

Green education-based model online career counseling “ACIS-Q” to enhance career maturity of vocational schools students

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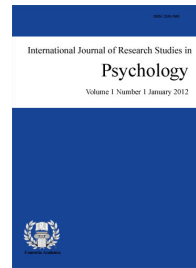
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Abstract

The purpose of this study is to acquire: (1) empirical data on career maturity of vocational school (SMKs) students; (2) empirical data on actual career guidance and counseling (BK) services at SMKs and the need of students and guidance and counseling teachers/counsellors (BK/K) against model online career counseling (OCC); and (3) model OCC to boost career maturity of SMKs students. The research using the method of research and development (R & D) to develop the OCC. Research population includes all the students of 10th grade at state SMKs in Jakarta province for educational year 2013/2014. Research sample amounts to 292 students and 10 BK/K teachers in Jakarta province. The sample is selected by using multistage cluster random sampling technique. Data collection applies inventory of career maturity and actualization as well expectation. Quantitative data is analyzed by using descriptive statistics with percentage technique with the aid of SPSS version 18.0 for Windows software. The research result covers: First, career maturity of SMKs students based on personal evaluation generally stands at the mature category. However, test result of detail is generally not mature yet which is signaled by inexistence of detailed career planning and information, no comprehension yet on information of liked work group and how to set up career decision. Second, BK/K teachers and SMKs students commonly need model OCC. Information required entails self-potential assessment and career information. Third, OCC ACIS-Q is obtained by utilizing green education media in the form of website in a bid to bolsters career maturity of SMKs students. Research recommendation is addressed to students, BK/K teachers and coming researchers for use and to complete the model OCC ACIS-Q.

Keywords: model online career counseling; green education; career maturity; SMKs students

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1. Introduction

Implementation of 2013 curriculum mandates the existence of interest program for students at the level of senior high school, including vocational schools (SMKs) managed in an effort to obtain data and information related to students tendency of their interest (SDM and PMP Development Agency of Kemendikbud, 2013a). One of the indispensable components in interest services of SMKs students covering interest service program (career guidance and counseling) is assessment and development of students' career maturity or career competency. Having career maturity (obvious interest), according to SDM and PMP Development Agency of Kemendikbud (2013b), SMKs graduates are expected to have owned steady and clear concept of where and what to be after they have graduated from SMK.

Such a policy is in urgency to be implemented soon with through planning and preparation. Based on empirical fact as explained by the Indonesian Ministry of Youth and Sports (Republika, 2012), educated unemployment in the productive age amounts to 41.81%, and educated unemployment from SMK level totals 11.87%. As for (SDM and PMP Development Agency of Kemendikbud, 2013b), one empirical fact which has caused this condition is huge tendency of SMK graduates to continue their study to higher stage is not (yet) based on their interest with sufficient self-potential and condition.

If analyzed through career development theory, the fact on unpreparedness of SMK graduates to enter work world and increasing number of educated unemployment resulted from insufficient knowledge on self-potential and information on work world. This condition makes SMKs students unable to reach career maturity (Sharf, 1992; Crites, 1986; Paton & Lokan, 2001; Savickas, 2001; McMahon & Paton, 2006; Hassan, 2006) or career competence (ASCA in Cobia & Henderson, 2003) resulting in obstacles in setting up career decision. Meanwhile, as for Crites (Sharf, 1992) “... *the maturity of an individual's vocational behavior as indicated by the similarity between his behavior and that of the oldest individual's in his vocational stages*”. Besides, according to Super (Sharf, 1992) career maturity is “...*the readiness to make appropriate career decisions*”...*readiness to make (a) good choice (s)*...”. It means individual (student) reaching career maturity will be prepared and able to make decision and career option exactly.

Such theoretical analysis and empirical fact have to be taken into account. There must be some efforts to be taken soon to cope with the issue. One of endeavors which can be held is by optimizing career nurturing and counseling services at SMKs through utilization of information technology and communication (TIC). However, empirical fact shows that BK career service at SMKs is not sufficiently conducted yet and TIC is yet to be utilized that information on self-potential and work world is then done conventionally, out of date, requires a lot of paper for printing, resulting in unfriendly environment.

Such theoretical analysis and empirical fact lead to the importance of green education based TIC utilization in the services of assessment and career BK. The term green education is defined as an interaction process which is related to educational activities conducted by utilizing any natural item, environmentally friendly, healthy, practical and economical. Such interaction changes printing items to paperless (Eckersley, 2007). The presence of TIC utilization-based career BK service which covers green education-based Online Career Counseling (OCC) to enhance career maturity of SMKs students plays important role. Through internet based career BK service, students and counseling teachers/counsellors (BK/K) can be facilitated each other as a lot of opportunities and benefit are available in a bid to support career counseling. TIC utilization in career counseling service possesses a number of benefits, among others is maximizing opportunity to study and facilitate access to several sources of career information (Sampson, 1990). Based on theoretical studies and the fact that previously filed, the problem

formulation is proposed in this research as to what is the empirical description of career maturity of SMKs students at DKI Jakarta province? and what is the green education based model hypothetical OCC to increase career maturity of SMKs students?

2. Method

2.1 Research Design

This research uses Research and Development (R & D) method. Such a method is applied as this research is aimed at producing educational product, as (Borg & Gall, 2003) stated that R & D belongs to a process applied to develop and validate proceeds. The research result refers to green education-based model OCC to alleviate career maturity of SMK students.

2.2 Population and Sample

Research population includes all the state-owned SMKs students at DKI Jakarta province for educational year 2013/2014. Sample determination is made by using multistage cluster random sampling technique. Sample consists of 292 students and 10 BK/K teachers from five state-owned SMK at DKI Jakarta province.

2.3 Measuring Instrument

Data collection technique applies the instrument of career maturity. Such instrument has been developed based on career maturity construct as described by Super (Sharf, 1992). The form of career maturity instrument Form-A is made in rating scale 1-4 and Form-B is in the form of detail test. The other instrument is the real service of career BK at SMK and SMK students and BK/K teachers to green education based model OCC as to enhance career maturity of SMKs students.

2.4 Data Analysis

Data analysis technique used to answer research questions on profile of career maturity before and after implementation of model OCC is descriptive statistics in the form of percentage. Category of position of career maturity profile of SMKs students either wholly or partly, aspect and its indicator uses ideal mean with the criteria of: if $X > \bar{X}$ belongs to mature category and $X \leq \bar{X}$ denotes immature category ($X = \text{total score}$; $\bar{X} = \text{mean}$). Determination of total percentage, sub competence and its indicator applies the following formula:

$$P = \frac{f}{N} \times 100$$

Remarks: P = percentage; f = frequency; N = number of respondents

Data analysis is computerized using SPSS 18.0 for Windows software. The second research questions are responded by following procedures of R & D method by Borg & Gall (2003).

3. Result

3.1 Students Career Maturity

Research result shows that career maturity of the 10th grade of students at state SMKs at DKI Jakarta province for educational year 2013/2014 based on self-evaluation generally stands at mature category (99.7%) and immature one (0.3%). However, if analyzed based on the result of IKK form-B data collection on career information competence, it is found that commonly students have yet to attain career maturity. Indication that

they have not possessed yet sufficient career information competence is signaled by an absence of some accurate knowledge on the liked work group, yet to understand physical requirements which supports jobs, yet to understand psychological requirements which supports jobs (aptitude, interest, personality, values and achievement), yet to understand administrative requirements (academic qualifications and skill), yet to understand job descriptions, yet to understand work equipment required, yet to understand universities for further study (names of universities, faculties, stages and study programs), yet to understand factors that hinder and support aspired work, yet to understand steps in taking right career decision.

3.2 Reality and Need for Career BK Service

At SMKs, research shows as follows: First, there exists service for career BK (58.6%), no/never securing service (12.3%), no idea (2%) and not filled in (26.7%). Second, service for career BK at SMKs where they study cover laptop, PC, LCD and other electronic media (27.4%), printing media (9.9%) others/without media, not filled in, and no idea (62.7%). Third, SMKs students need OCC-based service for career BK (57.7%), no idea (7.5%) not filled in (34.9%). Fourth, 57.7% of students and 100.0% of SMKs teachers of BK/K need model online career counseling to enhance career maturity of SMKs students. Fifth, information required by SMKs BK/K students and teachers includes self-potential (career assessment) and career information (information on self-development, information on universities and work world information).

3.3 Planning and Development of Green Education-based Model OCC

Research shows that the need for green education-based model OCC at SMKs, either for students or BK/K teachers, is badly huge resulting in development of model OCC. Green education-based model OCC which is now under development is called Assessment and Career Information System-Q (ACIS-Q) website. The components of ACIS-Q website consists of six menus, among others: home, career assessment, career information, career counseling, customers' satisfaction and link. Home menu includes information on ACIS-Q website, such as background, suggestions and benefit, directions for use and teams of development and management. Career assessment menu covers measurement of aptitude, achievement, personality, career values, and career interest and career maturity. Career information menu contains a number of career information such as self-development, university information and work world information. Career counseling menu is designed for career counseling interaction and communication via internet. Customers' satisfaction menu includes questionnaires as to collect users' opinion on ACIS-Q website.

The core benefit which can be secured by using *ACIS-Q* website includes, among others, (1) to access, to dig, to understand, and to comprehend a number of core self-potentials in career, such as: quotient, talent, achievement, personality, career values, career interest and career maturity; (2) to dig some career information, namely: self-development, educational information, work world information and the other latest career information; (3) seeking service for career counseling via internet in order to make users more flexible wherever and whenever they do it; and (4) to facilitate in selecting and making career decision as being complete with strategy for career selection and decision making, and to dig supporting or hindering factors in career success.

4. Discussion

Research demonstrates that self-assessment to career maturity of SMKs students at DKI Jakarta province stands at mature category. Ideally, students should be competent in career planning, exploiting career, understanding self-information, understanding information on work world, understanding information on work group, understanding the way how to make career decision and realizing career decision. If analyzed using IKK form-B instrument in the form of detail written test, most students cannot answer questions on career correctly. In other words, students have not yet reached actual career maturity. This is signaled by the students' incompetence in planning their career, lack of career information, lack of career exploration, and lack of knowledge on how to set up career decision and unable yet to realize aspired career. Students are still confused

in selection subjects at SMKs, subjects for further study upon graduating from SMKs, being confused in opting aspired job upon concluding SMKs and yet to possess accurate knowledge on self-potentials quotient, talent, interest, personality, achievement, values).

Longitudinal research result (Sharf, 1992) following development of a number of students at the 9th grade demonstrates that several vocational maturity characteristics, which include planning, accepting responsibility and awareness to some work aspects liked are not in order and unstable during SMA period. However, individual which is considered owning vocational maturity at the 9th grade based on their knowledge on occupation, planning and interest are significantly more successful when they start to enter adult age. This signals that there exists relation between career maturity and youth achievement in career awareness, their knowledge on occupation and ability of planning. Therefore, vocational attitude at the 9th grade possesses predictive validity for their future. In other words, individual who is successful in concluding his development duties at each stage tends to reach bigger maturity level at his further life period.

This research result certainly has implication on the importance of service for career BK at SMKs as to raise career maturity of SMKs students. Students are requested to attain consistent career maturity on self-assessment, written test result and real practice in daily life. This is necessary as based on Super’s career development theory (Sharf, 1992) SMKs students’ stands at career exploration level, especially at the tentative and transition level. Exploration level happens at the age of 15 to 24, that is when individual thinks of several career alternatives, but yet to take binding decision. At such level, individual begins conducting self-analysis, trying several roles as well as doing work or position exploration at school, during spare time or through vocational system. Tentative level starts at the age of 15 to 17. During this period, the aspects of need, interest, capacity, values and opportunities are started to be considered wholly. At the tentative period, options start to come out of the fantasy through discussions, working and even other activities. Meanwhile, transition level starts at the age of 18 to 21 marked by emergence of more realistic considerations as to enter work world or professional exercises as well as efforts to implement self-concept.

Other opinion is addressed by Herr (Herr & Cramer, 1990) stating that service for nurturing and career counseling at SMAs/SMKs is aimed at assisting students to: (1) learn relation between achievement, values, preference, personality, educational and career aspirations; (2) to analyze the latest personal competence related to required skill in a given career preference; (3) to learn to be responsible against career planning and its consequence; (4) to prepare individual’s quality to enter further education and work skill courses; (5) to develop career knowledge and skill; (6) to test real career preference systematically; (7) to identify several alternative ways as to reach the objective of selected education and career; (8) to describe forms of further education which can be followed upon graduation from SMKs; (9) to identify ways to further education and/or occupation; (10) to possess accurate estimate on personal characteristics and achievement; (11) to develop special plan as to implement career goal; and (12) to conduct career plan.

Comprehensively and in detail, ASCA National Standards (Cobia & Henderson, 2003) has outlined that career nurturing and counseling program at schools are aimed at preparing the basics of attitude, knowledge and skills which can be used by students to be successful during transition from school to work world from one occupation to another during span of life. There exist three standards of career development which need to be attained by students which must be taken into account by BK/K teachers in holding service for career BK at school. Three standards of students career competence covers: (1) to possess skills to investigate work world in relation to individual knowledge and career decision making; (2) to possess strategy as to reach career goal in the future successfully and with heart’s content; and (3) to understand relation between self-quality, education, training and work world.

A gap between ideal expectation and reality on career maturity and competence of SMKs students is not surprising as many factors affect career maturity achievement (Sharf, 1992) and career competence ASCA in (Cobia & Henderson, 2003). Mitchell and Krumboltz (Sharf, 1992) in their social learning strategy states that

components affecting individual career option constitutes genetically gift, condition and environmental events (social, education and work world), learning experience (instrumental and associated) and skilled in doing work. Taking into consideration the two experts' opinion based on perspectives of two different career development theories –career development theory (Super) and social learning theory (Krumboltz) it is found that one factor affecting individual career maturity (SMKs students) is educational environment. One of educational environments needs creating includes making career nursing and counseling at SMKs.

Based on this rational reference, this research tries to respond such need by developing model OCC ACIS-Q. This model is predicted to be effective in enhancing career maturity of SMKs students as it covers career assessment (self-potential related to quotient, talent, achievement, personality, career values, career interest, entrepreneurship personality, and career maturity); career information (self-improvement, educational information and work world). Argument on importance of model OCC ACIS-Q development is as follows. Internet development in the digital era has speedily influenced and resulted in career counseling revolution. Traditional career counseling through face-to-face process between career counsellor and the counselled changes to virtual career counseling through internet. Internet or online career counseling (Boer, 2001) is used as an instrument in career counseling service as to assist the counselled to exploit interest, career choice, vocational statistics, educational information, career information and occupational opportunities.

Other research held by Castilo and Kempner (2011) shows that access of Mexico-American students against counsellor to conduct career counseling experiences a lot of obstacles and problems. The existence of online career counseling helps the counselled access a number of career information more easily and speedily. Technology information and computer (TIK) covering computer and internet also impacts significantly on assessment of career nurturing and counseling. In career side, TIK and computer can be used for several years to access and provide career information. In fact, TIK program is widely used for career counseling. Career assessment with TIK application must be reconsidered in respect of career counseling. Research demonstrates that counsellors need computers during the process of career counseling assessment (Sexton et al. as cited in Whiston, 2000).

5. Implication

SMK students are urged to attain career maturity in order that they can choose and make correct career decision. Research has inferred as follows: First, based on self-assessment career maturity of SMK students generally they stands at mature category. However, test result of detail mostly shows immature which is designated by yet to possess complete career planning and career information, yet to understand work group information liked and how to set up career decision. Second, BK/K teachers and SMKs students mostly need green education-based model OCC. Information required covers self-potential assessment and career information.

Third, it is found green education-based model OCC called Assessment and Career Information System-Q (ACIS-Q) to enhance career maturity SMKs students. Model OCC “ACIS-Q” which has been developed in the first year research contains information on career assessment (achievement, personality, career personality, entrepreneurship personality characteristics, career values, career interest and career maturity), and career counseling menu via internet.

On the basis of the theoretical analyses and empirical facts, some efforts which can be taken as to improve students career maturity include, among others, : first, to explore some self and career information, to conduct career counseling via internet by utilizing ACIS-Q website and some other sources on career information. Second, BK/K teachers are expected to use green education-ACIS-Q website as a supporting system for career BK service at SMKs, especially in order to access self-potentials and career information. Third, further researchers are urged to make this research result as a pilot project in a bid to develop and complete contents of ACIS-Q website, to add menu to analyze relation between self-potentials and correct career information as well

as researching other variables related to career development of SMKs students.

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