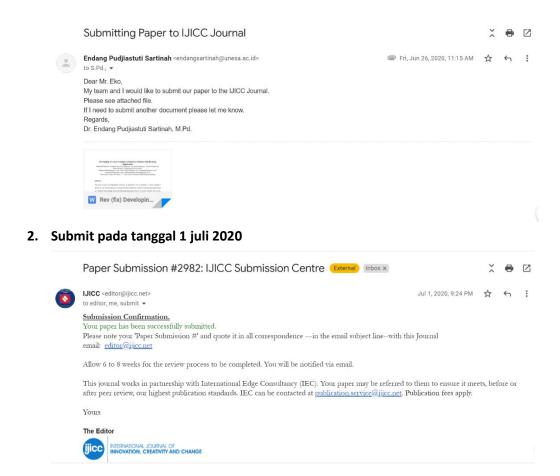
## **BUKTI KORESPONDENSI JURNAL**

## DEVELOPING A CAREER GUIDANCE MODEL FOR STUDENT WITH HEARING IMPAIREMENT

## International Journal of Intelligent Computing and Cybernetics (IJICC)

## 1. Submitting paper 1 tanggal 26 juni 2020



# Developing A Career Guidance Model for Students with Hearing Impairment

Endang Pudjiastuti Sartinah<sup>1</sup>, Esa Nur Wahyuni<sup>2</sup>, Sri Joeda Andajani<sup>3</sup>, Eryana Fatimasari Retno Budiati<sup>4</sup>, Muhammad Nurul Ashar<sup>5</sup> endangsartinah@unesa.ac.id<sup>1</sup>, esanw@uin-malang.ac.id<sup>2</sup>, sriandajani@unesa.ac.id<sup>3</sup>, eryana.frb01@yahoo.com<sup>4</sup>, muhammadnurulashar@unesa.ac.id<sup>5</sup> Universitas Negeri Surabaya <sup>1,3,4,5</sup>, Universitas Maulana Malik Ibrahim Malang<sup>2</sup>

#### Abstract

The goal of this developmental research, in particular was to produce a career guidance model on self- knowledge and occupational knowledge for students with hearing impairment in a Special Senior High School for Hearing Impairment that is accurate, feasible, and can be implemented. The developmental research applied in this study was modified from the Borg & Gall model. The data were analyzed using a Paired Samples t Test. Results showed that the development of career guidance model for self-knowledge and occupational knowledge for students with hearing impairment is appropriate and feasible in career guidance services, Whereas the data taken from small-scale testing showed that there is an increase in the level of self-knowledge and occupational knowledge among the students with hearing impairment. Therefore, it can be concluded that the career guidance model on self-knowledge and occupational knowledge for students with hearing impairment of the Special High School is feasible and effective in optimizing change of knowledge and skills in self-knowledge and occupational knowledge.

Keywords: Career Guidance; Students with Hearing Impairment

### Introduction

The condition of students with hearing impairment caused by their handicapped factor and minimum support from the environment so that it produces disability in making decision, difficulties in preparing career, and self-knowledge so that the students with hearing impairment are struggling to plan the career for their future. For every individual self-knowledge and occupational knowledge has very important influence to career development. This deals with self-concept (i.e. self-description, self-assessment, respect and self-acceptance). Self-knowledge can be defined as process of recognizing or self-understanding (Gertler, 2017; Vohs & Baumeister, 2016). Further, self-knowledge also means to know, recognize, understand, realize, and accept the self-condition in regular basis (Bransen, 2015). In reality, self-knowledge is rarely to be understood by students with hearing impairment.

Commented [MOU1]: Avoid the term handicapped

Whereas, the occupational knowledge is the persons' understanding towards the job. Further, occupational knowledge is the cognitive comprehension of an individual particularly the knowledge on their ability as one of the components which is required for them to get a job (Hordern, 2016). Indeed, it is widely reported that people with hearing impairment tend to face the higher rates of unemployment as well as underemployment (De Veirman, 2015; Perkins-Dock, Battle, Edgerton & Mc Neill, 2015). In addition, they would likely get less money and also have smaller promotion opportunities compared to their hearing colleagues (Kelly, 2015; Kurz, Hauser, & Listman, 2016; Punch, 2016).

Self-knowledge and occupational knowledge are among the most essential components of career guidance which are used to guide someone so that he or she could manage and plan career in the future. Career guidance is a service process and a helping activity which are delivered by counsellor or guidance teacher to either a student or a group of students in all ages along their life to be able to understand themselves, job's environment, to decide education choice, training and career option of profession area in adjusting themselves to job vacancy demand, in turn they could help arranging the plan to realize either making decision or managing individual career (Crisan, Pavelea, & Ghimbulut, 2015; Gati, Levin, & Landman-Tal).

In discussing the self-knowledge and occupational knowledge, there is a Cognitive Information Processing (CIP) theory which explains that there are three domains which are involved in career option and overcoming problem namely (1) knowledge domain, (2) decision making skill domain, and (3) executive processing domain (Lachman, Lachman, & Butterfield, 2015; Zunker, 2002). CIP theory as mentioned in career option and overcoming problem is one of the domains which is developed in career guidance model for self-knowledge and occupational knowledge to students with hearing impairment in Special Senior High School for hearing impairment. One the knowledge domain in CIP theory, someone, in planning career could start through giving knowledge or comprehension. Giving knowledge or comprehension to students with hearing impairment early is important for students to prepare career for their future. This became the reason to take knowledge domain which is developed in career guidance model for self-knowledge and occupational knowledge to hearing impairment student in Special Senior High School for Hearing Impairment. Moreover, the development of career guidance model in this study is also based on the hearing impairment student's characteristics and needs,

The next important step is giving a treatment in choosing services to students with hearing impairment in Special Senior High School for Hearing Impairment so that they can

implement career guidance for self-knowledge and occupational knowledge in the school. This should also consider the students with hearing impairment's need to follow the career guidance which requires conducive learning so that the students could follow the guiding process maximally appropriate with the potency. Therefore, the main priority for exact guidance service for students with hearing impairment is career guidance for self-knowledge and occupational knowledge. In connection with career guidance for self-knowledge and occupational knowledge to students with hearing impairment of Special Senior High School for Hearing Impairment, the service strategy is a group guidance while the technique applied was a group discussion (Brunner, Wallace, & Reyman, 2014; Corey, 2011).

The main duty of counsellors and teachers of Special Senior High School for Hearing Impairment as a translator is to help developing self-knowledge and occupational knowledge to students with hearing impairment in Special Senior High School for Hearing Impairment, Based on the explanation above, it is evident that there is no career guidance to help developing self-knowledge and occupational knowledge to students with hearing impairment in Special Senior High School for Hearing Impairment particularly in Indonesia.

A plethora of studies have investigated he career guidance program to improve the understanding of self-efficacy and vocational development self-efficacy (Ferrari et al., 2015; Meijers, Kujipers, & Gundy, 2013). However, only a small number of studies have examined the role of family in enhancing the career development of young people with hearing impairment (Michael, Most, & Cinnamon, 2013). Indeed, study on the career guidance model which emphasizes on the self-knowledge and occupational-knowledge is still scarce.

In detail, this study aims 1) to produce a career guidance model which contains (a) the steps of career guidance model used in counselling by counsellors and teachers of Special Senior High School for Hearing Impairment as translators, (b) the steps of career guidance model which used in counselling for students with hearing impairment, and (c) the materials of career guidance for self-knowledge and occupational-knowledge, and 2) to test acceptability of the career guidance model for self-knowledge and occupational knowledge for students with hearing impairment of Special Senior High School for Hearing Impairment.

#### Method

This present development study generally, had a purpose to produce career guidance model for self-knowledge and occupational knowledge for students with hearing impairment of Special Senior High School for Hearing Impairment, The main focus of this developed model was formulated from knowledge domain which consists of 1) self-knowledge, included (a) interest,

Commented [MOU2]: Elaborate more on this novelty

(b) ability, (c) personality, and (d) value and behavior; 2) occupational knowledge which consists of (a) goal or individual thinking pattern toward job and (b) connecting between self-knowledge and job domain which wanted to be occupied.

This research applied development research model of Borg & Gall (1998), while to develop the career guidance model for self-knowledge and occupational knowledge for hearing impairments students of Special Senior High School for Hearing Impairment, the Dick, Carey & Carey model was applied (2001). The procedure of development research of Borg & Gall (1998) model consisted of 10 steps, however this research only applied 6 steps. The steps of this development research were described as follows:

- Exploring and collecting information which would be developed through a) literature study and b) field study (interview, observation, and documentation),
- Planning the early product of career guidance for self-knowledge and occupational knowledge by deciding the sequence of the developed product.
- Developing early product by arranging the prototype of career guidance model for selfknowledge and occupational knowledge to help career development of students with hearing impairment in Special Senior High School for Hearing Impairment
- 4. Performing validation test of main product design. The prototype of career guidance model for self-knowledge and occupational knowledge to students with hearing impairment in Special Senior High School for Hearing Impairment was validated by counselling guidance experts, special education experts, and also learning design experts.
- 5. Revising the main product design based on the several suggestions from the experts.
- 6. Performing small scale field test. The career guidance model for self-knowledge and occupational knowledge was tested among 10 first grade students with hearing impairment from one Special Senior High School for Hearing Impairment in Surabaya, Indonesia

## **Results and Discussion**

## A. The Career Guidance Model for Students with Hearing Impairment

As mentioned previously, this career guidance model was developed to help students with hearing impairment in Special Senior High School for Hearing Impairment in recognizing, **Commented [MOU3]:** Add more information about participants and data analysis

understanding themselves and their environment in the job environment so that he/she could prepare to arrange plan and choose or make career decision for their future. The content of career guidance for self-knowledge and occupational knowledge for students with hearing impairment includes two main topics namely 1) self-knowledge (interest knowledge, ability knowledge, personality knowledge, and value and behavior knowledge, and 2) occupational knowledge (goal knowledge or individual thinking pattern toward job knowledge related to self-knowledge and the job domain which wanted to be occupied.)

The career guidance model for self-knowledge and occupational knowledge for students with hearing impairment is emphasized on the process of utilizing manual book for career guidance particularly on the aspect of self recognition and career for students with hearing impairment. This in in line with the Zunker's opinion on the CIP theory on knowledge domain in developing career guidance model for students with hearing impairment (Zunker, 2002).

The essence of this career guidance is to optimize the guidance activity which is provided for students with hearing impairment of Special Senior High School for Hearing Impairment. In practice, the collaboration between counselors and teachers has a role and responsibility to the operational of the service of career guidance for students, particularly for students with hearing impairment (Cowie & Pecherek, 2017; Kook & Low, 2017; Mryar & Mazgon, 2017).

The results of the analysis of 12 students with students with hearing impairmentrelated to their knowledge about occupational and job before the intervention are as follows:

1.Live experience which connected to job and not a lesson

- a. There is a student who wants to help their parents to make up brides
- b. Four students are interested to have computer skills
- c. One student has participated in a dance competition at school and regency levels
- d. Two students are interested to have cooking skills
- e. Four students are interested to have skill in sport
- 2.Reflection of jobs which are suitable to the students' ability
  - a. One student is enthusiasts to follow the parent's job as a bridal makeup. He or she tries to improve his or her skills and knowledge. He or she applies his or her skills by making up his or her friends in his or her neighborhood.
  - Four students have learned computer skills from their teacher and they are confidence to show their ability to their friends.
  - c. A student joins a dance group and he or she performs a dance in a farewell party program. She participates in a dance competition.

Commented [MOU4]: Describe in details on this finding

- d. Two students want to have cooking skills and they
  often participate in a cooking competition in their village.
- e. Four students are interested in sport.
- f. One student, during rest time, tries to learn make up skill by visiting beauty salon and practicing it with his or her friends.
- g. Four students like to listen explanation about computer lesson with their friends in a computer rental
- h. One student is often to become a model in a dance class and he or she likes to participate in a dance competition.
- Two students want to have cooking skills and often to participate in o cooking competition in their village.
- j. Four students like to have training in sport almost all the time and they join a youth sport club.

Based on the restructuring cognitive, the students with hearing impairment are forced to be able to use four steps procedure in career guidance model for self-knowledgeand occupational as follows:

- 1. Identifying information to find the problem of self-knowledge and occupational knowledge in their career.
- 2. Directed chalenge so that they could find the problem of self-knowledge and occupational knowledge in their career.
- 3. Directed change to plan their career in the future.
- 4. Trying to realise and strive their self-knowledge and occupational knowledge.

Conditioning of career guidance model for self-knowledge and occupational knowledge to students with hearing impairment in Special Senior High School for Hearing Impairment is as an effort in solving career guidance services. The service for students with hearing impairment of Special Senior High School for Hearing Impairment in career guidance for self-knowledge and occupational knowledge has a purpose to actualize the ability of teachers and counselor as translators such that they can give maximum guidance for students with hearing impairment. Indeed, this supports the previous studies by Iswari (2017); Ojo and Samson (2014) that students with hearing impairment need a guidance from counsellors and teachers to support their career development. Moreover, it is well supported that career guidance is essential to be made specifically to meet the students' needs as had been developed by this study (Janeiro, Mota, & Ribas, 2014; Mereuta, 2018).

# B. Acceptability of The Career Guidance Model for Self-Knowledge and Occupational Knowledge for Students with Hearing Impairment

The validation of the model was done by three experts including an expert of counseling guidance from the Universitas Negeri Malang, an expert of special education from the Universitas Negeri Surabaya, and an expert of learning design (learning technology) from the Universitas Negeri Surabaya. Moreover, the results from this validation were used for revising the product.

The results of the analysis of self-knowledge are data about the knowledge of interest, ability, personality, and value and behavior, as well as goal or individual thinking pattern toward job and connecting between self-knowledge and wanted job domain. They are utilized for the revision of questionnaire used for the research before it applied in a small scale trial test or main field test.

The resulting questionnaire which was used in the trial tests, either pretest before intervention and post test after intervention to students with hearing impairment showed that the improvement of their knowledge and skill is evidenced. Indeed, this is supported by previous studies which reported that knowledge and skill can be gained after the interventions (Brady et al., 2016; Garrote, Dessemontet, & Opitz, 2017).

The material of career guidance is appropriate for students with hearing impairment of Special Senior High School for Hearing Impairment. In-applying guidance services, the learning strategy is a focus group discussion that is modified based on the characteristics and ability of the students. The success of the learning is depending on the class situation. The existence of manual books or learning sources and career guidance books has an important role in the class (Joo, Park,& Shin, 2017). Moreover, the teacher and counselor have to be creative to be able to create the variety of guidance service activities such that the whole potency and imagination of the students can be developed, optimally.

The relalibility of the career guidance model for self-knowledge and occupational knowledge to students with hearing impairment of Special Senior High School for Hearing Impairment has been tested by counseling guidance experts. Expert I states that 1) the language in the career guidance material is too formal; 2) the pictures on the material are mostly not appropriate for students with hearing impairment of Special Senior High School for Hearing

Impairment; 3) there are several sentences that are not operational for counseling guidance procedure related both on self-knowledge and occupational knowledge.

The data analysis in measuring knowledge and skill on the interest and ability of students with hearing impairment of Special Senior High School for Hearing Impairment was done by using a Paired-Samples t Test. The results showed that there is a significant improvement between the results of pre test and post test related to the knowledge of interest, ability, personality, value and behavior, goal individual thinking pattern toward job and connection between self-knowledge and job of the students with hearing impairment of Special Senior High School for Hearing Impairment.

Conclusion

The career guidance model for self-knowledge and occupational knowledge to students with hearing impairment of Special Senior High School for Hearing Impairment is to give career guidance service to students with hearing impairment of understanding themselves and occupational knowledge. It means that the career guidance model for self-knowledge and occupational knowledge to students with hearing impairment of Special Senior High School for Hearing Impairment enhances knowledge and skill of the students in the knowledge of interest, ability, personality, value and behavior, goal or individual thinking pattern toward job and connecting between self-knowledgeand job domain which wanted to be occupied, Moreover, it is useful for the Special Senior High School for Hearing Impairment's teachers and counselors as translators for guidance in providing service. Based on the results of data analysis using a Paired Samples t, there are significant improvement in knowledge of interest, ability, personality, value and behavior, goal or individual thinking pattern toward job and connecting between self-knowledgeand job domain which wanted to be occupied to students with hearing impairment of Special Senior High School for Hearing Impairment after they followed the guidance.

Commented [MOU5]: Add citations to support this notion

#### References

- Borg, W.R., and Gall, M.D. 1989. *Educational research: An introduction*. White Plains: Longman Inc.
- Brady, N. C., Bruce, S., Goldman, A., Erickson, K., Mineo, B., Ogletree, B. T., ... & Schoonover, J. (2016). Communication services and supports for individuals with severe disabilities: Guidance for assessment and intervention. *American journal on intellectual and developmental disabilities*, 121(2), 121-138.
- Bransen, J. (2015). Self-knowledge and self-love. *Ethical Theory and Moral Practice*, 18(2), 309-321
- Brunner, J. L., Wallace, D. L., Reymann, L. S., Sellers, J. J., & McCabe, A. G. (2014). College counseling today: Contemporary students and how counseling centers meet their needs. *Journal of College Student Psychotherapy*, 28(4), 257-324.
- Corey, G. (2011). Theory and practice of group counseling. Nelson Education.
- Cowie, H., & Pecherek, A. (2017). Counselling: approaches and issues in education. Routledge.
- Crișan, C., Pavelea, A., & Ghimbulut, O. (2015). A need assessment on students' career guidance. *Procedia-Social and Behavioral Sciences*, 180, 1022-1029.
- De Veirman, S. (2015). Hearing Impairment and disabled?(Un) Employment of Hearing Impairment people in Belgium: a comparison of eighteenth-century and nineteenth-century cohorts. *Disability & Society*, 30(3), 46
- Dick, W., Carey, L., & Carey, J. O. (2001). The systematic design of instruction. 6th. *New York: Longmann*.
- Ferrari, L., Ginevra, M. C., Santilli, S., Nota, L., Sgaramella, T. M., & Soresi, S. (2015). Career exploration and occupational knowledge in Italian children. *International Journal for Educational and Vocational Guidance*, 15(2), 113-130.
- Garrote, A., Dessemontet, R. S., & Opitz, E. M. (2017). Facilitating the social participation of pupils with special educational needs in mainstream schools: A review of schoolbased interventions. *Educational Research Review*, 20, 12-23.
- Gati, I., Levin, N., & Landman-Tal, S. (2019). Decision-making models and career guidance. In *International handbook of career guidance* (pp. 115-145). Springer, Cham.
- Gertler, B. (2017). *Privileged access: Philosophical accounts of self-knowledge*. Routledge. Hordern, J. (2016). Differentiating knowledge, differentiating (occupational) practice. *Journal of Vocational Education & Training*, 68(4), 453-469.
- Iswari, M. (2017). Career Guidance Model in Independence of Deaf Children in Time After Special Senior High School. *Journal of ICSAR; Volume*, 1(2), 131-133.
- Janeiro, I. N., Mota, L. P., & Ribas, A. M. (2014). Effects of two types of career interventions on students with different career coping styles. *Journal of Vocational Behavior*, 85(1), 115-124.
- Joo, Y. J., Park, S., & Shin, E. K. (2017). Students' expectation, satisfaction, and continuance intention to use digital textbooks. *Computers in Human Behavior*, 69, 83-90.
- Kelly, R. R. (2015). The employment and career growth of Hearing Impairment and hard-of-hearing individuals. Rochester, NY: REACH Center for Studies on Career Success, National Technical Institute for the Hearing Impairment, Rochester Institute of Technology. Retrieved from Raising and Educating Hearing Impairment Children website: http://raisingandeducatingHearing Impairmentchildren.org/node/21239.
- Kok, J. K., & Low, S. K. (2017). Proposing a collaborative approach for school counseling. *International Journal of School & Educational Psychology*, 5(4), 281-289.

- Kurz, K. B., Hauser, P. C., & Listman, J. D. (2016). Work-related resilience: Hearing Impairment professionals' perspectives. *JADARA*, 50(3), 88-109.
- Lachman, R., Lachman, J. L., & Butterfield, E. C. (2015). *Cognitive psychology and information processing: An introduction*. Psychology Press.
- Meijers, F., Kuijpers, M., & Gundy, C. (2013). The relationship between career competencies, career identity, motivation and quality of choice. *International Journal for Educational and Vocational Guidance*, 13(1), 47-66.
- Mereuta, C. (2018). The Importance of Professional Counseling and Career Guidance in Technical Faculties. *The Eurasia Proceedings of Educational and Social Sciences*, 10, 244-247
- Michael, R., Most, T., & Cinamon, R. G. (2013). The contribution of perceived parental support to the career self-efficacy of deaf, hard-of-hearing, and hearing adolescents. *Journal of Deaf Studies and Deaf Education*, 18(3), 329-343.
- Mrvar, P. G., & Mažgon, J. (2017). The role of the school counsellor in school–community collaboration: The case of Slovenia. *International Journal of Cognitive Research in Science, Engineering and Education*, 5(1).
- Ojo, I. O., & Samson, A. A. (2014). Meeting the Psychosocial needs of students with Hearing Impairment through Counselling Services. *African Journal for the Psychological Studies of Social Issues*, 16(2), 216-221.
- Perkins-Dock, R. E., Battle, T. R., Edgerton, J. M., & McNeill, J. N. (2015). A Survey of Barriers to Employment for Individuals Who Are Hearing Impairment. *Journal of the American Hearing Impairmentness & Rehabilitation Association (JADARA)*, 49(2).
- Punch, R. (2016). Employment and adults who are Hearing Impairment or hard of hearing: Current status and experiences of barriers, accommodations, and stress in the workplace. *American annals of the Hearing Impairment*, 161(3), 384-397.
- Vohs, K. D., & Baumeister, R. F. (Eds.). (2016). *Handbook of self-regulation: Research, theory, and applications*. Guilford Publications.
- Zunker, V.G. (2002). *Career counseling: Applied concepts of life planning* (6<sup>th</sup> ed.). Pacific Grove, CA: Brooks/Cole.