Review Article

Career Decision Making Self-Efficacy (CDMSE) among Gifted and Talented Students in Malaysia: An Initial Demographic Study

Mohd Hakimie Zainal ABIDIN¹, Salleh AMAT², Mohd Izwan MAHMUD², Mastura Abu BAKAR³ & Abu Yazid Abu BAKAR²

Received: 3 February 2019 Accepted: 29 May 2019

Abstract
Career decision making is one of the crucial elements for students in the school setting. Career decision making is vital for students to make a decision over their knowledge about their future professions. For gifted students, they may advance from the normal population of students in discovering their future jobs. This study focusing on career decision making among gifted and talented students in Malaysia. The level of career decision making is measured by the researchers using Career Decision Making Self-Efficacy (CDMSE)-Revised, which was developed in 1996. This research involved 2800 Malaysian gifted and talented students who are studying at the boarding schools. The descriptive statistical analysis is used to find the phenomenon of career decision making among research respondents in terms of gender, parental level of education, and family income. The finding of this research shows that gifted and talented students are different from their normal peers in terms of career decision making self-efficacy. The implication of this research is discussed in this paper especially for guidance and counseling provisional dimension.

Keywords
Career counseling; CDMSE; gifted and talented students; Malaysia

To cite this article:

¹ Pusat PERMATApintar™ Negara, Universiti Kebangsaan Malaysia. E-mail: hakimie@ukm.edu.my
² Faculty of Education, Universiti Kebangsaan Malaysia. E-mail: sallehba@ukm.edu.my
³ Faculty of Education, Universiti Kebangsaan Malaysia. E-mail: izwan@ukm.edu.my
4 Faculty of Major Language Studies, Universiti Sains Islam Malaysia. E-mail: mastura.ab@raudah.usim.edu.my
ORCID No: 0000-0002-5811-7514
Introduction
Career counseling is the crucial period for high school students to understand themselves in order to plan for their future career field. Based on the career developmental theory by Super (1957), there are different stages of individual career development, and one of them is the exploration phase between the age of 15 to 24 years old. At this stage, the student is categorized by formatting the self-concept and occupational concepts. The gifted and talented students had some issues regarding career counseling mainly in career choices, perfectionism in career planning, and gender-role barriers in career exploration.

Career decision making self-efficacy is one of the contributions from Albert Bandura’s Social Cognitive Theory, in which it is referring to an individual belief to complement a task for preparation in a career decision (Betz, Klein & Taylor, 1996). Career decision making process is complicated for gifted and talented students because it has been reported that they might be fearful of committing "wrong" choices (Kerr, 1981; Marshall, 1981). The five-factor difficulties commonly experienced by gifted and talented students in career decision making are, (a) sensitivity to others’ expectations, (b) perfectionism, (c) developmental issues, (d) superior intelligence, and (e) multi-potentiality (Emmett & Minor, 1993).

Gifted and talented students are associated with high ability especially in the cognitive domain. History showed that since 1906 until now, there was extensive development of gifted and talented education (Colangelo & Wood, 2015). To illustrate, Gagné (2004) introduced the differentiated model of gift and talent (DMGT) which argued that gifted students need to be supported by the various developmental catalysts in order to transform their natural abilities into specific systematic talents. In Malaysia, some of the methods to identify the gifted and talented students are using the online tests and academic results (Ishak & Bakar, 2017). Generally, students who passed all stages in the tests will be offered to enroll in numerous boarding schools throughout Malaysia. Studies in Malaysia stated that there are numbers of counseling services such as career guidance, academic guidance, group counseling, individual counseling, and family counseling need to be provided in order to support these students’ holistic talent development (Bakar & Zakaria, 2018; Bakar, 2016; Ishak & Bakar, 2014).

The Career Decision Making Self-Efficacy (CDMSE) scale evaluates an individual school student’s career decision making based on the belief that he or she can successfully complete specific tasks (Betz, Klein, & Taylor, 1996). It is a well-known instrument to measure the level of career decision making self-efficacy, developed based on Bandura’s Social Cognitive concept (Bandura, 1997, 1986). Thus, this demographic study is conducted using CDMSE instrument with objective to answer these questions:
what is the level of the career decision making self-efficacy among gifted and talented students in Malaysia?

are there any differences between demographic factors and career decision making self-efficacy level among Malaysian gifted and talented students?

Method

The study employs cross-sectional survey design, in which the CDMSE instruments were distributed to a stratified sample comprised of 2800 respondents, 1477 (52.8%) male and 1323 (47.3%) were female. The sampled gifted and talented students were between 13 to 16 years old and came from different boarding schools all over Malaysia. All of the participants were from the science stream education background. The CDMSE instrument comprised of 25 items, using a 5-point Likert scale response format. The range of means from 1.00 to 2.33 indicates the low level of career decision making self-efficacy of the respondents, whereas the range of 2.34 to 3.66 reflects the moderate level, and the range of 3.67 to 5.00 shows the highest level of career decision making self-efficacy. Data was descriptively and inferentially analyzed using the SPSS 24.0 software.

Results

Table 1 revealed the descriptive data of the respondents’ career decision making self-efficacy based on demographic factors of age, gender, and family income. In summary, the participants of this research were male and female students in three different age groups, and three categories of family income. The analysis showed that more than 60% of the participants have high level of career decision making self-efficacy regardless of their age, gender, and family income status classifications.

<table>
<thead>
<tr>
<th>Demographic Factors</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Level of career decision making self-efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>15</td>
<td>1.38</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>380</td>
<td>34.93</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>693</td>
<td>63.7</td>
<td>High</td>
</tr>
<tr>
<td>14</td>
<td>8</td>
<td>0.9</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>266</td>
<td>31.1</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>581</td>
<td>67.95</td>
<td>High</td>
</tr>
<tr>
<td>16</td>
<td>8</td>
<td>0.9</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>258</td>
<td>30.1</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>591</td>
<td>68.9</td>
<td>High</td>
</tr>
</tbody>
</table>
Table 2, on the contrary, showed that there is a significant difference between level of career decision making self-efficacy among gifted and talented students of different gender, but not in the demographic factor of parental education backgrounds.

### Table 2.

**Independent t-test of Career Decision Making Self-Efficacy against Gender and Parental Education Background**

<table>
<thead>
<tr>
<th>Demographic Factors</th>
<th>Category</th>
<th>N</th>
<th>Mean</th>
<th>t-value</th>
<th>Sig. (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>1477</td>
<td>3.819</td>
<td>-2.575</td>
<td>.010*</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>1323</td>
<td>3.873</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fathers’ Education</td>
<td>High School</td>
<td>1064</td>
<td>3.841</td>
<td>-.511</td>
<td>.610</td>
</tr>
<tr>
<td></td>
<td>Tertiary</td>
<td>1586</td>
<td>3.852</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mothers’ Education</td>
<td>High School</td>
<td>1183</td>
<td>3.826</td>
<td>-1.486</td>
<td>-.137</td>
</tr>
<tr>
<td></td>
<td>Tertiary</td>
<td>1530</td>
<td>3.859</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant level p<0.05

**Discussions and Conclusion**

The result of this initial demographic study provides a base line data on Malaysian gifted and talented students’ career decision making self-efficacy (CDMSE) profile. Overall, more than 60% of the participants of this study have high level of career decision making self-efficacy. For the rest 40% who has moderate and low level of specific program need to be developed by school counselors to help elevate their
career decision making self-efficacy. As career counseling is one of the crucial services needed by gifted and talented students in school setting (Ishak & Bakar, 2014; Wood 2010), it is essential for local school counselors to help this population to develop high career decision making self-efficacy so that they can plan for their career paths in the early days of their schooling.

As for the difference in career decision making self-efficacy between male and female students, career counseling programs for this population should also take into consideration on this finding. The fact that female students normally mature faster than male students, any programs should give more focus to strengthen career decision making self-efficacy among male students (Abidin et al., 2018; Bakar, 2017).

In a nutshell, as the government of Malaysia has registered gifted and talented education in the National Education Blueprint 2013-2025, it is important to serve this population of students with counseling provision that could support their potentials to optimal growth. Thus, by understanding their level of career decision making self-efficacy, proper career counseling programs could be systematically developed.

References
