The Development of a Career Guidance Program with a Modelling Technique to Improve Student Career Awareness

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The purpose of this study is to generate a career guidance program with the modelling technique to improve student career awareness. The research and development approach was conducted through several steps, namely: needs assessment, planning, implementation, evaluation, and follow-up of the program. The data analysis technique used was the paired sample t-test to determine the impact of the program. The participants are students in the fifth grade of Al-Fityan elementary school in Aceh, in the academic year of 2017/2018 and whom were selected using purposive sampling. The self-developed career awareness instrument was designed in the Likert scale with a coefficient reliability of 0.800. The findings of the research stated that the main indicator of a successful program evaluation is the improvement of the level of career awareness in students. This research concludes that the program of career guidance, which used the modelling technique, is effective to improve the awareness of students regarding their prospective future career choices.

\textbf{Keywords:} Career Guidance Program, Modelling, Career Awareness, Guidance and Counselling.
Introduction

The commencement of late childhood is marked by the inclusion of children in primary school education who have a new responsibility signal (Baez & Talburt, 2008; Sylva, Melhuish, Sammons, Siraj-Blatchford, & Taggart, 2010). The child is responsible for oneself and what is owned, so that many important potentials in the child form as a basis for further development. The child needs to be aware of how to change and use the school experience to obtain information and be better prepared to plan for the future (McDermott & Hastings, 2000; Worrell & Hale, 2001).

We know how children learn and prepare for the future — given the ever-changing needs of the twenty-first century that require individuals to be flexible thinkers, effective problem solvers, and lifelong learners — therefore, it is very important in childhood to gain a better understanding of the career development process, to be better prepared for the future (Keumala, Nurihsan, & Budiamin, 2018; Kim & Bang, 2017; McMahon & Watson, 2008). Primary school-aged children have an interest in "what I would do as an adult" (Agnoli et al., 2012; Hill, Laybourn, & Borland, 1996; Stewart & Sun, 2004). Generally, children are concerned and interested in their work in the future and are eager to express their preferences and desires. So while there is little urgency for most children to make direct employment choices, it is important for them to develop a meaningful understanding of the relevance of career-based learning at school for their future (Kim & Bang, 2017; Schuette, Ponton, & Charlton, 2012; Worrell & Hale, 2001).

The cultivation of career awareness in children from an early age should be emphasised so that the career is not just a job, but more than that; the child, in choosing and determining a career, carries a satisfaction throughout life (Beale, 2000; McMahon & Watson, 2008; Nasir & Lin, 2013). Children begin to think about how ability and interest will affect their career decisions in the end. Career aims encourage children to develop an understanding of themselves, explore themselves with a variety of occupations, and help children avoid limiting educational and work options too early (Howard & Walsh, 2010, 2011).

Career development in primary schools is largely ignored in the form of literature, practice, and professional training programs (McMahon & Rixon, 2007; Savickas, 2011). While more and more school counsellor preparation programs include career counselling/development courses, few make adjustments for the needs of elementary school counsellors in the future. This makes many primary school counselors lack the proper training and support to facilitate the development of primary school students' careers.
On the matter of career counselling in primary schools, only one article has been revealed in the investigation of career development in primary schools, hindering the development of a systematic career program for advanced students (Carlson & Kees, 2013; Lai-Yeung, 2014; Şahin, 2012). Furthermore, comprehensive career development research still lacks a focus. Some of the research focusses on career aspirations, career interests, influence and career development of children, and career education programs (Bloxom et al., 2008; Schultheiss, Palma, & Manzi, 2005; Watson, Nota, & McMahon, 2015). Most research reviews conclude that career development in childhood is a complex interaction between attributes, behaviour and the environment (Oliveira, do Céu Taveira, & Porfeli, 2015; Porfeli & Lee, 2012; Vondracek, Lerner, & Schulenberg, 2019; Watson & McMahon, 2007).

Evident from data in the annual report of Indonesia, approximately 2.3 million children at 7–15 years of age are not going to school and about 42 per cent of them are a dropout (Pillay & Haribowo, 2013; Shoraku, 2009). Regarding this dropout rate in Indonesia increasing with primary school aged students, it reinforces that career awareness is required in school settings. A study in Turkey of primary school students also showed similar results; even though they were able to associate personal characteristics with careers, there was a lack of knowledge about career implications and career management tasks (Nazlı, 2014).

Based on a preliminary study conducted with teachers at the Al-Fityan elementary school, many students have not fully understood what it is they would like to do as adults. According to the teacher at the Al-Fityan elementary school, students have not found the interest and talent that exists in the self-seen which is evidenced from a lack of understanding in students of themselves, especially regarding extracurricular activities conducted in schools.

Students participate in selected extracurricular activities on invitation from friends or parental selections, and only a few choose extracurricular activities based on the student’s own interests. Students' knowledge of a profession is only seen externally or from the appearance of a profession, as students do not understand the task of a profession.

The phenomenon that occurs in primary school students is allegedly because the career guidance service in schools has not touched the many needs of students. The absence of a career guidance service in schools prioritises the needs of students on careers as less than important. Therefore, schools need to offer a career guidance service to students as one form of achievement of students' needs that must be invested in the form of self-belief, knowledge about career information and ideas, and becomes the main focus of career guidance in primary school.
The career guidance service in the context of primary school education is an effort to help students know themselves and optimise their potential, thus emphasising the importance of counselling and guidance services in schools to improve students' recognition, understanding, and self-awareness (Gottfredson, 2005; Gysbers & Henderson, 2014; Howieson & Semple, 2006; Vuorinen, 2012). Fernandes identifies the career of a child in the primary school age period, including the growth stage (Fernandes & Bance, 2015). The most dominant stage of career growth in primary school-aged children is the development of fantasy, interest, and career ability. Super career growth is designed for future planning, enhancing personal control over individual lives, developing awareness of the importance of school achievement and work, and gaining a competent work attitude (Kosine & Lewis, 2008; Nasir & Lin, 2013). In accordance with the scheme at the stage of growth, the child will go through various learning activities and experiences when developing greater self-awareness.

Muro and Kottman declared that the career in primary school focused on self-awareness and career awareness (Beale, 2000; Kottman & Ashby, 2000; Muro & Kottman, 1995). Self-awareness takes the form of awareness that students have of themselves, called self-knowledge. While career awareness is more focused on career exploration and the introduction of an existing position within the community. Career awareness of primary school-aged children is a form of career maturity, since children are still at the level of consciousness (Gysbers & Henderson, 2014; Herr & Cramer, 1988).

In the phenomenon of career awareness at the age of primary school, it describes a process of career development that occurs and is experienced in the life and development of humans generally. The task of a child's career is similar to the national career at the level of kindergarten through to the sixth grade of primary school, as published by the National Occupational Information Coordinating Committee (Worzbyt, O’Rourke, & Dandeneau, 2003). Child career goals are grouped into three career orientations; namely self-knowledge, education and career exploration, and career planning.

Self-knowledge consists of self-concept recognition, awareness of interacting skills, and awareness of growth and choice. Career education and exploration includes achievement awareness, work-relationship awareness and learning, understanding skills and use of career information awareness, and personal and work responsibilities awareness. Career planning consists of understanding decision-making awareness, relationships and the role of life awareness, job differences and the appropriate choice of roles of male and female awareness, as well as career planning process awareness (Porfeli & Lee, 2012).

Career development is a long process that includes choosing the right career path. In making the right decision and achieving the desired career goals, specific goals and specific stages must be taken into account. In other words, the development process does
not always run in a straight line or in the direction of its potential, hope, and value. For that, it also provided guidance with a career awareness program on guidance and counselling activities in primary schools (Beale, 2000; Nasir & Lin, 2013). The career guidance service in the context of primary school education is an effort to help the student know themselves and optimise their potential, thus emphasising the importance of career counselling services in schools to enhance a child's recognition, understanding, and self-awareness (McMahon, Gillies, & Carroll, 1999). School helps the child to obtain career information, recognise the characteristics of self and the relationship between work and learning in everyday life. At the same time, the school curriculum should guard against gender bias regarding employment information. The child needs to be aware of how to change and to use the school experience to obtain information and better preparation to plan for the future. The child learns about the various professions in various ways, such as school, parents, peers, environment, and personal experience (Watson & McMahon, 2007). Several inventions, which are consistent with others, show that career development learning is derived from all children's school experiences (McMahon, Carroll, & Gillies, 2001; McMahon et al., 1999).

Gibson states career theory by proposing the importance of role models in careers that will help individuals guide their development (Gibson, 2004). The selection of careers and children's education is influenced by adult role models, as well as by parents' expectations (Creed, Conlon, & Zimmer-Gembeck, 2007; Gibson, 2004; Kim & Bang, 2017). It reflects the important role that adults play in the development of childhood careers. In an African American study, it found the self-efficacy of the boy is predictable by modelling related to parenting careers, while the self-efficacy of girls is estimated by parents' emotional support (Alliman-Brissett, Turner, & Skovholt, 2004; Turner, Alliman-Brissett, Lapan, Udipi, & Ergun, 2003). The inclusion of parents, family members, and other important adults in career exploration and modelling can help to promote positive career development in children. The major foothold in the cognitive sociological theory approach derives from Bandura's social cognitive concepts which emphasise the complex ways in which behaviour and environment interact with one another (Cherry, 2011; Nabavi, 2012).

Children naturally have curiosity and seek to understand the world, look to others or models for counselling in seeking the identity, self-assessing with others' response to initiate self-exploration, watching people work and drawing conclusions about the nature or desire of work, and forming ideas about the self and aspirations (Kottman & Ashby, 2000; Watson & McMahon, 2007). The development of a sense of curiosity and excavation to obtain information from observations and the role of models will lead the child to the development of children's interests and self-concepts, resulted from the ability to plan careers.
Modelling is the process of teaching the child to behave voluntarily through observation and imitating of the desired behaviour. Children usually imitate the behaviour of people they like. In modelling techniques, there are several stages that can be used in providing services to individual or groups in order for the service delivery process to run properly. Bandura mentions four processes involved in learning through observation: namely, attention process, retention process, behaviour reproduction process, and motivation process (Bandura, 1999, 2001).

First, is the attention process. In this stage, the child pays attention to what behaviours or actions are performed by the person to be imitated. Models will often be noticed if they are the same as the observer, a respected person or having a high status, having more ability, or are considered strong and attractive. Second, is the retention process. It comprises that after observing the behaviour to be imitated and storing any information retrieved in the memory, then removing the memory when it is necessary. The retention process stores information symbolically in two ways, imaginatively and verbally. The imaginatively stored symbol is a description of the things that the model undergoes and can be taken and can be implemented after observational learning occurs. While verbal symbolisation occurs cognitively and is flexible. The complexity of information is stored cognitively and can be retrieved, repeated, and reinforced sometimes after observational learning occurs.

The third stage is the behaviour reproduction process. In order to imitate the model, an individual must change the symbolic representation of the observation to the form of action. The emerging behaviour must have something in common with the original behaviour. In other words, affirming a person's motor skills will affect a person's likelihood of imitating a behaviour that is seen either in whole or in part. The symbols obtained from the modelling will act as a template (mold) as a comparison of actions. During the training process, individuals observe their own behaviour and compare it with the cognitive representation of the model experience. The last stage is the motivation process which determines how capable the individual will be of imitation but its reinforcement in terms of motivation that can spur the desire of individuals to meet the stages of learning.

The use of modelling techniques will be appropriate if it is used to increase career awareness, as observing others performing an action that will have more responses which are not faulty imitating the behaviour of others, but the individual decides consciously to perform learned behaviours. This is because through modelling techniques, students are expected to increase career awareness by imitating the behaviour that exists in the model. Models can be presented to the child through the use of video. The implementation and use of video media will help students in responding to what they see and hear. Therefore, messages from the content of the material contained in the video will be constructed by
the brain of students and generate feedback in the form of questions about the learning materials, creating an interaction between students and teachers. Information will be easy to understand because of the use of the five senses, especially the ears and eyes that are used to absorb the information.

**Method**

The research and development approach was conducted through several stages including: needs assessment, program planning, implementation of program, evaluation, and follow up. The implementation stage of the program is displayed in Table 1.

<table>
<thead>
<tr>
<th>No</th>
<th>Activity</th>
<th>Supporting System</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Needs Assessment</td>
<td>Career awareness instrument</td>
</tr>
<tr>
<td>2</td>
<td>Program Planning</td>
<td>Career awareness overview</td>
</tr>
<tr>
<td>3</td>
<td>Implementation of program</td>
<td>SKLBK</td>
</tr>
<tr>
<td>4</td>
<td>Evaluation</td>
<td>Career awareness instrument</td>
</tr>
<tr>
<td>5</td>
<td>Follow up</td>
<td>The result of program evaluation (effective career guidance and counselling program with modelling technique to improve career awareness)</td>
</tr>
</tbody>
</table>

This research used a group pre-test and post-test design. This design is a pre-experiment design with the intention to see the response of the respondents before and after they have been provided with guidance services. The research population was all students of the fifth grade at the Al-Fityan elementary school in Aceh, that consisted of 53 students. The sampling technique used in this research was the purposive sampling method. This selection was done on the basis of consideration of the career awareness level of the research population that was at a lower trend. The purposive sampling technique was selected after consideration of the career awareness level of the research population, which is in the medium and low-level tendency, as expressed through the career awareness instrument. From the results of the dissemination of the instrument, one class is selected after hearing the advice of a guidance and counselling teacher. The sample of research is fifth grade A students (26 students), with an average score of achievement lower than class B that is 69.92 per cent.

The career awareness scale of primary school students is self-developed by researchers, and it requires validity and reliability tests to see the level of accuracy and appropriateness of each item statement in the instrument. Test item validity was completed using the Pearson Product Moment. The test of the validity of the statement item is completed with the assistance of SPSS 16.0 for Windows. Invalid items are eliminated, so the number of
items before the test was 38 and was reduced to 25 items that will be used to uncover students' career awareness.

The reliability test of the student awareness instrument in this study was conducted using Cronbach's Alpha. The reliability value of the student awareness instrument of 0.800 is in the category of high-reliability degree. This proves that the research instrument can be used to reveal the level of student career awareness. For data analysis, to determine the impact of the program, the statistical parametric analysis was used. This is based on the normality assumption of both normal-distributed pre-test and post-test data. The statistical parametric analysis technique used to test in the research was the T Sample Paired Test.

**Result and Discussion**

The career guidance program with the modelling technique was developed based on the result of the library study and the students' career awareness pre-test results. The method used in this study is to examine the real needs of students in the field through career awareness instruments. Based on the pre-test results, a general profile awareness of career students was determined and used as a foundation in formulating the needs of students.

The formulation of the program developed in the study is a program that is only implemented in a single, short period of about one month and is implemented by a counsellor. In this case, the researcher. The career guidance program using modelling techniques to improve the career awareness of the fifth-grade students of Al-Fityan elementary school in Aceh was prepared by taking into consideration the theoretical concepts. The development of a career guidance program in research refers to the Guidance and Counseling Development Guideline proposed by ABKIN (Indonesian Guidance and Counseling Association) (Bimbingan & Indonesia, 2007).

Development programs respectively include: rationale, description of needs, objectives, program components, program objectives, operational plans, theme/topic development, service units, and evaluation. In this study, the topics used to improve student career awareness are indicators of career awareness. The topics presented focus on the developing indicators: skills to understanding others; realising the needs of growth and self-improvement; understand the skills of using career information; awareness of the relationship of study and work; and realise the process of making career planning. Using indicators as a service topic has been expected, could improve career awareness as a whole and is able to achieve optimal improvement.

The evaluation process of the implemented program consists of two kinds: namely, the evaluation of the process and results. The evaluation of the process is carried out to
determine the suitability of the implementation of career guidance service activities with programs that have been formulated (Abivian, Budiamin, & Agustin, 2017). An evaluation of outcomes is identified from student involvement in the service, counsellor-student interaction, service delivery, and time. The evaluation of the results is conducted to determine the level of achievement of the implementation of career guidance services with modelling techniques. The main indicator of success in terms of outcomes is the improvement in students as indicated by the increased level of career awareness of students on post-test results.

The pre-test and post-test results indicate that there was a significant difference in student career awareness. The existence of significant differences through career guidance services with modelling techniques is known after the comparative processing of the pre-test and post-test results, as it is portrayed in Table 2.

Table 2. Mean, standard deviation and sample paired test in pre-test and post-test

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Experiment</th>
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<tbody>
<tr>
<td>Pre-test (N=26)</td>
<td>M</td>
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<tr>
<td></td>
<td>SD</td>
</tr>
<tr>
<td>Post-test (N=26)</td>
<td>M</td>
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<td></td>
<td>SD</td>
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<td>p</td>
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</table>

Based on Table 2, the student’s career awareness mean on the pre-test is 67 and the standard deviation is 3.383. Meanwhile, in the post-test, the mean is 74 and the standard deviation is 2.263. This indicates that the data variance is smaller because the standard deviation is less than the mean. There was also a significant difference between the mean score of the pre-test and post-test.

With the pre-test and post-test scores at significance level $\alpha <0.05$, it can be concluded that the probability number Asymp. Sig. (2-tailed) of student awareness before and after 0.000, or probability under alpha 0.005 ($0.000<0.005$). In addition, the paired $t$-test results also show that $t$ arithmetic $6.602 > t$ table $1.708$, which means there is a significant difference between the condition of students before and after obtaining career guidance services with modelling techniques. It can be concluded that career guidance with effective modelling techniques can be used to improve student career awareness.

Growing student awareness reflected that the students increasingly understood the importance of skills related to others, realising the importance of growth and change in the self, understanding the importance of using career information, being aware of the
relationship of learning and working, and being aware of the process of making career planning. Increasing the students’ career awareness cannot be separated from the assistance of the career guidance program with modelling techniques that have been prepared according to the needs of students (Beale, 2000; Keumala et al., 2018; Nasir & Lin, 2013).

Students need to be aware of how to change and use the school experience to obtain information and be better prepared to plan for the future (Watson & McMahon, 2007). Students learn about the various professions in various ways, such as schools, parents, peers, the environment, and personal experience. The study supports the results in African American studies, that found the self-efficacy of boys is predictable by modelling related to parenting careers, while the self-efficacy of girls is estimated by parents' emotional support (Alliman-Brissett et al., 2004; Kim & Bang, 2017; Turner et al., 2003).

Through modelling, students can understand the skills associated with others; realise the importance of using career information skills; be aware of the learning and work relationship; as well as being aware of the process of making career planning. Perry and Furukawa said modelling is a learning process through observation in which the behaviour of an individual or group, as a model, acts as a stimulus for thoughts, attitudes, or behaviours as part of another individual observing the model shown (Perry & Furukawa, 1980). Adi Putra's research also states that the use of modelling techniques in improving child care planning is effective (Adiputra, 2015).

The purpose of the study is to direct the child to be able to plan a career by understanding the interests and potential of child development. Through modelling using individual media, the child will learn through their own experiences and the experience of others (Adiputra, 2015; Keumala et al., 2018; Verianto, Suranata, & Dharsana, 2014). The individual learning process is not only obtained through personal experience but through observation of the behaviour of others. Students who are able to plan for the future can do so because they have realised self-knowledge and the importance of achieving in school and work. Furthermore, they will make other students more confident to start realising self-knowledge and achieving in school and work, comparable to what other students have done.

Conclusion

Overall, this research has fulfilled the goal of producing a career guidance program with modelling techniques to improve student career awareness. The career guidance program with modelling techniques is a guidance activity developed based on the structure of the program, which explains the link between the stages of career counselling with modelling techniques and aims to improve career awareness generally. It can be assumed that career
guidance services utilising modelling techniques are empirically proven to be effective in raising career awareness.
REFERENCES


