
Issues and Perspectives in Business and Social Sciences

Influencers of University Students' Career Decision

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Abstract

Making a career decision is often challenging among students for which they are expected to decide on a career in times of uncertainty that will have an impact on the rest of their lives. The purpose of this study is to investigate the factors influencing undergraduate students' career decision and to propose recommendations aimed to rectify career indecisions. The independent variables chosen for this research are extrinsic factors, intrinsic factors, and interpersonal factors, which is derived based on the tri-dimensional model of career choice proposed by Carpenter and Foster in 1977. An additional independent variable, which is industrial training, was added as an extension of the research framework as it is perceived to potentially influence undergraduate students' career decision as well. All data were collected from 200 undergraduate students from a private university using questionnaires and analysed by utilising Statistical Package for the Social Sciences (SPSS Version 22). The study results indicate that intrinsic factors are the most influential in affecting undergraduate students' career decision which is followed by interpersonal factors. However, extrinsic factors and industrial training were found to have insignificant relationship with career decision making.

Keywords:

Career decision;
Factors;
University students.

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1. Introduction

Making a career decision is among the most complicated and significant decisions in which individuals have to make during their lifetime. It is often that university students are the ones experiencing career indecisions and related career decision-making difficulties (Morgan & Ness, 2003). Most young graduates fall within the population age of 20 to 24 years (Department of Statistics, 2017), of which they can be labelled as youth as defined by Ministry of Youth and Sports Malaysia (1997). Even though youth is viewed as a period of exciting yet tumultuous time, they are expected to make a career decision in times of uncertainties that will have a life-long impact on the rest of their lives (Shea & Joy, 2012). Barker and Kellen (1998) reported that only half of the students enrolled in universities and colleges completed their studies within four years while the other half either completely drop out or change their major from one to another, thus, adding more coursework and time to their college years. This is a result from making a career decision before fully realising one's personal values, needs, options and other factors which could have been a determinant of one's career success (Barker & Kellen, 1998). Individuals facing difficulties in making a career choice may attempt to push the responsibility of making the decision to someone else, delaying the decision, refraining from making a decision, as well as failing to make an optimal career choice (Gati, Saka, & Krausz, 2001). Chen and Liew (2015) further added that career indecision may even lead to temporary unemployment.

In retrospect of the COVID-19 pandemic that has been surging since the preceding year, the Malaysian economy contracted by 5.6% in 2020 from a growth of 4.4% in 2019 due to restrictions on the economic activity resulting from containment measures by the government responding to the pandemic (Department of Statistics Malaysia, 2021b). The decline in economy growth can be seen to be portrayed in the increase of unemployment rate rising from 3.3% in 2019 to 4.5% in 2020 (Department of Statistics Malaysia, 2021a). According to the Annual Report 2016 released by Bank Negara Malaysia, it was estimated that the youth unemployment rate was approximately three times higher compared to the national unemployment rate (Ibrahim & Mahyuddin, 2016). The population aged 15 to 24 years reached a high unemployment rate of 12% in 2020, recording a total of 314,000 of youths unemployed in year 2020 itself compared to 10.5% in the preceding year (Department of Statistics Malaysia, 2021b). Most young graduates fall in the population age of 20 to 24 years and thus, they may be among the ones facing difficulties in securing a job upon graduation. It highlights the concern of the rising trend of Malaysia's unemployment rate, considering the pandemic situation as well. These statistics of the unemployment rate among graduates remains a serious concern and it is deemed to be attributable by students' lack of career readiness and maturity, putting aside the changing economic landscape and labour market impacted by the COVID-19 (Mansor & Tan, 2009).

With limited knowledge and awareness of the professional world, students are pushed and pressured to figure out what career they should pursue even though they may be clueless about what they may want to do in the future. Moreover, from a theoretical standpoint, final year university students aged between 21 to 23 years old should have been able to crystallise and specify their career options according to career developmental tasks (Mansor & Tan, 2009). The ability to make a right career decision is of utmost importance as it has a lifelong impact on one's life, and it can be taxing and stressful on students as well knowing the consequences of making a wrong career decision.

The focus of this research is to investigate the factors influencing career decision among students. Very few studies on factors influencing students' career decision were done in Malaysian universities. For instance, Mansor and Tan (2009) studied the independent variables including financial outcomes, interest in the subject, future job opportunities, and ease of subject. Wesarat et al. (2017) explored the independent variables which are nationality, gender, age, and grade point average. There is lack of research on the factors associated in influencing students' career decision such as categorising it into a tri-dimensional model of career choices as proposed by Carpenter and Foster (1977) based on extrinsic, intrinsic, and interpersonal factors in the Malaysian context. Moreover, past researches on this topic may be outdated as the perception of students on factors influencing their career decision may change over time. Thus, this presents a research gap in which this study aims to fill. This study report shall address the research gap by examining the factors influencing students' career decision using tri-dimensional approach including extrinsic, intrinsic, and interpersonal factors with an addition of another variable which is industrial. Previous research mainly focused on specific-wise factors, in which this study will segregate those factors into three categories as proposed by Carpenter and Foster (1977). The research objectives are (1) to identify the most and least important factors affecting the career decisions process of undergraduate students and (2) to examine the underlying factors influencing undergraduate students' career decision.

The results of this study are relevant for the university management, employers, and students. An accurate understanding on the factors associated in influencing undergraduate students will be the foundation for the university to design and develop programs to support and guide students in deciding the right career decision and make them more sustainable in the labour market. Therefore, it is important for the university management to develop and implement effective tools and programs by understanding the perception and factors affecting students' career decision to support their career development (Marinas et al., 2016). In an employers' perspective, understanding what factors students perceive as a main driver in making a career

decision can use this information in developing a sound recruitment plan for the best graduates and retention of high-quality staff. The results of this study will enable students to consider more career alternatives and by identifying the factors they use in selecting a career, a comprehensive and detailed career plan can be developed.

2. Literature review

Career choice is defined as the kind of profession one intends to pursue in life (Edwards & Quinter, 2011). Geciki (Geciki, 2002 as cited in Ahmed et al., 2017) defined career as occupational, commercial, or industrial activity a person may adopt during the stages of life from education or till his death. It was pointed out by past researchers namely Barreto and Aiello-Vaisberg (Barreto & Aiello-Vaisberg, 2007 as cited in Hsiao & Nova, 2016), Gati et al.(2001), and Nepomuceno and Witter (Nepomuceno & Witter, 2010 as cited in Hsiao & Nova, 2016), that career decision normally occur during adolescence and it is a major decision in a person's life, which may seriously affect the person's future in regards to fortune, lifestyle, education, and personal and professional acquaintanceships. According to Dubar (Dubar, 2005 as cited in Hsiao & Nova, 2016), career choice is akin to personal and occupational identity, worldview, and further decisions. An individual making a career decision over his or her life span involves lifelong psychological and behavioural processes as well as contextual factors which influences one's career decision (Niles & Harris-Bowlsbey, 2009). Gokuladas (2010) implied that career choice involves students selecting the occupation and professional field they wish to pursue by matching their choices to their own individual needs.

Career decision making is a lifelong process and it shapes one's future career (Baliyan & Baliyan, 2016; Mansor & Tan, 2009). Most people make their career decisions by balancing their interests and values with opportunities, cost of pursuing those job opportunities, as well as their talents. Career choice is not influenced by only individual factors. It is also influenced by various factors including economic, cultural, social, and environmental (Baliyan & Baliyan, 2016). According to Venable (Venable, 2011 as cited in Baliyan & Baliyan, 2016), the career choice that individuals makes are unique to their own situation which are determined by a combination and interaction of various factors.

2.1 Expectancy Theory

The Expectancy Theory model is often used in predicting people's occupational preference and choice (Mitchell & Beach, 1976). This model is based on the notion that the strength of a person's tendency to behave in a certain way is dependent on the expected outcome or consequence, and the attractiveness and value perceived of those outcomes by the individual (Lawler, 1973). This theory model was developed by Victor H. Vroom in the year of 1964. He conceptualised that career choice is dependent on the degree of a given alternative that will most likely bring forth valued outcomes than other alternatives (Mitchell & Beach, 1976). Vroom (1964) defined an individual's expectancy as the person's belief regarding the probability of his decision will lead to a specific outcome of interest. The Expectancy Theory model can be used to predict career choice as suggested by Vroom (1964). The theory also postulates that people join organisations along with their own expectations and whether those expectations are met, will influence the decision to remain or leave the organisation (Daly & Dee, 2006). An explanation of why people choose to behave in a certain way is provided by this theory.

According to the expectancy theory, social factors include parents' influence, friends, and teachers' influence, social status and economic conditions which also includes job opportunity, amount of salary, as well as work-life balance (Baliyan & Baliyan, 2016). Vroom (1964) suggested that the Expectancy Theory is based on four assumptions:

- i. People join organisations with expectations of their needs, motivations, and working experiences.

- ii. People's behaviour are derived from a conscious choice whereby they are free to choose behaviours based on their own expectations.
- iii. Different people expects different things from an organisation (i.e. salary, career advancement, promotion, job security)
- iv. People select among alternatives or decide on opportunities to pursue by optimising their expectations and outcome of the job.

Aforementioned, the Expectancy Theory can be used to predict career choice among many other existing models according to past empirical researches (Mitchell & Beach, 1976). Hayibor (2012) points out that this theory is applicable to conditions whereby stakeholders secure their interests by deciding the action they will take against or perceive about an organisation. Therefore, he applied the Expectancy Theory in his study which was aimed to investigate and analyse the factors influencing accounting students when seeking for jobs.

2.2 Extrinsic factors

Extrinsic factors are defined as financial remuneration and market-related factors that are extrinsic to the nature of the job itself (Paolillo & Estes, 1982; Gul et al., 1989; Auyeung & Sands, 1997; Baliyan & Baliyan, 2016). Financial and job-market factors are related to the availability of jobs, opportunity for career advancement, career options flexibility, job security, excellent long-term earnings, and good initial salary are among the determinants influencing job seekers to decide on a career (Gul et al., 1989; Felton et al., 1994; Mauldin et al., 2000). Extrinsic factors refer to an importance placed on making money, job security, potential earnings, and job availability (Elizur, 1984; Ros et al., 1999; Duffy & Sedlacek, 2007). Other than financial rewards, extrinsic factors such as job security, opportunity for career advancement, and job availability were found to have significant relationship with career decisions as well. A study conducted on students' preference when selecting a career revealed that job security, anticipated challenging work, and career advancement are among the most important factors behind making a career decision (Bundy & Norris, 1992). Similarly, Aycan and Fikret-Pasa (2003) indicated that university students were mostly influenced by extrinsic factors such as financial remuneration, opportunity for career advancement, working environment, and so forth. To confirm that extrinsic factors indeed have significant influence on career decision, the following hypothesis is proposed for this study:

H1: There is significant relationship between extrinsic factors and undergraduate students' career decision.

2.3 Intrinsic factors

Intrinsic factors are defined as factors relating to the satisfaction derived from a job and helps individuals to be creative and autonomous within an intellectually challenging and dynamic environment (Ahmed et al., 1997). Intrinsic factor refers to an importance placed on autonomy, intrinsic interest, and independence (Elizur, 1984; Ros et al., 1999). According to the authors examining on undergraduate students' motivation who selects teaching as a career choice, intrinsic factors is defined as those which reflect themes of personal satisfaction and possessing personal interest in the subject and career itself (Chuene et al., 1999; Yong, 1995; Young, 1995). It was stated that intrinsic factors are focused on the job content as well as the opportunity to receive further training and career advancement. More specifically, intrinsic factors include job related factors such as the power and authority the job entails, working environment and opportunities for career advancement, intrinsic interest in the job profession, creativity and expected professional challenges (Bai, 1998; Aycan & Fikret-Pasa, 2003; Gokuladas, 2010; Felton et al., 1994; Carpenter & Foster, 1977; Beyon et al., 1998). Olamide and Olawaiye (2013) also considered grades to be an intrinsic factor falling under "personality descriptors" that may limit opportunities in the future. Aycan and Fikret-Pasa (2003) revealed that intrinsic factors such as self-aspirations mostly affect one's career choice. Similarly, Zhang (2007) concluded her research whereby interest in a specific subject is perceived to influence career decision making as well. In

order to determine whether intrinsic factors have influence on career choice as evidenced by aforementioned studies, the following hypothesis is proposed for this study:

H2: There is a significant relationship between intrinsic factors and undergraduate students' career decision.

2.4 Interpersonal factors

Carpenter and Foster (1977), Beyon et al. (1998) and Gokuladas (2010) reported that interpersonal factors refer to the influence of parental, family, relatives, friends, as well as professors. The study on factors determining secondary school students' career choice by Olamide and Olawaiye (2013) involving 100 students as sample size revealed that various environmental factors including parents will influence students' career choices. If a student does not have any plans for a career, provided that parents exert enough pressure on them to pursue a particular career field, the student will follow his or her parent's suggestion. Environmental factors that exerts relative influence on career choice are parents, relatives, siblings, peers, teachers, and counsellors which makes up a student's support system (Olamide & Olawaiye, 2013). Studies also found that most students' career choice is perceived to be influenced by the attitude and expectations of parents and teachers. It was found by researchers that family, parent, or friends have a significant influence on students' making a career choice (Emmanuelle, 2009; Mudhovozi & Chireshe, 2012). In Asian countries, parents exerts significant influence on their children's career choice to the extent that parents are the ones who choose the career that their children pursue (Wong & Liu, 2010; Baines, 2009). Other similar studies concluded that parents were perceived to be the most influential in students' career decisions (Basow & Howe, 1979; Hoffman et al., 1992) which may be attributed to their close relations with one another. To verify whether interpersonal factors have influence on career decision, the following hypothesis is developed for the purpose of this study:

H3: There is a significant relationship between interpersonal factors and undergraduate students' career decision.

2.5 Industrial training

An industrial training is an opportunity for undergraduate students to gain professional working experience as part of their formal education in a university by partaking in supervised and planned work as well as being exposed to real-world corporate environment (Renganathan et al., 2012). It was stated by Ko (2007) that students' satisfaction of their industrial training experience may affect their confidence in choosing a career development path. To have realistic career expectations, the experience for which students obtains from partaking in industrial trainings is of high importance (Lam & Ching, 2007). Salatan (2016) explored the influence of internship experience on students' career selection and found that students perceived industrial training planning to be an important factor in influencing their internship experience satisfaction which ultimately lead to deciding whether or not they will pursue a career in the tourism and hospitality industry. Industrial trainings are perceived to be effective tools in helping students to make better career choices by ensuring that students gain practical experience through experiential learning (Lee & Chao, 2012). Students are able to put into practice what they have learned theoretically in university which directly and indirectly contributes to the sustainability of learning processes that leads to an improvement of informed career decision making. To verify whether industrial training have influence on career decision, the following hypothesis is developed for the purpose of this study:

H4: There is a significant relationship between industrial training and undergraduate students' career decision.

2.6 Research Framework

A research framework was developed for the purpose of this study as shown in Figure 1. Figure 1 shows the relationship between the independent variables (Extrinsic, Intrinsic, Interpersonal, and Industrial Training), and the dependent variable (Undergraduate Students' Career Decision).

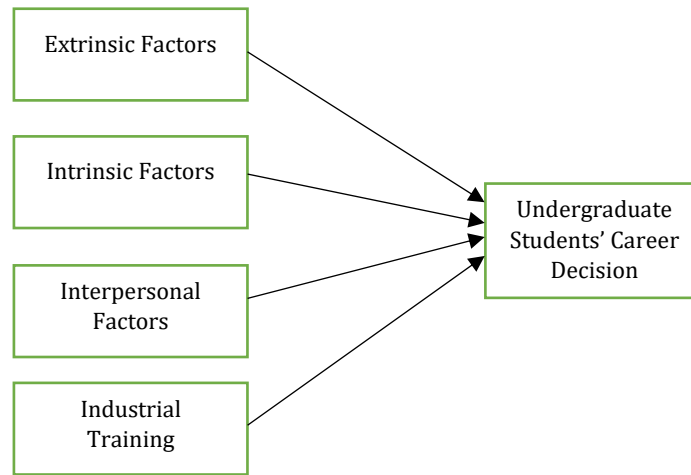


Figure 1: Research Framework

The research framework components comprising of independent and dependent variables were developed by referring to the tri-dimensional model of career decision proposed by Carpenter and Foster (1977). This model proposed that there are three main factors that influences career decision namely extrinsic factors (good salary and benefits, job security, career advancement, prestigious occupations and availability of the job), intrinsic factors (self-interest, self-image, personal values, and opportunity for learning and development), and interpersonal factors (influence of parents, friends, and professors). An additional independent variable which is industrial training was included into this research framework as it could potentially influence undergraduate students' career decision as well.

3. Methodology

3.1 Research design

This study used quantitative data collection techniques and study designs. Descriptive and survey research design were adopted for the purpose of achieving the objectives of this study. Descriptive survey research would be suitable for this study as it will result in the indication of percentage of people who holds a particular perception on the subject matter after the issues of this study are defined and basic information in relation to this study is available in the form of literature review (Neuman, 2014). This design is appropriate for the purpose of this study as a self-administered survey in the form of questionnaires will be collected from respondents as primary data for this study for analysing the perception regarding factors influencing career decisions of undergraduate students. In addition, a cross-sectional research design was used to collect information from undergraduate students in one of the universities in Melaka. It is simple and cost effective as this study examines only the variables at a single point in time (Neuman, 2014).

3.2 Research instrument

Questionnaires were used as a research instrument for achieving the objectives of this study. The questionnaires were directly distributed to respondents by the researcher to identify the

undergraduate students' perception of factors influencing their career decision. The questionnaire has a total number of three sections as follows:

- Section A: Demographic information (i.e. gender, age, year of study, and faculty)
- Section B: Factors Influencing Career Decision (Independent variables: extrinsic factors, intrinsic factors, and interpersonal factors)
- Section C: Career Decision (Dependent variable)

Section A aims to elicit demographic information from respondents such as gender, age, year of study, area of study, industrial training experience, and whether they preferred the private or public sector. For section B, respondents were required to rate the Likert scale pertaining to their perception of factors influencing career decision which are the independent variables namely, extrinsic factors, intrinsic factors, and interpersonal factors. Section C comprised of statements aimed to measure the dependent variable which is undergraduate students' career decision. For section B and C, a 4-point Likert scale were used to measure target respondents' perception of factors influencing career decision. The scale for "Extrinsic Factors" and "Intrinsic Factors" which are the independent variables ranges from 1 = "Not at all important" to "Extremely important". The scale for "Interpersonal Factors" which is also an independent variable ranges from 1 = "Very low" to 4 = "Quite high". Meanwhile, the scale for "Career Decision" which is the dependent variable ranges from 1 = "Strongly disagree" to 4 = "Strongly agree". All of the scales used for this questionnaire do not have a midpoint to reduce central tendency error. The reason behind using a 4-point Likert scale is to eliminate social desirability bias (Garland, 1991) and propel respondents to provide a definite answer (Kroh, 2007). The questionnaire was developed based on Carpenter and Foster (1977) tri-dimensional model for career choice comprising of extrinsic, intrinsic, and interpersonal model. The questionnaire items were adapted and adopted from other related empirical researches mentioned in the literature review to suit the context of this study. All items in the questionnaire are close ended in order for the researcher to be able to analyse data in an accurate manner. Appendix A shows the items in the questionnaire.

Pilot study was carried out to ensure the reliability of the survey items. As suggested by Johanson and Brooks (2009), a minimum of 30 respondents representing the population of interest were involved in the pilot testing. The items of the questionnaire was pilot tested with 30 undergraduate students on a random basis. The reliability of the instrument was checked using Cronbach's Alpha whereby the minimum value should be 0.60 as suggested by Hair et al. (1998). All items in the questionnaire for each variable are deemed to be acceptable as all Cronbach Alpha values listed exceeded 0.70 (Career decision = 0.758, Extrinsic factors = 0.915, Intrinsic factors = 0.912, Interpersonal factors = 0.852).

3.3 Sampling plan

The target population for this study were undergraduate students who are currently pursuing their bachelor's degrees. As the focus of this study is to examine the factors influencing undergraduate students' career decision, the target population was chosen because they will soon be graduating in the near future and this study may be able to help them in ways to make a sound career decision.

The sampling plan chosen for this study is non-probability sampling techniques. Firstly, convenience sampling method was used to disseminate questionnaires to students who are currently pursuing bachelor degree programs. Another sampling technique used for this study is snowball sampling (non-probability sampling technique) whereby students were asked to distribute the questionnaires to their friends.

3.4 Data collection method

The data was collected through surveys and the researcher personally distributed the questionnaires to students within the premise of the university to ensure the validity of respondents and obtain full and prompt responses. The researcher also designed an online

questionnaire using Google Form to reach more respondents within a short period of time by sharing the link to the questionnaire through social media. To ensure the validity of respondents who answered the questionnaire through Google Forms, the researcher disseminated the links to the targeted population personally. The students were ensured anonymity in regards to the responses they provide in the questionnaires and it takes approximately 10 minutes to complete the survey. A study by James and Denis (2015) on the factors influencing career decision among undergraduate students in an African university context had a sample population 116 students being randomly selected. This study collected data from 200 students, which is slightly more than the previous study to improve the accuracy and reliability of data collected. To conclude, the number of sample size which was collected for this study was adequate according to GPower Version 3.1 whereby the number of respondents must be at least 195.

3.5 Data analysis method

The quantitative data obtained from disseminating questionnaires were analysed using Statistical Package for the Social Sciences (SPSS) version 22. The SPSS was used to generate descriptive statistics and inferential statistics for the analysis of this study. Descriptive statistics were generated using the SPSS such as frequency, percentage, mean, and standard deviation to analyse the trend for data collected on respondents' demographic information for frequency analysis. The SPSS generated inferential statistics comprising of multiple regression analysis and Cronbach's Alpha.

4. Results and Analysis

4.1 Respondents' profile

Table 1 shows a majority of respondents (66%) were female while the remaining 34% were male. This may be attributable to more females enrolled in the university compared to males. Majority of the respondents of this study belonged to the age group of 21 – 23 with a percentage of 76.0% while the minority of respondents belonged to the age group of 27 and above (1.0%). The remaining respondents fall into the age category of 18 – 20 (10.5%) and 24 – 26 (12.5%). More than half of the total respondents were Chinese at a percentage of 72.5% while the remaining were Malay, Indian, and others. Slightly over half of respondents were in year 3 (51.0%) and there were over 30% of respondents in year 4. The remaining respondents were in year 1 (5.5%) and year 2 (9.0%). Majority of respondents were pursuing their studies in Business field (71.0%), followed by Engineering and Technology (12.0%), Information Science and Technology (10.5%), and Law (6.5%) respectively.

Close to half of respondents (48.5%) have undergone industrial. For those who have undergone industrial training, majority of the respondents deemed their internship experience as moderately relevant at the percentage of 18.0% out of 48.5%, which is then followed by those who perceived that their industrial training were only slightly relevant (14.0%) to their career decision. 12.5% of respondents perceived their hands-on working experience throughout the internship duration to be extremely relevant to their career decision, while on the other hand, only 4.0% deemed it to be not at all relevant. A huge majority of respondents deemed industrial training to be of great importance in influencing their career decision at the significant percentage of 93.5%. Students may be of the perception that by gaining real working experience in the form of industrial training, they may use such experience to decide on the career path for which they plan to pursue. On the other hand, only 6.5% of respondents perceived industrial training to have no importance in influencing their career decision. There is a significant amount of respondents who prefer to work in the private sector at the percentage of 80.5%. In contrast, only 19.5% of respondents prefer to work in public sectors.

Table 1: Respondents' Profile

Demographic	Category	Frequency	Percentage (%)
Gender	Male	68	34.0
	Female	132	66.0
Age	18 – 20	21	10.5
	21 – 23	152	76.0
	24 – 26	25	12.5
	27 – above	2	1.0
Race	Malay	32	16.0
	Chinese	145	72.5
	Indian	19	9.5
	Others	4	2.0
Year of Study	1	11	5.5
	2	18	9.0
	3	102	51.0
	4	69	34.5
Area of Study	Business	142	71.0
	Law	13	6.5
	Engineering and Technology	24	12.0
	Information Science and Technology	21	10.5
Undergone Industrial Training	Yes	97	48.5
	No	103	51.5
Relevance of Industrial Training	Not at all relevant	8	4.0
	Slightly relevant	28	14.0
	Moderately relevant	36	18.0
	Extremely relevant	25	12.5
Importance of Industrial Training	Yes	187	93.5
	No	13	6.5
Sector Preference	Private sector	161	80.5
	Public sector	39	19.5

4.2 Descriptive analysis

The mean and standard deviation were obtained for all five variables, namely career decision, extrinsic factors, intrinsic factors, interpersonal factors, and industrial training. The mean of variables range from 1.07 to 3.28. The mean score for extrinsic factors is the highest at 3.28. It is followed by intrinsic factors, career decision, and interpersonal factors at 3.23, 3.00, and 2.54 respectively.

Table 2: Descriptive Analysis for Variables

Variable	Mean	Std. Deviation
Career Decision	3.00	0.469
Extrinsic Factors	3.28	0.371
Intrinsic Factors	3.23	0.400
Interpersonal Factors	2.54	0.584

4.3 Multiple linear regression analysis

Based on Table 3, 22.4% ($R^2 = 0.224$) of the variation in career decision is explained by extrinsic factors, intrinsic factors, and interpersonal factors. The F-value is 14.077 which is significant at 0.000 level. Since the significant value is below $p = 0.05$, there is a model fit. This indicates that there is at least one of the independent variables have significant relationship with dependent variable.

The multiple regression table shows that intrinsic factors ($p = 0.000$) and interpersonal factors ($p = 0.000$) significantly influence career decision at 1% confidence interval level since the p value falls below 0.01. However, it appears that extrinsic factors ($p = 0.479$) and industrial training ($p = 0.947$) do not significantly influence career decision which is indicated by the p value above 0.05. The independent variable which influences career decision the most is intrinsic factors ($\beta = 0.299$) followed by interpersonal factors ($\beta = 0.284$). Therefore, the Multiple Regression analysis indicated that intrinsic factors are the most influential variable in explaining undergraduates' career decision.

To test the hypotheses, the p value generated in the Multiple Regression analysis table is referred to. Hypothesis 1 and 4 are rejected due to the p value exceeding 0.05 which rendered it as insignificant in influencing career decision of undergraduates. Meanwhile, hypothesis 2 and hypothesis 3 are accepted since the p value is significant ($p = 0.000$) at 1% confidence interval.

Table 3: Multiple Regression Analysis

Model	Unstandardised Coefficients		Coefficients Standardised Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	1.058	0.295		3.583	0.000		
Extrinsic Factors	0.071	0.100	0.056	0.709	0.479	0.632	1.583
Intrinsic Factors	0.351	0.093	0.299	3.755	0.000***	0.622	1.607
Interpersonal Factors	0.228	0.051	0.284	4.449	0.000***	0.974	1.026
Industrial Training	0.008	0.121	0.004	0.067	0.947	0.983	1.017

Notes: F = 14.077 ($p = 0.000$); $R^2 = 0.224$

5. Discussion and Conclusion

5.1 Discussion of research objectives

The first objective of this study is to identify the most and least important factors which affect undergraduate students' career decision choices. This objective has been achieved as the Multiple Linear Regression analysis conducted gave a definite result in regards to determining which factors have the most and least influence on undergraduate students when making a career decision.

Table 4: Ranking of Independent Variables

Rank	Item	Sig. Value	Standardised Beta
1	Intrinsic Factors	0.000	0.299
2	Interpersonal Factors	0.000	0.284
3	Extrinsic Factors	0.479	0.056
4	Industrial Training	0.947	0.004

The variable which obtained the highest value of standardised beta generated from conducting Multiple Regression Analysis can be denoted as having the most influence on undergraduate students in making their career decision. In Table 4, it is observed that intrinsic factors are perceived to be the most important career decision making factor as it has the highest influence on undergraduate students' career decision, which is then followed by interpersonal factors, extrinsic factors and industrial training respectively. It should be noted that extrinsic factors and

industrial training do not have significant influence on the dependent variable. Therefore, the first objective of this study which is to determine the most and least important career decision making factors perceived by respondents has been achieved.

The second research objective is to examine the underlying factors influencing undergraduate students' career decision. Therein, the factors influencing career decision making identified for the purpose of this study are extrinsic factors, intrinsic factors, interpersonal factors, and industrial training.

Extrinsic factors are denoted as not having significant influence on undergraduate students' career decision as the hypothesis which stated that there is a significant relationship between the two variables was rejected due to an insignificant p value above 0.05. The result of this study regarding extrinsic factors is in contrast with previous studies of similar topic. Undergraduate students' career decision seemed to be not extrinsic factors driven which was suggested otherwise by Marinas et al. (2016) and other prominent researchers. This may be attributable to majority of respondents belonging to Generation Y which are the groups for which employers will be looking to hire in the following years. This age cohort are those who are born between year 1980 to 2000 (William, 2008; Tay, 2011 as cited in Tan & Wan Fauziah, 2012). Generation Y is cited to focus more on intrinsic requirements involving non-financial motivations as opposed to extrinsic factors. Research findings by Ting (2017) found that intrinsic motivation is significantly important for Generation Y compared to extrinsic factors as they tend to pay more attention to their inner needs. However, in the same study, salary still plays a role in motivating and influencing Generation Y in career decisions and working performance.

The hypothesis which stated that there is a significant relationship between intrinsic factors and undergraduate students' career decision was accepted since the p value is significant ($p = 0.000$). Moreover, the Multiple Linear Regression analysis indicated that the independent variable exert significant influence on undergraduate students' career decision which is denoted by the significant value of below 0.05. It was also concluded that intrinsic factors have the most influence on career decision compared to extrinsic factors, interpersonal factors and industrial training. The resulting findings is in harmony with Aycan and Fikret-Pasa (2003) who found that intrinsic factors such as students' personal values and nature of the job that challenges them intellectually were the most influential. It was observed by Hsiao and Nova (2016) regarding Generation Y that intrinsic factors such as challenging nature of the job exerted great influence on career decision making, which can be suited to the scope of this study as the age cohort mainly belongs to Generation Y. It shows that Generation Y assign more relevance to openness to change such as learning new things and prioritising their personal values and interests in making a career decision as opposed to the traditional and conventional extrinsic factors which are often associated to have major influence on career choice in previous studies (Behling et al., 1968; Aycan & Fikret-Pasa, 2003; Schmutte, 2001). In retrospect of these findings, the objective of examining the relationship between intrinsic factors and career decision has been achieved.

Moving on, the hypothesis which stated that there is a significant relationship between interpersonal factors and undergraduate students' career decision was accepted since the p value is significant ($p = 0.000$). The Multiple Linear Regression analysis denoted that interpersonal factors also have significant influence and it is the second most influencing factor after intrinsic factors. The findings are in harmony with past researches such as Marinas et al. (2016) which found that interpersonal factors significantly influences career choice of undergraduate students who are majoring in business and administration. Abbasi and Sarwat (2014) also suggested that students are under great influence of their parents and friends, as well as placing great importance on social relations when selecting their career path. In particular, parents exert the most influence on undergraduate students' career decision which is indicated by the highest mean among other items under interpersonal factors such as relatives, teachers, friends or peers, and counsellors. Parents are among the major sources which impacts students' perception of the available and suitable career opportunities that will influence their initial career decision.

Respondents are greatly influenced by interpersonal factors when deciding on their career decisions which may be attributable to lack of working experience. Students have limited exposure towards real working experience so they tend to rely on job information from their parents who have years of working experience and are seen to be reliable sources of career information (Choo et al., 2012). All these findings lead to the achievement of this objective in examining the relationship between interpersonal factors and undergraduates' career decision.

The last factor that has the potential to influence undergraduate students' career decision is industrial training which is a type of working experience provided for students in universities where they may apply the theories which they have learned in a professional working environment. It is also said that industrial training is a platform for which students are given the opportunity to gain practical working experience and to have realistic expectations of the plausible career path to be pursued in the future (Lam & Ching, 2007). The hypothesis which stated that there is a significant relationship between industrial training and undergraduate students' career decision was rejected due to an insignificant p value above 0.05. This is contrary to the majority percentage of respondents deeming that industrial training was indeed an important type of working experience that will influence their career decision. The result derived was also in contrast with Edwards and Quinter (2011) who found that learning experiences are the most influential factors affecting career decisions among students. Even though the results derived using Multiple Linear Regression denoted that there is no significant influence of industrial training on undergraduate students' career decision, majority of respondents are of the perception that industrial trainings are important in determining their future career path according to their responses. Nevertheless, students may be of the perception that industrial training do not significantly influence their career decision due to being heavily influenced by intrinsic and interpersonal factors instead. While having already made a career decision, industrial training may be deemed as a reality check to verify that they have made the right career decision.

5.2 Research contribution

This research provides an insight of the factors influencing undergraduate students in making their career decisions. Knowing the factors which have an impact on undergraduate students' career decision making will allow them to examine their perception and processes when making a career decision. By having an insight of these factors, undergraduate students may construct a more comprehensive career plan by considering more career alternatives which will result in them making an informed career decision. The results and findings of this research will also contribute in terms of providing information about factors influencing career decision to relevant parties such as the university management in deciding on how to aid students in choosing a career path and for employers to recruit the right candidates.

5.3 Implications and recommendation

The implication of this research involves the university management, employers, as well as students. First of all, according to the data collected, majority of respondents perceived that industrial training is an important type of working experience that will influence their career decision. Therefore, it is perceived that gaining personal exposure of real working experiences through industrial training is vital for students in making professional choices related to their career (Marinas et al., 2016). Therefore, the recommendation for the university management is to actively collaborate with potential employers of graduates in terms of providing relevant industrial training for students that will significantly influence their career decision making. The university management should also do more to provide students with information on the type of careers available and advise them on the kind of careers that may be suitable for them. This will also implicate employers since most organisations would want to recruit talents especially among fresh graduates. The findings of this study will allow organisations to align their employment offerings such as benefits in terms of providing opportunities for self-development and chances to learn new things that may be in the form of job-rotation for which the organisations may then

promote these offerings to attract and retain talents as well as enhancing person-organisational or person-job fit. By realising the specific factors that greatly influences undergraduate students' career decisions, students themselves should initiate and actively obtain and keep abreast of career information by utilising the Internet as a platform by gaining access to employment websites such as LinkedIn and Jobstreet.com, as well as attending career fairs to gain real-time information regarding companies employment offerings and benefits that will help in making an informed and well-planned career decision.

5.4 Suggestion for future research

Further research on this study with the same line of thought should be done in order to better comprehend the factors and processes that influences students in making their career decisions. The future research on the same scope of study should include more students from both private and public universities to generalise findings on a broader population of the country by increasing the sample size. There could be other influential variables for which this study may not cover such as culture and academic performance which should also be considered to study this topic within the Malaysian context as most researches focused on the Western cultures.

5.5 Limitation

This study has limited sample size due to short amount of time span. The data collection was carried out in only one private university in Malaysia for which the findings of this study could not be fully generalised in the Malaysian context. Due to time and financial constraints, convenience sampling was applied within one private university premise which again, limits the generalisation of the results and findings.

5.6 Conclusion

As making a career decision before one's graduation is often challenging when the decision itself in times of uncertainty will have an impact on one's entire life, there is a need to investigate the underlying factors influencing undergraduate students' career decisions and to propose recommendations to alleviate career indecisions. The study found that intrinsic factors have the most influence on undergraduate students making a career decision, which was followed by interpersonal factors. These findings are in contrast with past researches whereby most of them emphasised on extrinsic factors having significant influence on career decision making, for which this study found that extrinsic factors do not have any significant influence over deciding on a career path. This study will help students to crystallise and specify their career decisions prior graduation by having a clear understanding of the factors to be taken into consideration when deciding on a career choice. All in all, making the right career decision is crucial to be successful as undergraduate students may be future pioneers or even leaders, which prompts the need for further research to analyse the underlying causal factors during career decision making.

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Appendix A

Construct	Item	Item Description	Source
Extrinsic Factors (EF)	EF1	Job availabilities	Carpenter and Foster (1977)
	EF2	Good initial salary	Carpenter and Foster (1977)
	EF3	Potential for future higher earning	Sibson (2011)
	EF4	Career advancement opportunities	Carpenter and Foster (1977)
	EF5	Job security	Carpenter and Foster (1977)
	EF6	High social standing	Carpenter and Foster (1977)
	EF7	Prestigious profession	Edwards and Quinter (2011)
	EF8	Opportunity to achieve good standard of living	Aycan and Fikret-Pasa (2003)
	EF9	Good employer reputation	Omar et al. (2015)
	EF10	Good fringe benefits (i.e. medical insurance, bonus, allowance etc.)	Abassi and Sarwat (2014)
Intrinsic Factors (IF)	IF1	My interest in a particular subject	Zhang (2007)
	IF2	Opportunity to learn new things	Corporaal (2012)
	IF3	Opportunity for self-development	Aycan and Fikret-Pasa (2003)
	IF4	Fit to the image that I have for myself	Aycan and Fikret-Pasa (2003)
	IF5	My personal values	Aycan and Fikret-Pasa (2003)
	IF6	My skills and abilities	Aycan and Fikret-Pasa (2003)
	IF7	Nature of the job that challenges me intellectually	Ahmed, Alam, and Alam (2010)
	IF8	My grades	Olamide and Olawaiye (2013)
Interpersonal Factors (IPF)	IPF1	Parents	Olamide and Olawaiye (2013)
	IPF2	Relatives	Aycan and Fikret-Pasa (2003)
	IPF3	Teachers	Olamide and Olawaiye (2013)
	IPF4	Friends or peers	Olamide and Olawaiye (2013)
	IPF5	Counsellors	Olamide and Olawaiye (2013)
Career Choice (CC)	CC1	I have made a career choice.	Borchert (2002)
	CC2	I have career plans at present.	Borchert (2002)
	CC3	I am aware of what career I'm planning to pursue.	Borchert (2002)
	CC4	I will choose my career choice based on my interest in a particular occupation.	Olamide and Olawaiye (2013)
	CC5	I intend to work in a profession related to my degree major upon graduation.	Fizer (2013)
	CC6	I intend to remain in the career field related to my degree major after graduation.	Watt and Richardson, (2007)