

The Influences of Career Interest and Career Information Seeking Behavior on Career Choices among University Students

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Abstract

This study aimed to examine the career interest and career information-seeking behaviour among male and female students in higher education students. This study used survey research design involving respondents were 570 students from selected institutions of higher learning using the stratified random sampling. A questionnaire was constructed based on the programs and activities carried out in institutions of higher learning and career exploration instrument was used. The career exploration instrument to measure career interest such as Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E), and Conventional (C). The data analysis showed that the male and female students have non-different patterns of personality which were the combination of Social (S), Conventional (C) and Enterprising (E). Meanwhile, the frequency data for students meeting a counsellor showed that female students met with counsellors more often met to discuss career development issues. The same data also showed that a lot of female students were involved in career programs in schools and universities. This study suggests that counsellors should take into account the different needs of male and female students in designing and implementing career programs/activities to help students make informed career decisions.

Keywords: gender differences, job aspirations, career interest and career information-seeking behaviour.

INTRODUCTION

The Economic Transformation Program (ETP) 2010 (PEMANDU, 2010) provided directions for Malaysia to become a high-income developed country which is inclusive and sustainable. ETP has important implications on the roles of both gender of men and women in the development of the country, including equity in the allocation of nation's resources and income. Thus, imbalance of opportunities and income affect the aim of ETP because the development impacts and at the same time, impacted by men and women in different ways. Studies of gender analysis in education can explain how gender participation influences the effectiveness and durability of policy and program development (United Nations, ECOSOC 2010).

Gender differences in the context of education and career have given implications to national policy by introducing several policies, guidelines, action plans to balance the significant gap between genders (Walker, et al., 2019; United Nations Development Programme, 2014). The gender gap and imbalance in education and careers has a direct impact on the job market including task roles, role conflicts and organizational well-being and also impact during and Post Covid-19 Pandemic (Djankov, et al., 2020; Alon, et al., 2020).

In the context of higher education, despite the higher participation of female students than male, this does not guarantee a better life for women especially in career and income (David, 2015; Vuorinen-Lampila, 2016). The educational equity gap among male and female students in advanced and tertiary studies levels affect the labour market, and also the value and lifestyle of Malaysians (Yusoff et al., 2008). The changes in values and lifestyles caused values and societal conflicts among the community members that will leave a negative impact on the younger generation. In addition, psychological factors such as attitudes, emotions and beliefs also influence students of career development. This factor will determine how well one can adapt to the work environment and to satisfy his

career activities. This study will also identify psychological factors that influence student career development based on student gender.

Obviously, there is imbalance of participation in the education between the male and female students in terms of the number and allocation of the educational program (Norman & Kaur, 2002; Ministry of Higher Education, 2015). At the school and non-technical university level, the number of female student exceed the number of male students. However, at the technical university inclusive of technical and community colleges, a different situation arises whereby the number of male students is greater than the female students (Abu Bakar, 2009). The patterns which is based on the allocation of the educational program shows that most of the female students are focusing more on the social sector meanwhile, the male students are concentrating more on the technical and vocational. The imbalance of gender at this level portrays a continuation from the imbalance in the academic achievements at the school level. However, statistically the participation of the female workers in the employment sector is not generally related with their achievements in the school level and as well as their numbers in higher education. This can be proven by the number of female workers is less than the number of male workers, the key focus of female workers is more to services sector and most of them are at the lower level as compared to male workers (AmlaMohdSalleh, 2010). This issue has attracted the interest of researchers whose trying to understand this phenomena from a various angles. However, not many studies are trying to explore the evolution and influence of the student's career development towards the student's participation in the educational program at the tertiary level and as well as in the context of gender (Malisch, et al., 2020; Card, & Payne, 2021; Siddiq, & Scherer, 2019).

The development of higher education and career of the 21st century involves individuals such as talent, interest and ability and meeting the needs of the job market (Bridgstock, 2019; Paolini, 2019; Okech, & Rubel, 2018). While the demands of the employee market are influenced by socioeconomic factors and current policies in a country. Recently, it had been admitted and validated that graduates lack knowledge and skills that are needed by the career market (Ismail, 2012; Yussof, et al., 2008; IPPTN, 2003). The issues such as graduates who are jobless and currently looking for jobs became a main concern of the universities and industrial players where a solution is needed (ZainiUjang, 2009).

Gender Differences

The achievement trend that favours female students at the basic education level has brought imbalance in the enrolment for advanced and tertiary studies. Referring to the university enrolment in 2010 to 2013, the enrolment of female students was more focused on the fields such as social sciences, business and law, education and the arts and humanities. On the other hand, the field of engineering, manufacturing and construction still showed that the number of male students was more than female students. These data reinforce the community's stereotypes that fields related to services are for females, not males (Ministry of Higher Education, 2014). By comparison, the enrolment of female students was higher private and higher education institutions and higher male students' enrolment in polytechnics and community colleges. The statistic gap between male and female students enrolment was not obvious in polytechnics and community colleges, but it was very significant in public universities enrolment. (Graduate Tracer Study, 2021).

Career Interest

Career selection is a reflection of one's motivation, knowledge, personality, and abilities. Jobs describe a way of life and the environment, not just a set of separate work or skills functions. Holland's theory has categorized individuals into one of the six categories namely realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E) and Conventional (C). Each type of personality is formed as a result of the interactions between various cultural and personal demands including peers, biological inheritance, family, social classes, culture and physical environment from individual interactions and these factors, individuals will love certain activities and not to other activities (Issacson, & Brown, 2000).

The assumption of the appropriateness between the personality and the career environment selected is the basis of Holland's career theory and this is accepted as a method of explaining the success and failure of the decision - making process. Holland considers that satisfaction, stability and achievement depends directly between the

alignment between personality and the work environment. The higher the alignment between the personality and the environment, the clearer one's interest in the job (AmlaMohdSalleh, 2010). Previous study also show the different male and female incareer interest (Ion, et al., 2019; Abdullah Ab. Rahim & Othman, 2009; Turner & Lapan 2002). Meanwhile in another factors also show the gender difference incareer choice, career decision making (Lasselle, et al., 2021; Walker & Tracey, 2012; Abu Talib& Tan 2009; Scott & Ciani, 2008) career value (Behrend, Thompson, Meade, Grayson, & Newton, 2007); career maturity (Darell Anthony Luzzo, 1995), career self-efficacy (Jasmi et al., 2014; Sani Ismail, 2011; Alisa & Betz., 2004; Sullivan & Mahalik, 2000).

Career Information-seeking Behaviour

Gathering information is a process that refers to an individual's behavior. Wilson (2000) noted the information-seeking behaviour refers to the behaviour of human in seeking resources and information channel passively or actively. The behaviour of information-seeking involve a set of activities such as the need for information, finding information, evaluating and selecting information and finally using that information (Pesch, et al., 2018; Muhammad Rafiq, 2009; Majid&Kassim, 2000). In this study, the information-seeking behaviour is measured by looking at the extent to which an individual has information relevant to their career planning. Career information is one of the most important things in one's career development process (Brown, 2007; Millar & Shevlin, 2003; Suradi Salim, 1996). Career-related information is considered essential once a person understand him/herself and his/hersuitable career environment in the process of career decision-making (Brown, 2007; Isaacson & Brown, 2000; Suradi Salim, 1996). The context this study, the behaviour of information-seeking is measured by the frequency of students meeting with a counsellor or guidance teacher and their involvement in school and institutions of higher learning through the program and career activities.

In general, this study aims to study the differences in gender on career information-seeking behaviour among higher education students.

METHODOLOGY

Samples

The respondents of this study were from a population of male and female adolescents in institutions of higher education aged between 18 to 23 years, who are in their first year and final year of their undergraduate studies. The sampling was done through stratified random sampling based on the level of study, gender and field of study. The number of male samples was 223 and female were 347.

The Research Instrument

This study uses a career plaque test (Salleh, 2010) adapted from Holland's theory (1994) to measure student career interest, this test has 90 items that measure six types of personality namely realistic, investigative, artistic, social, enterprising and conventional. While career information-seeking behaviour uses a set of questionnaires that measure the frequency of counseling services and frequency of career programs.

Data Analysis

In order to be able to discuss the three objectives of this study, the data analysis measures were as follow. For the first objective which was to identify the personality pattern of male and female students, trend analysis was done to look at the three combinations of dominant personality. For the second and third objectives which meant to understand the information-seeking behaviour, the frequency of students meeting counsellor and their participation in career programs at school and university.

RESEARCH FINDINGS

The findings are presented based on the research objectives. The findings discussed took into account the background of the respondents and the educational context that influences the outcome of education at advanced and tertiary level. Students in public higher educational institutions are often influenced by the attitudes, behaviour and values in their life environment. The differences not only found between the male and female group (inter), but also within the group (intra).

Pattern of Career Interest

The students' personality types were analysed using the RIASEC career personality model. As a whole, the students can be categorized into six types of RIASEC personality although the level of dominance of each personality type is different (Figure 1).

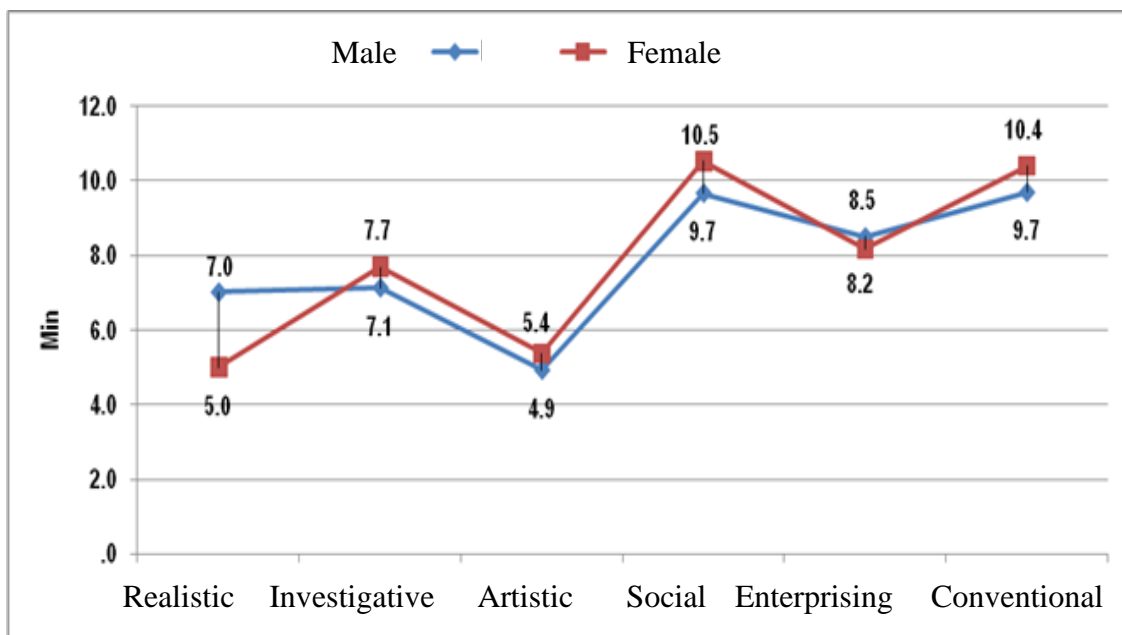


Figure 1 shows the types of career interest also known as career personality among students of higher education institutions. The male and female students have very similar dominant personality types which are Social (S), Enterprising (E) and Conventional (C). The most dominant personality type is Social (S). This means that male and female students are deemed to have social nature that gives priority to relationships, intimacy, prefer helping work such as teaching, guiding and nurturing. The Conventional (C) personality type describes the nature of being detailed, neat and systematic. In these six personality types, the most significant difference between male and female students could be seen in the Realistic (R) personality type. Data revealed that males are more likely to be in realistic fields even though it is not very prominent. This finding is in line with the findings of study field and career aspirations. Generally, this study showed no difference in career personality pattern in male and female students. The low scores suggest that the personality traits of the students are not strong.

Correspondence between Career Personality Types and Career Aspirations

The following analysis shows to which extent the students' career personality types influence their career aspirations. There was obvious relationship between the personality domain and career aspirations. For example, Table 1 shows that students who have Realistic job aspirations have matching personality traits which is Realistic (R) for both gender groups (M - 77.5%, F-59.4%).

Table 1. Correspondence between Career Personality Types and Job Aspirations

Dominant of Personality	Career Aspirations													
	R		I		A		S		E		C		Not Sure	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
R	77.5	59.4	20.0	5.2	16.7	4.8	22.1	6.1	16.7	1.2	-	2.8	30.9	14.8
I	11.8	19.8	72.3	80.9	6.7	31.0	24.7	33.2	50	40.7	27.3	22.2	29.4	49.4
A	1.7	4.0	-	-	53.3	14.3	5.2	1.0	6.1	1.2	9.1	11.1	1.5	2.5
S	2.2	7.9	1.5	5.2	10.0	7.1	32.5	41.3	9.1	8.1	-	-	11.8	12.3
E	.6	-	-	-	-	-	7.8	5.1	10.6	24.4	54.5	36.1	-	9.9
C	6.2	8.9	6.2	8.7	13.3	42.9	7.8	13.3	7.6	24.4	9.1	27.8	26.5	11.1

Table 1 shows the distribution of job aspirations matched with students' personality type. The findings showed there were tendencies of career aspiration matching the personality. The students with job aspiration of Realistic (R) group were the largest group followed by the Investigative (I) personality type group. For the career aspirations in the Investigative (I) group, it was also dominated by students of Investigative personality type no matter male or female. In the Artistic (A) career aspirations group, male student were the largest group (53.3%). Female students (31.0%) with Investigative (I) personality had more Artistic (A) career aspirations compared to male students.

Career aspirations in the Social (S) group matched because it was dominated by students with Social personality (male and female). However, the Enterprising (E) and Conventional(C) aspirations types did not match the personality types Enterprising (E) and Conventional (C)of students. Data showed thatEnterprisingcareer were dominated by students of Investigative (I) personality (male and female). The Conventional (C) type was dominated by students of Enterprising (E)personality type. With reference to the RIASEC model, Investigative (I)students who are in the Realistic career aspirations, Investigative (I) students in Artistic career aspirations, and Enterprising (E)students inConventional career aspirations are considered a moderate match. The Enterprising (E) student groups were more focused and prefer Conventional (C) and Enterprising (E) occupations. Thus, five types of career (R, I, A, S, C) were found selected by most students who have the kind of personality that matches their personality or career interests. This pattern was found to be the same for male and female students. Obviously, most students chose jobs that match their (measured) career interests. Due to the matter where there were students who chose jobs that do not match theirtype of personality and there were still uncertainties with employment options, there is a need to enhance students' understanding of their interests and abilities in order to enable them to make a better decision.

Career Information-seeking Behaviour

The findings of this study showed the extentof students' behaviour in seeking career information based on the frequency of their meeting with the counsellors at Higher Education Institutions and their involvement in career programs and activities in schools and universities.

Table 2: Frequency of Meeting with Counsellor

Frequency	Undergraduates	
	Male	Female
Very Often	.9%	2.0%
Often	11.3%	17.6%
Not Often	24.3%	21.1%
Rarely	34.7%	39.9%
Never	28.8%	19.4%

In comparisonof undergraduate male and female students, the female students showed more frequently met with counsellors compared to male students.The number of male students who never met a counsellor is higher than the female students.This showed that the female students feel more comfortable in meeting a counselor to discuss theircareers planning compared to male students.

Table 3: Participation in Career Programs in Schools and Higher Education Institutions

Institution	Participate		Never Participated	
	Male	Female	Male	Female
School	62.2%	76.0%	37.8%	24.0%
University	44.5%	50.0%	55.5%	50.0%

The involvement of the respondents in the career programs are measured based on their participation during the time of secondary schools and Higher Education Institutions. The research findings showed that the number of female students who participated is higher than male students. However, when it comes to the statistic of students who never participated in any career programs, both male and female students are just the same. Their reluctance to participate is even clearer in university. This situation leads to assumption that either the career programs in schools and universities failed in attracting them, or the counsellors at school and university failed to play their role; or also lack of support from schools and universities in helping the students' career development.

Table 4: Career programs attended in Higher Education Institutions

Program/Activity	Once	More than once	Not related/ No such program
Starting School	29.1	7.0	63.8
Finishing School	22.9	7.7	69.3
<i>BengkelKenaliDiri</i> (interest / personality / talent / attitude test)	27.8	28.1	44.1
Career Seminar / Workshop / Talk	30.8	33.5	35.7
Career Carnival / Day/ Symposium	30.3	20.9	48.8
Career Delegation / Visit	22.8	16.3	60.9
Career Briefing	36.9	22.4	40.7
Career Exhibition	35.6	25.6	38.9

Career program were measured based on the students' participation in the program organized at universities. The findings showed that the program that was followed by a student at the university more than once was career seminar / workshop / talk, followed by *BengkelKenaliDiri* and career exhibitions. The majority of students have not attended the career program / activities in university and maybe the careers programs are not related to them.

DISCUSSION AND SUGGESTION

In terms of personality pattern (career interest) there was no difference between male and female students. However, there were some aspects found to be different. The female students have the Social, Enterprising and Conventional personality types as their dominant personality. They have career aspirations congruent with their personality types for Social and Enterprising, but not for Conventional type. Several other personality types also appeared though not dominant. However, they were found to have career aspirations that match their personality type. The personality trait (measured interest) investigative was lower in female students, but they focused on Investigative study programs. This group was found to have problems in choosing the correct job. Although there are some students who chose the right occupation, but many were still stuck with the wrong ones especially in the Social occupations. This group has the largest number of students who cannot make decisions and could be related to the high percentage of female students who face chronic problem in making career decisions. Most probably it could be due to the issue that they entered Investigative field based on their academic results alone. This has an implication on the

system of student enrolment in higher education institutions, which is Science 60: Humanities 40 and a serious need of counsellors' role and career guidance programs among female students.

Male students generally have the same pattern but different issues. They were also shown to have three dominant personality types similar to female students which are Social, Enterprising, and Conventional and they chose jobs that match except for Conventional group. Male students have the Realistic trait but it is not dominant. However, many of them were focused in programs of Realistic field and chose matching careers. Those who have a high level of career self-efficacy were focused on programs and career options in the type of Realistic. Male students in the field of Realistic showed high level of career self-efficacy and career maturity. This shows that they are quite focused and make systematic choices (Ion, et al., 2019; Abdullah Ab. Rahim & Othman, 2009; Turner & Lapan 2002). In general, mixed findings on factors related to occupational choices implies that the factor of male and female career development has yet to be fully developed, resulting in the inability of students to make career decisions. Therefore, there is a high need for career guidance for students at the level of secondary school. The fostering of students' career development can help the students develop skills at an optimal level and avoid the waste of human potential and financial resources (Jasmi et al., 2014; Sani Ismail, 2011; Alisa & Betz., 2004)

When observed from the behavioural aspects of career information-seeking, it showed that in overall, the female students have a good career information-seeking behaviour compared to male students. For both the groups, the information-seeking behaviour is low especially in higher education institutions. This showed that many of the respondents never participated in any career programs that can help them make career plan during the three to five years of study period. This has implications on the pattern of decision-making without adequate information and their decision is more unable to reflect their actual interests, talents and abilities (Brown, 2007; Isaacson & Brown, 2000; Suradi Salim, 1996).

Perhaps, many students have not participated in the career programs at school and institutions of higher learning because the program content was not attractive to them. Many female students than male were involved with career programs at school and Higher Education Institutions because the content of the program was found interesting by the female and not interesting for the male students. The male students were more interested in practical career programs than theoretical ones (Syed Mohamad, 2010; Sani Ismail, 2011; Ministry of Higher Education, 2013). This implies that the roles and responsibilities of guidance teachers and counsellors in assisting the career development needs of students with regard to gender are very important.

Greene and Staff, (2012) stated that career programs could increase the career readiness of the students especially in the aspect of career planning in order to fulfil the demands of the career market. The emphasis of the career programs should have criteria such as providing career programs that are appropriate with the needs of the students; provide substantive programs that develop specific skills; program contents include searching, attaining and maintaining jobs; and provide supervision at the work place. Zunker (2006), suggested three types of psychoeducational workshops which are (i) job searching skills; (ii) working climate and; (iii) life-style skills. Spokane (1991) on the other hand suggested a few career interventions that include individual career counseling, assessment, career decision making and group interaction. Reardon, Lenz, Sampson, & Peterson (2006) suggested few elements that need to be taken into consideration in developing and implementing an intervention such as intake interview, intake assessment, problems that need to be solved, goal setting, development of individual learning plan and follow-up.

CONCLUSION

The findings of this study contribute towards a better understanding and knowledge on the role of career counselling services in schools and institutions of higher learning. These findings have important implications on whether support services in schools and institutions of higher education are being helpful in students' career development.

Among the measurements that can be taken at the level of policy-making is by creating a policy of continuous career development of students in university: create positions of qualified career counsellors according to the number of students to implement career programs that are comprehensive and effective for every student;

establish a Career Centre at each university apart from the Counselling Centre. In short, ensure a more professional career counselling service by creating the post for certified counsellors. Educational institutions such as schools and institutions of higher learning can build and deploy Virtual Career Portal for career development needs of students. This method can provide more extensive services to students because it can be accessed at any time by more students. A comprehensive Virtual Career Portal can provide guidance to develop awareness and career skills that are not dominated by students yet. In addition, higher education institutions should develop and implement guidelines on career programs which should not be limited to career placement alone. They should also take into account the need for career development in the first year of study with a focus on guiding students to get enough career information that suits their personality.

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