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The Influence of Study Stream on Carrier Self-Efficacy among Secondary School Students

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Abstract
This article aims to measure the level of career self-efficacy among secondary school students. It determines whether the variable of career self-efficacy could be correlated to the variable of study streams. A total of 1060 respondents had been selected by systematic cluster random samplings from 106 national secondary schools in Terengganu. This survey used a set of questionnaires that consists of two parts: (i) Demographic information (ii) Career Self-efficacy that had been tested and has high levels of validity and reliability with alpha cronbach value was 0.95. The data obtained had been analyzed using descriptive analysis that included t-Test, mean, and standard deviation to meet the research objectives. The result showed that the level of students' career self-efficacy is significantly different in accordance with their study streams. It could be concluded that the level of career self-efficacy among the students has been influenced by their study stream. Hence, any career guidance and counseling activities should consider the factor of study streams.

Keywords: Educational Thought, Islamic Mathematics, KH. Fahmi Basya, Muslim Scholar, Holistic Education.

Introduction
Choosing the right career path that suits individual's interest is essential to promote individual well-being. Thus, it is an urgent need to put more efforts to help every individual in knowing own self and getting awareness of career and opportunities availability before deciding career choices. A thorough planning should be done especially during the age of 15 to 18 years, as the students
are at the point of career exploration (Super, 1971). Hence, guidance and counseling services at school should play a significant role in helping students to improve their career self-efficacy. Appropriate career choice has been a major problem for high secondary school students, especially those in Form Four who are lacking exposure of career and information of profession (Noah, 2002). Most students are still ambigous about their career choices to be explored (Hashim & Amnah, 2006). Generally, students nowadays will choose career based on the criteria determined by their families, colleagues, and sponsors (Hashim & Amnah, 2006). In fact, most students have not received any direct guidance if the services of guidance and counseling services are not being implemented seriously, formally and effectively (Salim, 2001; Oboh, Chinonyelum, Edeme, 2018).

In addition to the issue of lack of career information and knowledge of information sources, other relevant issues such as scattered, incomplete and outdated information, as well as difficulty to obtain the information also pose a problem for students, job seekers and vocational counselors (Salleh & Ahmad, 2000). These issues are major challenges for career development, especially among students. They need to make career-related decisions early so they have enough time for wise choices (Salleh, Mahmud & Ahmad, 2007). Thus, career awareness should be promoted during secondary school (Ariffin, 2006; Yatin, Mokhtar, Baharuddin, & Ali, 2018).

In schools, teachers and counselors could assist students in providing career guidance and counseling, advising on appropriate courses to be pursued at universities or higher learning institutions based on student’s academic excellence, personality and interest. They make discussion with students and guide them in choosing the right course, prior their admission to university or college. However, such opportunities are seldom taken by students and this is detrimental to the students themselves (Ariffin & Rozali, 2006). Therefore, this article aims to determine whether there are significant differences in the career self-efficacy among students of different study streams. The hypothesis is there is significant difference in career self-efficacy among students of different study stream.

**Career Self-Efficacy**

Self-efficacy introduced by Bandura (1986) is defined as the ability of an individual to consider, organize and implement the course of action required to achieve their goals based on their acquired skills. Self-efficacy is said to play an important role for individuals to have functional beliefs, be motivated, levels of effectiveness and act based on what they believe objectively and in reality by correcting early perceptions with the support of existing knowledge and skills. This theory explains that human behaviors and actions are often depending on the level of the individual actual confidence and individual behavior that sometimes are different in capabilities, even though they have similar knowledge and skills.

Therefore, there are individuals who have the ability to act better through their own beliefs to accomplish a task, rather than their early perceptions. There are also individuals who are talented in a particular field but are skeptical and are not confident with their own ability, eventually they will experience failure despite they have various knowledge and skills. Compared to individuals...
with less knowledge and skills they can excel due to high levels of ability, faith and self-confidence. Self-efficacy is developed based on the four most significant sources which are experience of self-achievement, experience with other’s failure and success (Modeling), verbal persuasion that is motivation as well as physiological and emotional factors.

Factors Related to Career Self-Efficacy
In previous studies there were several variables that could be related to the career self-efficacy among students. The most frequently studied variable is study streams.

   a) Factor of Stream of Study
In Malaysian education system, Form 4 is a significant year of schooling for students to begin their careers, in which they are able to choose their study stream that will guide them to their future career path.

   Previous studies found that students' study stream can give influence or positive impact on their career self-efficacy or vice versa. This means that the level of self-efficacy can also be influenced by the study stream of a student. Based on prior studies, they have found that student’s study stream can influence the student’s career self-efficacy such as researches conducted by Chian, (2000); Ponnambalm, (2001); Lian, (2001); Chua, (2002); Hon (2002); Lih, (2004); Zhang, (2006) and Brown et al., (2006)

In conclusion, the study stream is appropriate to be included in this study as an independent variable in order to examine the impact of its influence on the student’s career self-efficacy level, as predicted by Albert Bandura’s Social Cognition Theory (1977, 1986, 1997, 2003) and other previous research findings.

Due to the obtained data cannot provide a conclusive picture of the factors associated with career self-efficacy, a better systematic study with larger samples may provide a more conclusive and clearer picture. Therefore, a more comprehensive study was conducted in the state of Terengganu.

Methodology
Research Design
This study applied survey method using the Career Decision-Making Self-Efficacy Scale-Short Form 1996 as an instrument of data collection.

Sample of the Study
This study selected 1060 Form 4 students comprised 530 boys and 530 girls; from 106 National Secondary Schools in Terengganu to be respondents.

Variables of Study
The dependent variable for this study was the career self-efficacy. While independent variable was study stream.

Instrument of the Study
The In order to obtain data of this study, the instrument of questionnaires was divided into two parts;
Part A: Demographic information
Part A is a questionnaire relating to respondents' personal information. It was developed to obtain information of respondent’s background. Among the items contained in Section A is the study stream. These details were used as factors in the hypothesis tested.

Part B: Career Decision-Making Self-Efficacy Scale-summarized by Betz et al. (1996) - Short Form (CDMSE-SF).
This section C applied the Career Decision-Making Self-Efficacy Scale (Short Form 1996) questionnaire which had been translated into Malay language. The purpose of this instrument was to collect data regarding the confidence level and one’s belief toward himself or herself in making a career choice as well as his or her ability to explore in a career of his or her choice (Betz & Taylor 1983); and (Betz et al. 1996). This questionnaire measured the confidence level and one’s belief of an individual to engage in a particular career-related activity as well as gaining information about his or her ability and an individual success to meet his or her career. Based on the literature, Betz (1983) applied the sections in Crites’s Career Maturity Inventory (CMI) into the questionnaire of Career Decision-Making Self-Efficacy Scale (CDMSE). As a result, CDMSE was also divided into five sections as found in the Career Maturity Inventory - John O Crites's Competency Sub-scale (1978): (1) self-knowing; (2) career information; (3) goal / career choices; (4) future career planning, and (5) problem solving of the chosen career. Betz et al. (1995), had conducted research, reviewed and finally produced the Career Self-Efficacy Scale - Summary (1996)
There was a total of 25 items for the Career Self-Efficacy Scale questionnaire. The CDMSE-SF measuring tool used a five-point likert scale for each question presented in five scale dimensions, namely (1) - (Very Uncertain) to (5) - (Very Sure). The Rensis (1932) suggested that indexes should be constructed by adding items related to a concept. Piaw (2006), states that the data obtained on a Likert scale has higher reliability. Betz et al. (1996) provided a 'Career Developer' script that provided an explanation on the answer, namely, the confidence level in career choices. The Career Self-Efficacy Scale had been conducted for a pilot test and a retest, to test validity and reliability, involving 120 form 4 students. The reliability coefficient (Alpha Cronbach) of the Career Self-Efficacy Scale was 0.95.

Data Analysis
The data of the study were processed using the Social Science Statistical Package (SPSS). The statistical tests used were t-test to see differences in career self-efficacy among students of different study streams. The level of significance of the test was (P <0.05).

Results and Discussion
Career Self-Efficacy
Table 1 showed the overall results of differences related to career self-efficacy based on the factor of study stream.
Table 1: Differences in career self-efficacy based on the factor of study stream (N = 1060).

| Career Self-Efficacy | Factor | Division   | Numbers of Sample | Min | Significance |
|----------------------|--------|------------|--------------------|-----|--------------|
|                      | Study Stream | Science | 530                | 3.70| .000         |
|                      |         | Non Science | 530                | 3.48|              |

Career self-Efficacy Based on the Factor of Study Stream

T-test showed that there was a significant difference in career self-efficacy based on the factor of stream of study, t value was \( t = 3.999, p = .000 < .05 \). The mean score of career self-efficacy for the science stream student group was \( n = 530, \text{min} = 3.70 \) which is higher than the career self-efficacy mean score for the non-science stream student group \( n = 530, \text{min} = 3.48 \).

The results of the analysis related to the factor of study stream indicated that this new finding support the previous research findings conducted by Bee, (2000); Chian, (2000); Mervin (2001); Lian, (2001); Andrew, (2002); Chua, (2002); Hon, (2002); Ee, (2004); Lih, (2004); Hampton, (2006) and Brown et al., (2006). It is about there are significant differences in terms of career self-efficacy in accordance with the study stream. The results show that students studying pure science have higher levels of career self-efficacy compared to students studying in non-science streams.

Conclusion and Recommendations

The findings of this study give some implications for theory and practice of career guidance and counseling especially in secondary schools. There were three major findings as follows:

Firstly, the finding had shown that the students of science stream had higher level of career self-efficacy compared to non-science stream students.

Secondly, career awareness development programs and other career guidance and counseling programs need to have strategies to give high impact on the targets of different study streams.

Thirdly, the finding also had shown that classroom environment of different streams affected the career self-efficacy of a student. Moreover, the effect of study stream was related to the aspect of individual intellectual development.

Due to the fact that science stream students were found to have higher levels of career self-efficacy compared to non-science students, hence all career guidance and counseling program activities need to consider and differentiate these targets. Those with high levels of career efficacy may need enrichment support programs to further develop their career self-efficacy, while those with low career self-efficacy need intervention, prevention, and treatment, rehabilitation and career development guidance programs, in addition to the supporting programs that involve the school as a whole as well as parents and families.

In conclusion, counselors need to be proactive and more concern to students’ traits especially their study stream when planning career guidance and counseling programs at schools. Programs for giving exposure to career self-efficacy involving ordinary teachers also need to be developed according to the current needs.
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