportunities ensure job stability and higher earning potential, while academic qualification offers pathways to further education. Program recognition enhances employability through the reputation of the institution and the quality of training received.

Table 8. Factors influencing students 'choice of diploma program: intrinsic, extrinsic, interpersonal

Factors	N	Mean	Std. Deviation
Intrinsic Factors	715	4.9394	.91809
Extrinsic Factors	715	4.9949	.80312
Interpersonal Factors	715	3.6993	1.36833

4.4 Interest in the Program

Table 9 illustrates the level of interest among the 715 respondents in their diploma program. Based on the mean scores, respondents generally believed that they could succeed in their enrolled diploma program (M=5.10, SD=0.838). Although they found the program stimulating and challenging (M=5.03, SD=0.875), they believed it would offer employment opportunities abroad (M=5.02, SD=0.856). Nevertheless, they enjoyed performing the skills and activities required (M=4.97, SD=0.940) and liked the challenges offered by the program (M=4.90, SD=0.988). They also felt that the enrolled diploma program was a field where they could excel (M=4.81, SD=1.005) and that it was their own choice (M=4.79, SD=1.108). The computed

composite means of 4.94 (SD=0.770) indicates that the respondents have a high level of interest in their enrolled diploma program. This finding is consistent with Briones and Bruno (2019) who reported that students exhibit a high level of interest in their chosen degree program.

Table 9. Interest in the enrolled diploma program

Items	6-Point Likert Scale						Mean	SD
	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree		
I believe that I can succeed in this program	6 (0.8%)	3 (0.4%)	14 (2.0%)	100 (14.0%)	363 (50.8%)	229 (32.0%)	5.10	0.838
The profession in this program is stimulating and challenging	7 (1.0%)	5 (0.7%)	18 (2.5%)	107 (15.0%)	367 (51.3%)	211 (29.5%)	5.03	0.875
I believe this program can offer me employment abroad	5 (0.7%)	4 (0.6%)	24 (3.4%)	110 (15.4%)	371 (51.9%)	201 (28.1%)	5.02	0.856
I enjoy performing the skills and activities involved in this program	6 (0.8%)	11 (1.5%)	26 (3.6%)	124 (17.3%)	339 (47.4%)	209 (29.2%)	4.97	0.940
I like the challenges offered by this program	9 (1.3%)	13 (1.8%)	32 (4.5%)	123 (17.2%)	346 (48.4%)	192 (26.9%)	4.90	0.988
This program is the field in which I think I can excel	7 (1.0%)	17 (2.4%)	38 (5.3%)	157 (22.0%)	322 (45.0%)	174 (24.3%)	4.81	1.005
This program is my own choice	11 (1.5%)	27 (3.8%)	39 (5.5%)	141 (19.7%)	304 (42.5%)	193 (27.0%)	4.79	1.108
Total	70 (1.2%)	108 (1.9%)	238 (4.1%)	1030 (18.0%)	2721 (47.6%)	1553 (27.2%)	4.94	0.770

The findings reveal that interest plays a significant role in influencing students' course choices. Students consider their interests when evaluating different higher education programs and deciding which ones align with their interests (Nyamwange, 2016). They also assess how well the programs match their interest, considering the fit between their interest and the programs they are contemplating (Vulperhorst et al., 2020).

4.5 Program Choice Satisfaction

Table 10 presents the feedback from 715 respondents regarding their satisfaction with their enrolled diploma program, after completing 14 weeks of their first semester. The results show that 336 respondents (47.0%) enrolled in their first-choice program, while the remaining 379 respondents (53.0%) are otherwise. Among those who enrolled in their first-choice diploma program, 159 (47.3%) rated very satisfied, and 145 (43.2%) rated satisfied. Conversely, among those who did not enroll in their first-choice diploma program, 194 (51.2%) rated themselves as very satisfied and 78 (20.6%) as satisfied. In conclusion, most respondents (80.6%) were overall satisfied with their enrolled diploma program.

Students who rated very satisfied remarked that: "The program was my first choice and now I enjoy my diploma life and like it so much"; "I got my first choice, and I enjoyed studying this program"; "It is my own choice to be in the program"; "It is my interest and I enjoy it"; "I've got my first choice. I was given the chance to explore the field that I was interested in."; "I love it. It's the program that I would love to learn the most"; "The program that I have always wanted. So being offered to study this program was a blessing."

Meanwhile, students who rated very unsatisfied stated that: "It was not my first choice, I wouldn't be here if not because of my parents and I just keep trying my best to be a good daughter and make them proud of having me"; "It was not my first choice, but it is okay as I believe in Allah's rizqi"; "It is not something I am interested in".

Table 10. Program choice satisfaction

Enrolled Diploma Program	5-Point Likert Scale					Total
	Very Unsatisfied	Unsatisfied	Neutral	Satisfied	Very Satisfied	
Based on 1st Choice	0 (0.0%)	3 (0.9%)	29 (8.6%)	145 (43.2%)	159 (47.3%)	336 (47.0%)
Not based on 1st Choice	5 (1.3%)	19 (5.0%)	83 (21.9%)	194 (51.2%)	78 (20.6%)	379 (53.0%)

4.6 Association between Students' Interest and Satisfaction

To further examine the relationship between these two categorical variables, a chi-square test was conducted. As shown in Table 11, there was a significant association ($p < .05$) between students' satisfaction and their interest in the enrolled diploma program. The results from both Phi and Cramer's V tests indicate that this association is very strong (>.25).

Table 11. Chi-square test

	Value	df	Asymptotic Sig. (2-sided)
Pearson Chi-Square	310.570[a]	16	.000
Likelihood Ratio	222.115	16	.000
Linear-by-Linear Association	161.197	1	.000
Phi	.659		
Cramer's V	.330		
N of Valid Cases	715		

On top of that, as described in Table 12, students who are satisfied with their enrolled diploma program tend to have a high level of interest in the program.

Table 12. Cross-tabulation table

		Level of Interest in the Program					Total
		Very Low	Low	Moderate	High	Very High	
Satisfaction towards Program	Very Unsatisfied	0	2	1	0	2	5
	Unsatisfied	2	1	12	6	1	22
	Neutral	0	2	41	59	10	112
	Satisfied	1	3	34	216	85	339
	Very Satisfied	1	0	10	79	147	237
	Total	4	8	98	360	245	715

4.7 Relationship between Variables

To determine the most influential factors among intrinsic, extrinsic, and interpersonal factors (independent variables) on both students' satisfaction and interest (dependent variables), a linear regression analysis was performed. Table 13 indicates that all assumptions of linear regression analysis are met.

Table 13. Testing the assumptions of linear regression analysis
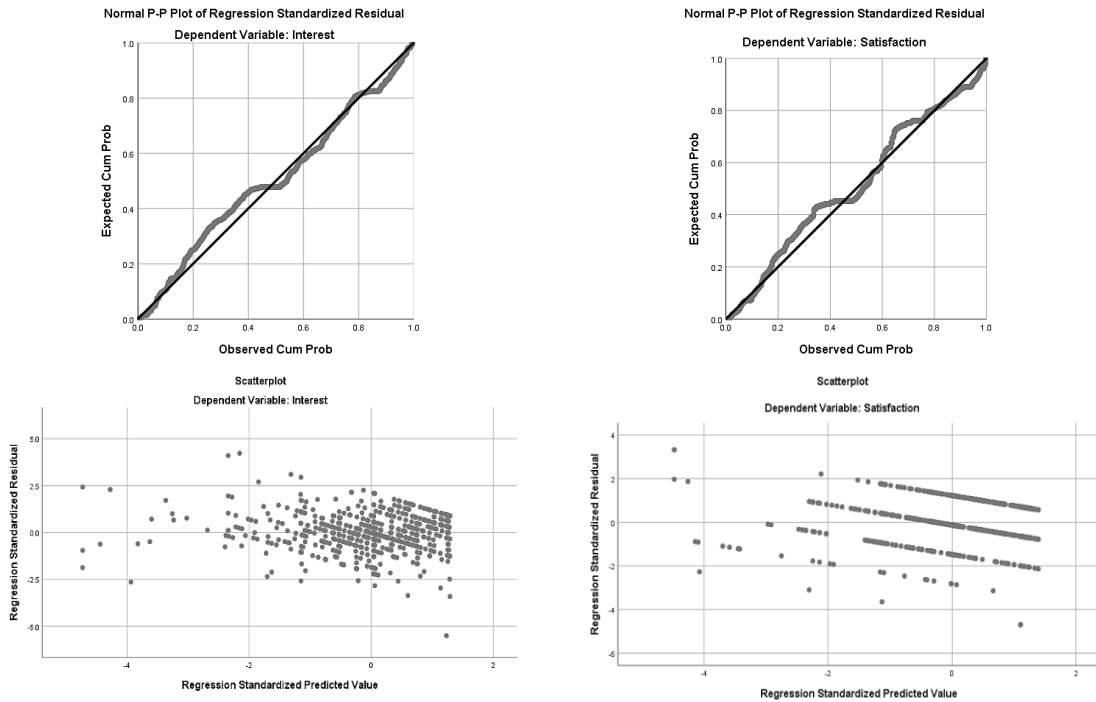
Dependent Variable			Interest Collinearity Statistics				Satisfaction Collinearity Statistics		
Model	t	Sig.	Tolerance	VIF	t	Sig.	Tolerance	VIF	
1 (Constant)	11.885	.000			12.025	.000			
Mean Intrinsic	14.354	.000	.488	2.050	8.092	.000	.488	2.050	
Mean Extrinsic	4.881	.000	.479	2.087	1.151	.250	.479	2.087	
Mean Interpersonal	-.379	.705	.858	1.165	-.911	.363	.858	1.165	

1. Linearity:
The scatterplots of the residuals versus the predicted values and the Normal P-P Plot of Regression Standardized Residuals for both interest and satisfaction show that the relationships between the independent variables (intrinsic, extrinsic, and interpersonal factors) and the dependent variables (students' interest and satisfaction) are linear.

2. Independence of Observations:
The data collection method ensured that each observation was independent. The participants were asked to complete the survey individually without influence from others, maintaining the independence of observations.

3. Homoscedasticity:
The residuals versus predicted values plot showed a random scatter, indicating that the assumption of homoscedasticity (constant variance of residuals) is met.

4. Normality of Residuals:
The Normal P-P Plot of Regression Standardized Residuals showed that the residuals are approximately normally distributed, satisfying the normality assumption.

5. No Multicollinearity:
The collinearity statistics indicated that the Variance Inflation Factor (VIF) values for all predictors were below 10. This confirms that multicollinearity is not a concern in this dataset.

As shown in Table 14, the analysis indicates that intrinsic factors are the most influential predictors of both students' interest and satisfaction. For students' interest, the intrinsic factor has a B value of 0.390 and a Beta value of 0.553, with a highly significant p-value of 0.000, demonstrating a strong positive and significant impact. Extrinsic factors also significantly affect students' interest, with a B value of 0.153 and a Beta value of 0.190 (p-value of 0.000), but their impact is less substantial compared to intrinsic factors. Interpersonal factors, however, show a negligible and non-significant relationship with students' interest, with a B value of -0.005, a Beta value of -0.001, and a p-value of 0.705, indicating they do not significantly influence students' interest.

Table 14. Linear regression analysis

	Unstandardized Coefficients B	Standardized Coefficients Beta	t	Sig.	VIF
Dependent variable (Students' interest)					
(Constant)	1.337		11.885	.000	
Mean Intrinsic	.390	.553	14.354	.000	2.050
Mean Extrinsic	.153	.190	4.881	.000	2.087
Mean Interpersonal	-.005	-.011	-.379	.705	1.165
Dependent variable (Students' satisfaction)					
(Constant)	2.151		12.025	.000	
Mean Intrinsic	.350	.393	8.092	.000	2.050
Mean Extrinsic	.057	.056	1.151	.250	2.087
Mean Interpersonal	-.020	-.033	-.911	.363	1.165

Similarly, for students' satisfaction, intrinsic factors again emerge as the most influential, with a B value of 0.350 a Beta value of 0.393, and a significant p-value of 0.000, highlighting their strong positive and significant role. Extrinsic factors exhibit a weak and non-significant impact on satisfaction (B value of 0.057, Beta value of 0.056, p-value of 0.250), suggesting they are not major determinants of satisfaction. Interpersonal factors also do not significantly influence students' satisfaction, indicated by a B value of -0.020, a Beta value of -0.030, and a p-value of 0.363. Therefore, focusing on enhancing intrinsic factors is justified as they are crucial for improving both students' interest and satisfaction.

The intrinsic factors are the most influential predictor of students' interest and satisfaction, justifying the focus on enhancing intrinsic factors to effectively improve both areas. In contrast, interpersonal factors, which show no significant effect on students' interest and satisfaction, indicate that social influences do not play a major role in this context. Nonetheless, while extrinsic factors significantly impact students' interests, they do not significantly affect satisfaction. This suggests that while extrinsic factors can motivate students to some extent, they are not primary determinants of how satisfied students feel with their educational experience.

4.8   The Conceptual Model of Students' Choice of Diploma Program

Figure 1 presents a general conceptual model of students' choice of diploma programs that specifies the important variable sets and their influence in predicting students' interest and satisfaction, based on the findings of this study. The model suggests 3 sets of factors that influence students' choice of diploma program, namely the intrinsic, extrinsic, and interpersonal factors, and how they affect the students' interest and satisfaction in the chosen programs.

The conceptual model underscores the paramount importance of intrinsic factors in enhancing students' interest and satisfaction. Educational strategies should focus on fostering intrinsic motivation, personal growth, and enjoyment of learning to achieve higher levels of student engagement and satisfaction. While extrinsic factors also play a role, particularly in boosting interest, their overall impact is less significant. Interpersonal factors, despite their importance in other contexts, do not appear to significantly influence students' interest or satisfaction in this model.
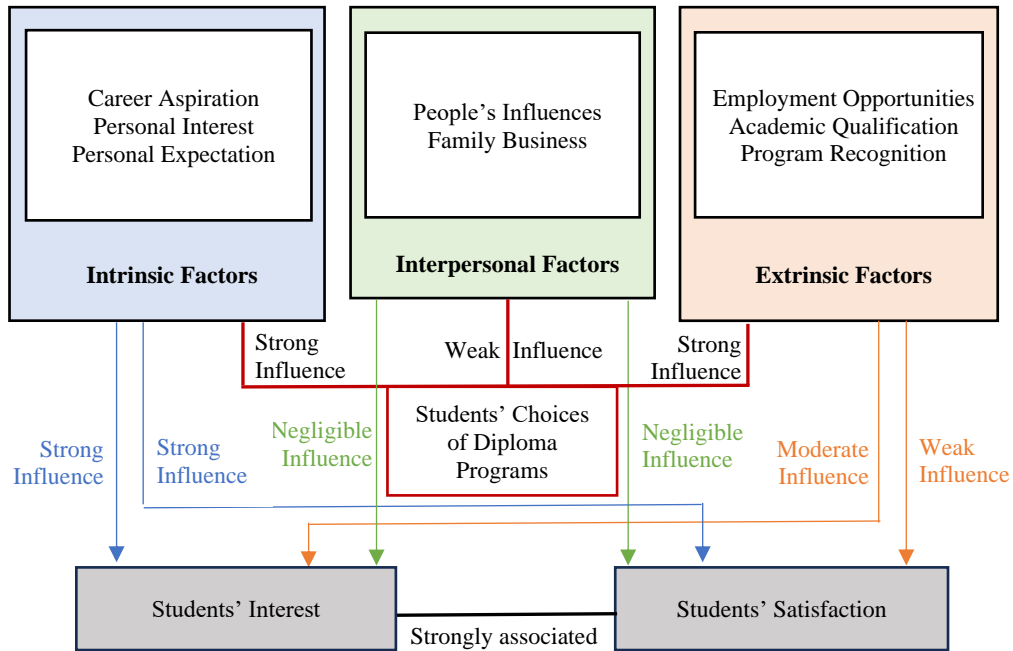
Fig. 1. Conceptual model of students' choices of diploma programs

5.0 CONCLUSION

This study provides valuable insights into the factors influencing students' choices of diploma programs at UiTM Sarawak. The findings reveal that personal decisions and family influence play significant roles in shaping students' program choices, consistent with previous research emphasizing the critical role of family and peers in educational decision-making. Among the various factors examined, employment opportunities, career aspiration, and academic qualification emerged as the most influential, highlighting the importance of practical considerations in students' higher education decisions.

High satisfaction levels were reported among students, particularly those enrolled in their first-choice programs. Students' satisfaction is strongly linked to their interest in the program, emphasizing the importance of aligning educational paths with personal interests and aspirations. The significant association between students' satisfaction and their interest in their diploma programs underscores the crucial role of interest in fostering a positive educational experience.

Further analysis reveals that intrinsic factors are the most significant determinants of students' interest and satisfaction, while extrinsic factors significantly influence interest but have a lesser impact on satisfaction. In contrast, interpersonal factors were found to have minimal effect. Additionally, the comprehensive conceptual model constructed in this study specifies the significance of intrinsic, extrinsic, and interpersonal factors in predicting the students' interest and satisfaction with their enrolled programs. It highlights the need to consider both intrinsic and extrinsic factors in educational decision-making and suggests that a supportive environment enhances satisfaction and educational outcomes.

Insights from this study are crucial for the higher educational institution to relook their overall educational approach in ensuring that the best learning experiences are provided to the students. By focusing on fostering intrinsic motivations and providing clear pathways to employment, UiTM and similar institutions can better support students in making informed choices that lead to higher satisfaction and successful career outcomes, at the same time can ensure inclusive and equitable quality education, in alignment with SDG4 which promotes lifelong learning opportunities for all.

6.0 RECOMMENDATION FOR FUTURE STUDIES

The limitation of this study is the use of convenience sampling, which may not fully represent the entire student population. Thus, to further increase the significance of the findings, future studies are recommended to employ random sampling to enhance the generalizability. Additionally, expanding the geographical scope by including multiple universities across Malaysia would provide a more comprehensive understanding of the factors influencing students' program choices. Besides, longitudinal studies tracking students' interest and satisfaction over time would offer deeper insights into how these factors evolve. Further studies could also investigate additional variables and effective interventions, even replicating findings in different settings, to further validate and enrich the knowledge of the current study.

7.0 CONTRIBUTION OF AUTHORS

The authors confirm the equal contribution to this paper and approve the final version.

8.0 FUNDING

9.0 CONFLICT OF INTEREST STATEMENT

All authors declare that they have no conflict of interest.

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About the Authors

Nor Hazizah Julaihi, is a senior lecturer at the College of Computing, Informatics, and Mathematics, Universiti Teknologi MARA, Sarawak. Her main research activities are mathematical education and social sciences. She can be contacted via email at norhazizah@uitm.edu.my.

Mohammad Isa Mohamadin, PhD is an Associate Professor at the Faculty of Applied Sciences, Universiti Teknologi MARA, Sarawak. His main research activities are in the area of Chemical Analyses, Material Analyses, Halal Analyses, and Academic and Student Development. He can be contacted via email at misa@uitm.edu.my.