

An Android-based Career Information to Improve The Career Choice of Vocational High Schools Students

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Abstract

The objective of this study was to improve students' career choice by using an android medium in the form of career information. To pursue such objective, this study used one-group pretest-posttest research design. For more, the instrument used in data collection was career choice scale. This instrument was given to 36 tenth grade students as the research subjects taken from 300 students selected by using purposive random sampling technique. After the data were analyzed, the research findings showed that there was an increase in score as many as 29.92 after using the android application on students' career choice. At last, this study confirms that an android-based career information application can improve career choice.

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INTRODUCTION

Job until now has become an important part of human life. Various ways are done by individuals to find and get jobs, one of which is by education. Today, job is used by the community as a consideration for a person's achievement. It means that the individual is considered successful when he is well-established by having a job that guarantees his life.

Education that directly leads into working world requires students to explore abilities and accurate information related to their current major of study. In Indonesia, the level of education that produces students who have abilities to jump directly into the workforce is in high school level and above. Not only in Indonesia, UK government also aggressively applies vocational education because they see the high labor market and level of study. They realize that the implementation of vocational education is useful for the future of young people in UK (Wolf, 2011)

Work problems were recorded in a survey conducted by BPS (Central Agency on Statistics) where the unemployment rate in Indonesia was recorded at 7.01 million people, originating from the Vocational High School (SMK) which was listed in the highest level among other education levels, namely 9.27 percent (BPS, 2017). From the survey, it can be seen that SMK students have obstacles and problems in the career field.

Studies of career problems that occur in SMK are mostly concerned about the teenage development, such as the choice of the types of work, how to choose future education, planning future careers, decisions making about future careers, and information about existing work groups with the required requirements (Leksana, Wibowo, & Tadjri, 2014). It is known that from the previous explanation, one of the problems is career choice. This often happens among SMK students. The reason is the lack use of media by counselors when providing services, less accurate material, confusion in determining appropriate choices, etc.

Various services that can be used to solve these problems, one of which is information

services. Information services can be used in all fields of guidance and counseling in the fields of learning, career, personal and social (Cojocariua & Cojocariu, 2015). With regard to the world of work sector, information services used are preventive and curative, relevant are career information services

Based on interviews conducted by counselors at SMK PGRI 1 Gresik and State Vocational High School (SMKN) 1 Duduksampean Gresik, it was found that the method used during the counselling was lecture, but materials related to the types of work were limited and appeared to bein general. Moreover, the use of media was considered to be very lacking. It was proven that 81.9% counselors did not use media in providing career services.

Nevertheless, there still found some counselors who made use of any available media. In relation to this, from the data obtained from students, 77.9% of students explained less interested in the media used by counselors during the provision of career information services. The reason was because the media were monotonous, such as videos, career information leaflets, so their career choice becomes limited. It was proven that only 20% of students had career choices for their future. Even 83.5% of students want new innovations related to job information media, because students need it for their future

Regarding material sources, in Indonesia, the official job information reference is KBJI (Standard Classification of Indonesia Work Types), in it which contains the classification of various types of work contained in the world of work in Indonesia (KBJII, 2014), but there are many weaknesses that make counselors find it difficult to understand the KBJI, namely: (1) KBJI describes all types of work which make counselors experience difficulties in choosing the types of work suitable for the departments available in particular SMK, meaning that the counselors still have to choose the most suitable on first, (2) there is no media update such as foreign countries provide for at least less than 3 months, while for KBJI, its last update were in 2002 and 2014, (3) there is no types of work codes in the lists classification, but only general

occupational categories (Cahyono, 2013; Rochmatin & Christiana, 2016)

When compared with career information media locat abroad. One of them is in the US, where career information is already using electronic systems and most of them can be accessed by using the internet which is wide in scope, while in Indonesia itself still using print media that only certain people own and print. For that development needs to be done using the latest media in the form of android, the material contained therein is adjusted to KBJI as the source and website of the company, where the use will be easier, because the work is arranged alphabetically and in accordance with the department in SMK (Jengathe & Rojatkar, 2015; Sutoyo, Yoshep, Susanto, & Kurniadinata, 2012)

The use of android can be interpreted as ICT (Information and Communication Technologies) (Andrus & Nieh, 2012; Fenwick, Kurtz, & Hollingsworth, 2011; Jagtap & Hanchate, 2017; Kocakoyun & Bicen, 2017). A previous research regarding android was conducted by Syakir, Mahmud, & Achmad, (2016) who explains that technology and information in guidance and counseling are needed by today's world of globalization. The aim of the study was to find out the information and communication technologies ICT (Information and Communication Technologies) that could be used to help natural students improve their decision making and succeed. The recommendation of this research is to develop more information technology to adapt to students with the environment in order to meet their needs. Subsequent research, a research conducted by Bingimlas, (2009) explains that ICT implementation in the field of education has failed, this is due to lack of competence from users and lack of resources.

This study used SCCT theory, where in the use of career choice, this theory offers reasonable data representation across themes from other theories such as Holland's, and existing international SCCT researches which offer strong evidence for the role in mediating self-efficacy (Sheu et al., 2010; Sheu & Bordon, 2017)

Based on the incongruity of current occurring phenomena with the ideals and expectations, the existence of the Holland and SCCT theories gaps cited from previous research, and the advantages of android media, the researchers were interested in conducting a research with the title of the development of android-based career information service to improve the Career choice of Vocational High Schools (SMK) Students.

METHODS

The design of this study was pre-experimental: one-group pretest-posttest design (pre and post treatments) by involving the experimental group only. In the first meeting, the intervention given was in the form of an explanation of how to use the application, then the students used the career information application when they were in school for 15 minutes, and 10 minutes when they were at home.

The trial subjects in this study were 36 tenth grade students of SMKN 1 Duduksampean Gresik selected from 300 students by using purposive random sampling technique. Meanwhile, the instruments used were career choice instruments adapted from CDSE-SF (Career Decision Self-Efficacy-Short Form) (Betz, Hammond, & Multon, 2005) with 25 items, and used five scales: very high, high, medium, enough, less. Based on the validity test, from 25 statement items, the number of valid items obtained were 25 items with the reliability level of 0.950, and the rxy validity level was 0.826.

There was only one group, namely experimental group without using a control group to follow steps in this study. The experimental group at the beginning was given a career choice instruments as a pretest, then given a career information application that was used for 10 days and finally given a posttest.

Career information application to improve career choice, ranging from accuracy, minimum requirements, continuous study and job prospects

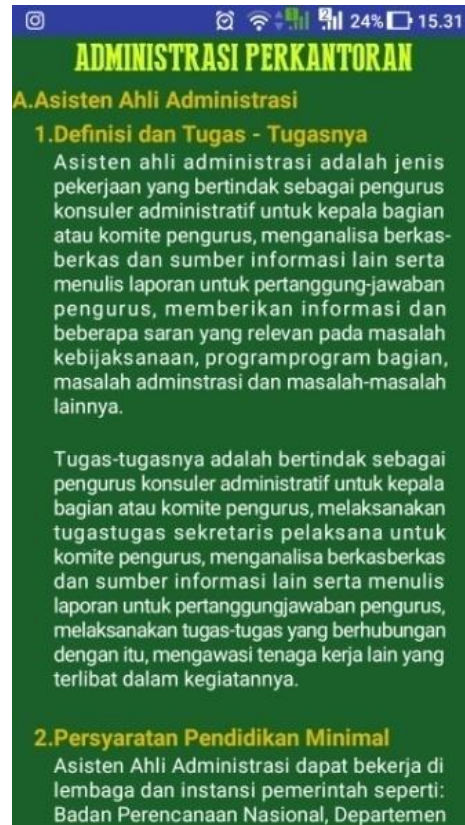
such as picture 1,2,3 which has been adjusted to the development of students,



Picture 1. Content View



Picture 2. Display The Contents of The Majors List



Picture 3. Fill In The Subject List Material

The career information application to improve career choice contained some materials that have been adapted to the development of students. In this application, one important part was the list of majors which provided various types of majors available and could be chosen according to the majors available in SMK. In the list of majors, shows several jobs that are in line with majors such as: job definition, minimum requirements, continuous study and job prospects.

RESULTS AND DISCUSSION

The description of the results of pretest-posttest of students' career choice is presented in table 1. As displayed in Table 1, students' career choice seemed to increase after being given an android-based career information application. This can be seen in the average score of the career choice at pretest of 91.11, while the posttest was 121.03.

Table 1. Pretest-Posttest Results

	M	SD
Pretest	91.11	20.43
Posttest	121.03	17.99
$t_{(35)}$		15.362
p		< 0.01

The purpose of testing the effectiveness of career choice was to get an idea of the extent to which the android-based career information application could improve career choice. The results of the study proved that android-based career information was able to improve the career choice of students in vocational high schools. This could be proved by the calculation of $t_{(35)} = 15.362$, $p (< 0.01)$, standard error mean = 1.847, chance of error 0.000 (significant).

This study succeeded to realize suggestions from the previous studies (Kocakoyun & Bicen, 2017; Syakir et al., 2016) to develop more information technology that is suitable for students with the environment in order to meet the needs of students. The development of advanced technology such as Android which is applied to the world of education will have a positive impact, as well as Android-based career information that can increase student career choice

The increase in students' career choice could be linked to the theory of SCCT by which SCCT is related to the use of android to improve students' career choice. Meanwhile, environmental factors also influenced students' career choice in accordance with the SCCT theory. This theory divides environmental factors into two, namely distal and proximal. In this study, distal, based on the data obtained was found in the similarity of culture, namely Javanese culture, middle to lower average economic conditions, the region occupied which is located between the countryside and the city. Meanwhile, proximal, in this study was found where students looked for information in the application of career information in school or at home in accordance with the majors (Sheu et al., 2010; Sheu & Bordon, 2017)

In addition, the android used as the medium has several advantages such as the easy use, easy access and attractive appearance. The availability of these advantages were utilized as a

career information service base that had a positive impact in an effort to improve students' career choice. Providing Android-based career information encourages widespread motivation, insight and knowledge about careers that are in line with the current department of future prospects, etc. This was obviously beneficial when compared to counselors who only deliver information verbally in front of the class and seems monotonous as well as makes students feel lazy to listen to the materials delivered.

CONCLUSION

This study has examined the effects of a career information application with the career choice of students in SMK. The effects can be seen from the results of pretest and posttest that has been done and prove that there are differences between before and after treatment.

The improvement of career choice not only comes from the use of application by students, but also from the role of counselors and researchers who monitored during the implementation of the experiment. In addition, counselors need to emphasize more detailed explanations in the beginning related to the use of career information application.

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