The Development Of Group Counseling Model Based On Social Cognitive Career Theory To Improve Student's Career Decision Making In The Era Of Society 5.0

Diana Dewi Wahyuningsih*, Mungin Eddy Wibowo, Edy Purwanto, Mulawarman

Mulawarman

Universitas Negeri Semarang, Indonesia *Corresponding Author: dianadewibagus@gmail.com

Abstract. The era of society 5.0 brought changes to working, this change became a challenge and opportunity for students. Where students are required to be able to keep up with rapid technological advances, this era demans students to be skilled and ability technology and information in various sectors of career and be able to adapt occupation. The ability to make career decisions is an important skill that students must have in the era of society 5.0. Group counseling based on social cognitive career theory can be a model of guidance and counseling services to improve students' career decision-making abilities. This study uses research and development methods involving 484 students, teachers and education practitioners to develop and obtain a hypothetical model. Data collection in this study through interviews, questionnaires and Career Decision Making Self Efficacy Scale. This research produces group counseling model based on social cognitive career theory to improve student career decision making in the society 5.0 era. The process and results of model development are further discussed in this article.

Key words: group counseling; social cognitive career theory; career decision-making abilities; society 5.0

How to Cite: Wahyuningsih, D.D., Wibowo, M.E., Purwanto, E., Mulawarman, M. (2022). ICT Literacy and Self-Directed Learning through E-Module. *ISET: International Conference on Science, Educaton, and Technology* (2022), 343-348.

INTRODUCTION

The fourth industrial revolution and society 5.0 has changed the working world, bringing both challenges and opportunities for vocational high school students (Anwar, 2021; Darni, Mursyida, & Samala, 2021; Maryanti, 2019). In this regard, students who could prepare skills(Abdillah, Panjaitan, Tiara, & Stefanny, 2022; Anwar, 2021), competence, and communication skills will likely manage to adjust themselves to any work level (Erol, Jäger, Hold, Ott, & Sihn, 2016; Silva, Kovaleski, & Pagani, 2019). Such students will also likely be able to see opportunities in the working world (Nagy, Ol, & Erdei, 2018; Rodzalan & Saat, 2012; Sima, Gheorghe, Subis, & Nancu, 2020). However, vocational high school students still find it difficult to make career decisions in this industrial revolution 4.0 and society 5.0 era. Career decision-making is a process a student should undertake in order to determine their career based on their own belief in skills and goals (Choi et al., 2012).

Our preliminary study found that many vocational high school students still find it difficult to adjust themselves to the fourth industrial revolution and society 5.0 due to a lack of field experience (Chakravorty, Arulampalam, Imbert, & Rathelot, 2021; Mavrikios, Papakostas, Mourtzis, & Chryssolouris, 2013; Paviotti, D'Angelo, Capellini, & Giaconi, 2021; Schnoes et al., 2018; Zehr, Korte, & George, 2020), short of knowledge (Bayerlein, 2015; Dupre, Ph, & Williams, 2011; Hynie et al., 2011; Karji, Taghinezhad, Bernstein, Tafazzoli, & Mohammadi, 2020; Rosyidah et al., 2020) and lack of support (Jemini-gashi, Duraku, & Kelmendi, 2019; Meador, 2018; Oudsvi, Raditia, Wantara, Putri, & Ramadhaniaty, 2020; Sovet & Metz, 2014; Wright, Perrone-Mcgovern, Boo, & White, 2014), eventually adversely affecting their career-decision making process (Chakravorty et al., 2021; Marsden & Piggot-Irvine, 2012; Simões & Brito do Rio, 2020).

One of the most significant factors in career decision-making process is students' self-efficacy (Sun, 2019). It plays an important role in acquiring new learning experiences and information, and imitating others' efforts to support their decision-making process (Park, Hai, Akkermans, & Verbruggen, 2021). Students who are capable of making career decisions tend to exhibit self-efficacy to regulate and determine their career choice (Bonitz, Larson, & Armstrong, 2010). Vocational high school students need to have adequate self-efficacy to motivate themselves, plan a successful behavior, and complete given tasks (Xing & Rojewski, 2018).

The concept of self-efficacy has been adopted by the social cognitive career theory (SCCT), which believes that self-efficacy plays a central role in career-decision making process by directing one's career interest, goals, and performance. The social cognitive career theory focuses on interplays among cognitive variables (i.e., self-efficacy, outcome expectation, and goal) and plays an equally important role like individual and environmental aspects in delivering a learning experience for clients to make a career decision (Blanco, 2011; Garriott, Raque-Bogdan, Zoma, Mackie-Hernandez, & Lavin, 2017; Jiang & Zhang, 2012).

Interventions made based on SCCT have been multifold, yet no interventions focusing on selfefficacy and outcome expectation are reported. It is necessary to develop a career group counseling intervention that focuses on self-efficacy and outcome expectation by, ideally, combining Bandura's four sources of information: successful performance orientation, vicarious experience (*observation*), emotional regulation, and verbal persuasion(Betz, 2007; R. w Lent, Brown, & Hakett, 1994).

The study aimed to develop an SCCT-based group counseling model that could be used by school counselors to improve students' career decision making process, allowing school counselors to monitor students' performance, understanding, anxiety, and verbal support. The following table presents the difference between the group career counseling conducted in this study and other group career counseling.

Table 1. Comparison between existing SCCT-based group counseling and the SCCT-based group counseling designed in this study.

Existing SCCT-based group Counseling	Designed SCCT-based group Counseling
Topics are not designed specifically.	Topics are designed more specifically by focusing on
	developing clients' self-efficacy to improve their
	career decision making skill.
The procedures are briefer and more	The procedures are set in more detail and specific,
general.	following Borg and Gall's R&D.
Materials are not designed based on	The materials are designed following values of self-
values of the social cognitive theory.	efficacy, consisting of four sources of information:
	mastery experience, modeling, verbal persuasion, and
	emotional regulation.
The service is delivered through group	The strategy used in the model combines learning
counseling without developing skills	experience for developing students' self-efficacy
required to improve one's self-efficacy.	through experiential learning, motivational support,
	and self-talk
Limited media use	Various media use

METHOD

a. Research Design

The present study was categorized as research and development. This study aimed to develop a SCCT-based group counseling model using Borg and Gall's Development model (Gall, Meredith D; Borg, 2003), which comprises ten steps. Of these steps, the present study was conducted until the fourth stage, i.e., preliminary field testing, as in previous studies (e.g., Kadek Suartama et al., 2020; Sari & Ayriza, 2021; Sigit et al., 2019). The data were collected through interviews with teachers and school counselors and by deploying career decision-making self-efficacy (CDMSE) to capture the students' level of career decisionmaking self-efficacy. The participants in this study were students of public and private vocational high schools in Boyolali Regency, recruited using purposive sampling technique.

b. Research Procedure

Three stages in this study were performed following Borg and Gall's model, namely:

- 1. Preliminary study, which was done by conducting interviews with five school counselors in public and private vocational high schools in Boyolali. Vocational high school students' career decision-making selfefficacy was measured using CDMSE scale, which had passed the validity and reliability test.
- 2. Product development planning, which was done by collecting relevant materials from the literature on previous SCCT-based

interventions for the career decision-making process.

counseling model by describing each step and stage of the counseling session.

3. Preliminary Product development, which was done by designing a SCCT-based career

c. Data Collection

Instrument	Data Types	Subjects	Purpose of the Study	Validity
Interview Guideline	Qualitative	School counselors in public and private vocational high schools in Boyolali Regency	Finding out the needs for career decision making- related intervention	Triangulation
CDMSE Scale	quantitative	Students from public and private vocational high schools in Boyolali Regency	To find out the students' career decision-making self-efficacy.	SPSS
Expert validation sheet	Qualitative	Group counseling expert	Providing a judgment on the developed product to ensure its validity	Delphi questionnaire
Practitioner judgment sheet	Qualitative	Practitioner	Assessing the product's practicality	Delphi questionnaire

 Table 2. presents the data types, data collection technique, instrument, and analysis technique.

 Instrument
 Data Types
 Subjects
 Purpose of the Study
 Validity

RESULT AND DISCUSSION

Interviews revealed that group career counseling for improving career decision-making self-efficacy (CDMSE) in Boyolali Regency had not been ideal due to counselors' lacked mastery of group counseling stages with certain career approaches. Several counselors even apply conventional counseling approaches to guide students' career, causing them to still rely on school counselors' advice to make career decisions. The CDMSE questionnaire was distributed to 484 students in five vocational high schools. The data showed that 26% of students have low career decision self-efficacy, while 42% of students exhibited moderate career decision self-efficacy, as presented in Table 3. 3

Table 3. Vocational Students' CDMSE in Boyolali Regency Boyolali Regency

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No.	Category	No. of Students	Presentation		
1	High	154	32%		
2	Moderate	203	42%		
3	Low	127	26%		
Total		484	100%		

As shown in Table 3, most vocational high school students still need their school counselors' assistance to make a career decision. The existing counseling service is deemed ineffective, and school counselors need a new model to improve career decision-making self-efficacy effectively. The present study developed a SCCT-based group counseling model for improving vocational high school students' career decision-making self-efficacy.

The development focuses on designing steps and procedures for a group counseling process based on the social cognitive career theory. Four aspects promoting self-efficacy were applied: mastery experience, modeling, verbal persuasion, and regulation of emotion. The strategy used increases self-efficacy through learning experiences, motivational support, and self-talk.

Technological developments in this digital era have put vocational high school students under pressure, as they lack competencies required to fill the position in the working world. This lacked competence seems to be accounted for by students' poor ability to optimize available opportunities, such as internship and training programs provided by their schools.

Hence, students lack confidence in finishing the given tasks during the internship and training programs, causing low self-efficacy. Selfefficacy is an important factor in predicting the extent to which students can finish their tasks, which may stimulate interest and behaviors in improving their competence (Azmi et al., 2018). One's self-efficacy may increase when they have a successful performance experience, are aware of one's ability, understand the performance value and meet the outcome expectation (Ali et al., 2019).

The social cognitive career theory was developed to extend the previous career theory by adapting Bandura's social cognitive theory. This theory focuses on cognitive aspects (i.e., selfefficacy, outcome expectation, and goal) and environmental aspects and regulate one's behavior in making career decision (Sharf, 2014). Experience, environmental support, and careerdecision making are interrelated, and it is necessary to develop interventions based on

social cognitive career theory (Johnson, 2013). previous studies have developed SCCT-based interventions to develop students' career decision-making skills (Rottinghaus et al., 2018; Waalkes et al., 2019; Fitzgerald et al., 2012).

Currently, efforts to improve vocational school students' self-efficacy are still suboptimal due to shortages in counseling services, particularly related to the material, strategy, and media designs. Therefore, the present study attempts to fill this gap by designing a SCCTbased group counseling to improve their selfefficacy. Figure 1 displays the procedure and the developed model.



Figure 1. SCCT-based group counseling model for career decision-making process.

CONCLUSION

The data showed that students' career decision process is influenced by counseling services at school. Vocational high school students' decision-making skills in Boyolali Regency were categorized as moderate and low, which may be accounted for by suboptimal career group counseling techniques and models. This study developed a group counseling model for improving students' career decision-making selfefficacy by focusing on four main aspects of selfefficacy: mastery experience, modeling, verbal persuasion, and regulation of emotion. Expert and practitioner validity test result showed that the developed model could be used to improve students' career decision-making skills. This study is limited to the development of group counseling model for improving decision-making self-efficacy that has not been tested for expert judgment, practitioner judgment, and field test. Therefore, future studies are recommended to continue the development by conducting expert and practitioner judgments and preliminary field tests to improve the developed

model.

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