



Evaluation of The Success of Career Guidance Program in Vocational High Schools (VHS)

Sri Tuter Martaningsih

Ahmad Dahlan University, Indonesia

Article Info

Keywords:
vocational school,
evaluation, career
guidance

Abstract

This study aimed to evaluate the success of career guidance for students and administer an improved recommendation implemented by vocational schools in Yogyakarta, Indonesia. Data was collected from 978 students of 8 vocational schools using the questionnaire method. The validity test for instruments utilized an analysis factor by the assessment of SPSS and SmartPLS 3.0. The reliability test was also performed using Alpha Cronbach, with the career guidance success rate described and observed in the aspects requiring improvement. The result furthermore showed the success rate of career guidance reached an average of 80.86 of 100 in the very good category. However, the minimum standard of 100 recommended 50% of schools to increase the success rate of the program, and at 85 it was 87% improved. Some aspects required improvements such as career readiness in 6 schools at 75%, self-understanding in 7 schools at 87%, and career understanding in 8 schools at 100%, were obtained from data analysis.

p-ISSN 2528-505X
e-ISSN 2615-6377

INTRODUCTION

Vocational High School (VHS) graduate is at the age of 19-20 years, interest in the school to work transition for work-bound youth has grown (Blustein, 1997, Lent, O'Brien, & Fassinger, 1998, Capuzzi & Stauffer (2012). Vocational students career development stages are in the exploration period (ages 14-24), individuals explore different possible career choice and become aware of their interests and abilities. Individuals develop their vocational goals on the basis of interests and abilities and prepare to acquire necessary skills as well as experiences for employment (Capuzzi & Stauffer, 2012; Super, 1957). Holland (1996) believed that people make the vocational choice on the basis of their personality types and their aspirations for career stability. He proposed six personality types: realistic, investigative, artistic, social, enterprising, and conventional. Career development researchers have found that perceived social support is related to high self-esteem, positive career expectations, and career certainty (Constantine, Wallace, & Kindaichi, 2005, Ferry, Fouad, & Smith, 2000; Kenny, Blustein, Chaves, Grossman, & Gallagher, 2003). But counselors, teachers, and other schools personnel can be the main source of career development support for students (Holcomb-McCoy & Young (2012), Capuzzi & Stauffer (2012). John Holland's career theory (1973, 1997) an amalgamation of the interaction among a person's heredity (or biological traits), interests, self-perceived competencies, and dispositions (personality world, and self-concept). Super (1957) proposed that self-concept is a critical component of vocational development. In the exploration period (ages 14-24), individual explore different possible career choices and becoma aware of their interests and abilities (Holcomb. McCoy and Anita Young, 2012: 345).

Vocational school students are middle- educational institutions at the 10th, 11th, and 12th grade expected to administer knowledge and career readiness to students. The skills and self-readiness in pursuing a career are expected to develop at vocational schools as it plays a vital role. Councilors facilitate students by providing various services to reach the purpose of career guidance. Therefore, the success fate of the service should be evaluated to obtain feedback as a sustainable improvement to keep the service more creative.

This study therefore aims to determine the success of career guidance among vocational school students and gives details of improvement recommendations that should be implemented by the schools. It comprises of four questions which are: 1) How is the description of career guidance of students in vocational schools in Yogyakarta; 2) What kind of recommendation needs to be emphasized in each school; 3) What is the percentage of schools to obtain recommendation, (4) what aspect of service needs to be improve at each school?

METHOD

This research was conducted in the academic semester of 2017/2018 at 8 vocational schools in Yogyakarta. The questionnaire instrument of the service program was upgraded by the researcher and respondents, with the quality test examined as follows: 1) Expert validation along with some practitioners asked to give some feedback for the instrumental revision; 2) content validation, analyzed using Aiken's index (Aiken 1980; 1985); 3) factor validation, analyzed using exploratory factor analysis and quality test conducted using partial least square SmartPLS 3.0

The subjects of this study were 797 students of vocational schools in Yogyakarta. In addition, data obtained were analyzed using the exploratory factor analysis of 80 instruments in these schools. The result of Kaiser Meyer Olkin and Bartlet Test was 0.923 with the significance <0.05, while the value of measurement sampling adequacy (MSA) ranged from 0 to 1. The MSA was more significant than 0.5, with its lowest and highest values at 0.774 and 0.946, respectively. This showed that the variable had a prediction, and further analysis could be conducted. Grouping factor was

conducted through the extraction process using SPSS, which obtained the commonalities, total variance, and factors determining the matrix components.

Table 1. Factor and instrument item of EFA examination towards instrument of result measurement component

Sub of result/factor component	Number of Instrument items	Total items
Self-understanding	1, 2, 4, 5, 6,7,8,9,10,23,33	11
Career readiness	11,12,13,14,15,16,19,20,21,22,23,24,25,26,27,28,29,30,31,32,39	21
Career understanding	40,41,43,44,45,46,47,48,49,50,52,53,56,71,72,74	16
Work characteristics	57,58,59,60,61,62,63,64,65,66,67,68,69,70	14
Assertiveness	17,22,34,35,36,37,38,42,52,55,73,75	12
Positive attitude towards guidance and counseling	54,76,77,78,79,80	6

Instrument reliability using alpha coefficient criteria reached the index $\geq 0,70$ (Allen and Yen, 1979:121). The result of the reliability test showing the index of Cronbach's alpha 0.945 was at a very high category, while that of quality instrument examination used partial least square smartPLS 3.0. Confirmatory factor analysis using partial least square smartPLS 3.0 (Ringle, C. M., Wende, S., and Becker, J.M., 2015) strengthened the reliability quality of the instrument items and identified its factors.

The result of the outer component measurement showed that all indicators were significant, and it could be used to measure the outcome. In detail, 10 of 80 indicators of the outer loading was greater than 0.5. Approximately six indicators of the result measurement comprise of assertiveness with 17 indicators used to measure career readiness, 10 measured self-understanding, 14 measured career understanding, 13 measured comprehensions of work characteristics, and 6 measured positive attitudes towards guidance and counseling. A total of 70 indicators were used to measure the result component, with the reliability result, as shown in table 2.

Table 2. Factor and instrument item of EFA examination towards instrument of result measurement component

Construction	Total of instrument items		Cronbach's Alpha	Composite reliability	Average of extracted Variance (AVE)
	Result of EFA test	After quality test			
Good criteria if	→		> 0,7	> 0.7	
Self-understanding	11	10	0,770	0,825	0,307
Career readiness	21	17	0,837	0,868	0,296
Career understanding	16	14	0,871	0,890	0,281
Positive work characteristics	14	13	0,900	0,916	0,456
Assertiveness	12	10	0,805	0,849	0,320
Positive attitude	6	6	0,796	0,852	0,491

towards career guidance				
Result of career guidance	80	0,803	0,866	0,570

The R square showed that the six descriptors were quite big towards the result component, with a percentage range of 23.3% to 99.3%. The rare construct reliability was also high (>0.7), and the result of VIF less than 5 (Chin 1998, Hair, et al, 2011 and Hair et al, 2012, and also Hanseler et al. 2009) which showed that there was no multicollinearity among latent variables. Inner model analysis with all measurement components was made towards the result of career guidance. A total of 70 validated data from the instrument was used to measure the result of career guidance service, which was continued by the analysis to evaluate each school. The service which was based on the EFA test was strengthened by the CFA which comprises of six aspects of career guidance success among students, namely self-understanding, career understanding, career readiness, work characteristics, assertiveness, and positive attitude towards service. Based on students' answers from the previously upgraded questionnaire.

RESULT AND DISCUSSION

The evaluation was conducted to describe the rate of success to improve feedback of the next career guidance program. The instruments with their valid reliability were given to the students to fill, and their answers towards the questionnaires were changed to the scale of 100, by dividing the obtained score with the optimum one multiplied by 100. The result of the analysis is as shown in table 3.

Table 1. Recapitulation of Guidance Result Vocational Career in Scale 100

School code	X1	X2	X3	X4	X5	X6	X7
A	75,53	72,01	83,06	77,01	80,03	90,14	79,88
B	78,33	72,44	81,26	77,31	80,09	87,66	79,85
C	78,11	73,95	83,55	78,26	81,35	86,88	80,41
D	77,75	71,40	82,18	76,59	80,83	89,19	79,95
E	81,61	74,51	85,32	81,15	80,19	92,53	82,25
F	78,51	72,57	85,67	78,89	82,38	92,64	83,30
G	78,91	75,52	81,70	80,43	84,31	88,69	81,99
H	75,30	71,23	83,01	75,78	80,61	88,94	79,32
Rerata	78,00	72,95	83,22	78,18	81,22	89,58	80,86

Keterangan:

X₁: Self-understanding

X₂: Career Understanding

X₃: Positive attitude towards career guidance

X₄: Career Readiness

X₅: Asertivitas

X₆: Understanding of work character

X₇: The result of career guidance

Table 3 above was the result of all success rates from the career guidance towards students. Furthermore, each aspect is described below:

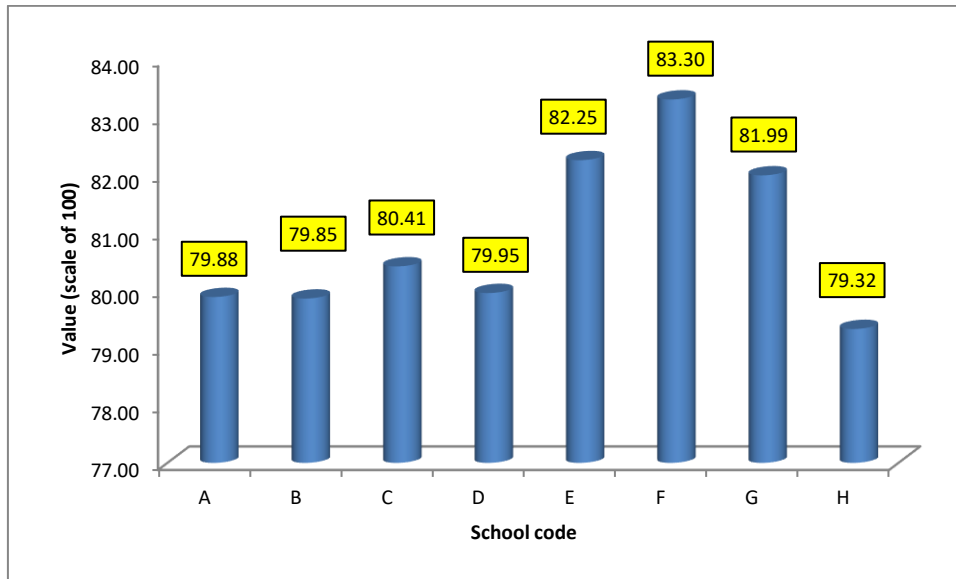


Figure 1. The results of career guidance of VHS students

The optimization of career guidance was still needed to increase the success of the program, with the service at the value of 79.31 to 83.30 (scale 100) at an average of 80.87. However, assuming the minimum standard was 80, the optimization of career guidance should be conducted by the schools with the code A, B, D, and H. Sustainable improvement is conducted by increasing the minimum criteria, by 82.50. Therefore, all schools except F would improve their performance. The result of the career guidance of the students is further seen in specific parts that needed to be improved, such as the grades below 80.

The success rate of the career guidance at each school is further described for the administration of proper recommendation for each school. The detailed explanation of each component from career guidance at each school is seen below:

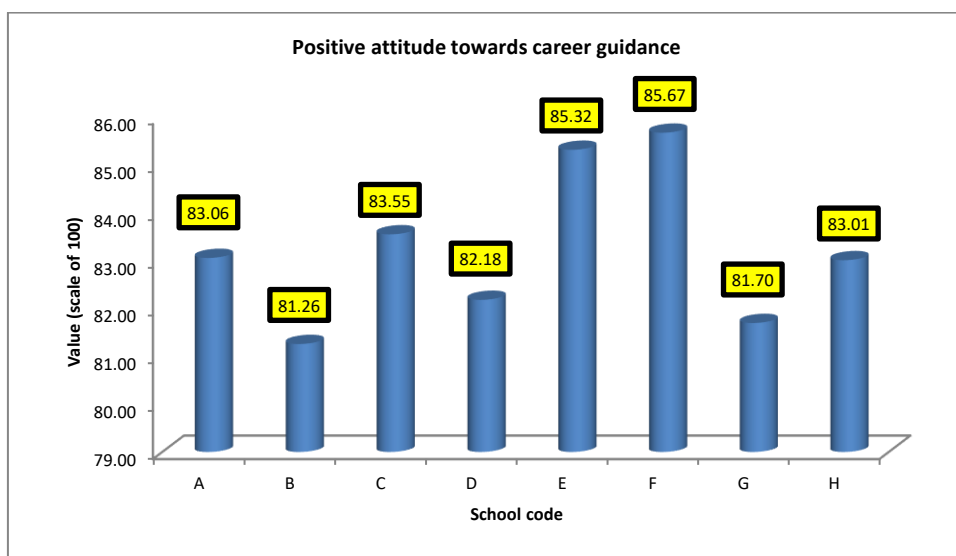


Figure 2. Positive attitudes of VHS students towards career guidance

Vocational students showed a positive attitude towards the career guidance conducted at their school. It was proven by the scale that was greater than 80 of 100 at all schools

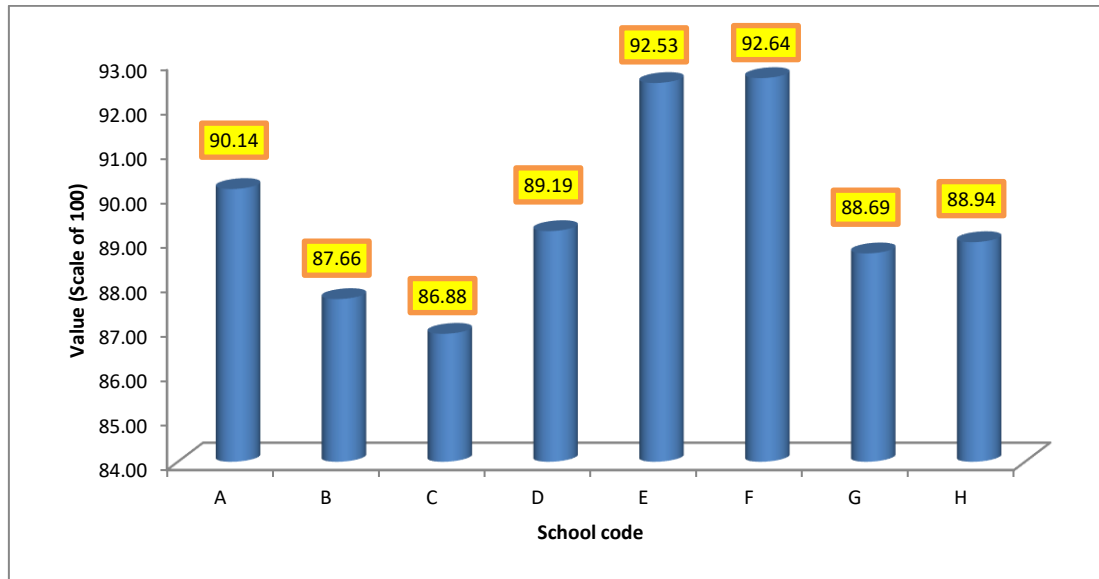


Figure 3. Understanding of VHS students towards work characters

The understanding of work characteristics that should be possessed even before people arrived at the working environment was also very good at all schools, with an average of 89.50. The student's understanding of the characters possessed in the working environment was also very good.

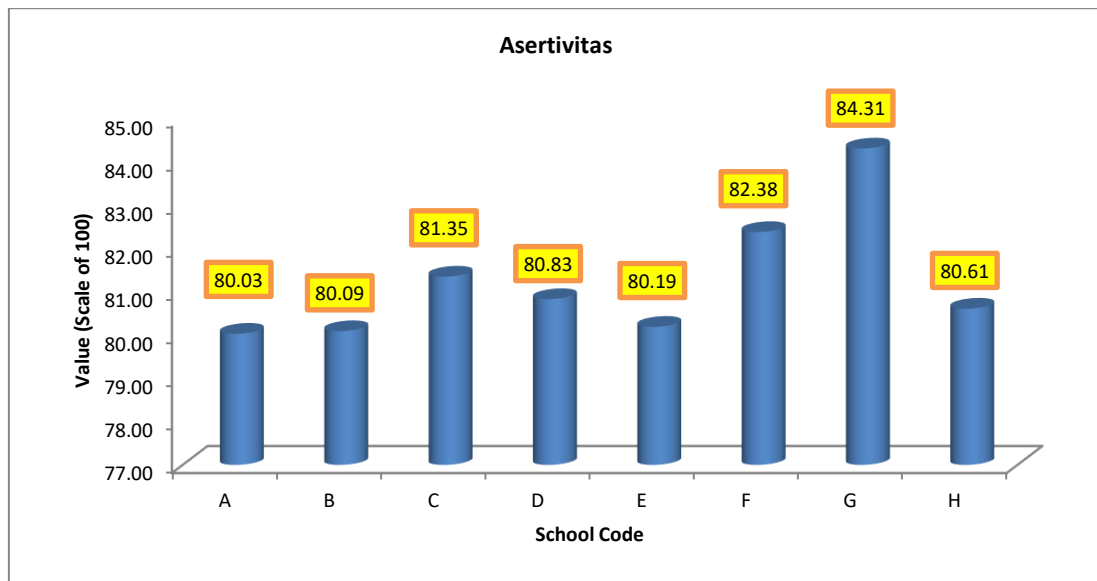


Figure 4. VHS student's assertiveness

The assertiveness of vocational students was good with the range of 80.09 to 84.31 (of 100 scales) and an average of 81.22. The braveness associated with arriving at the working environment was also good at all schools.

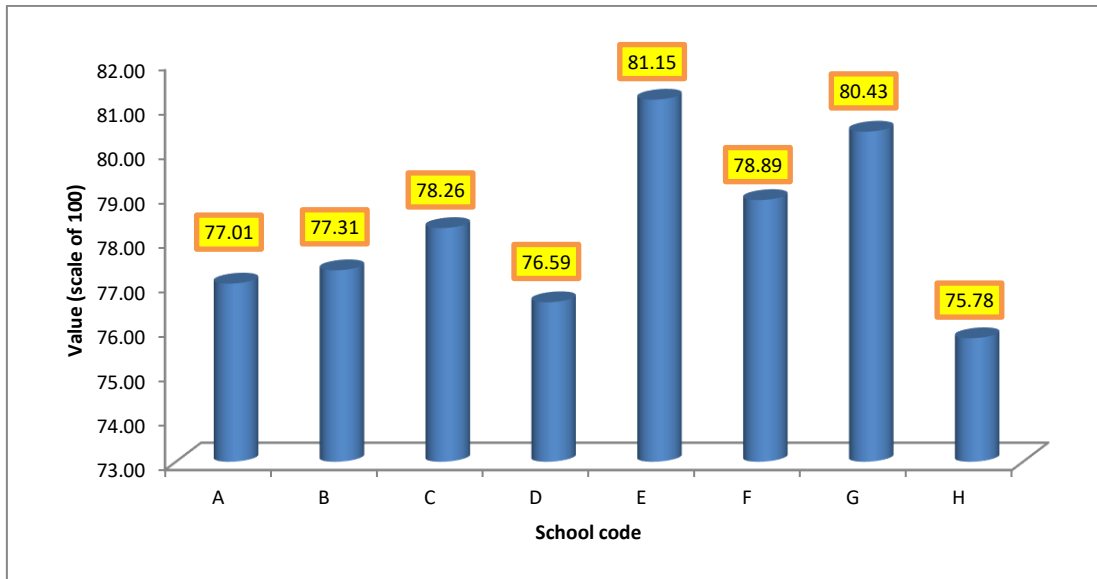


Figure 5. Career readiness of VHS students

For career readiness, vocational students' value was 75.78 to 81.85 with an average of 78.18 (<80), which indicated that the subjects of study needed some improvement. A total of 6 schools (75%) were recommended to increase their career readiness (schools with codes A, B, C, D, F, and H).

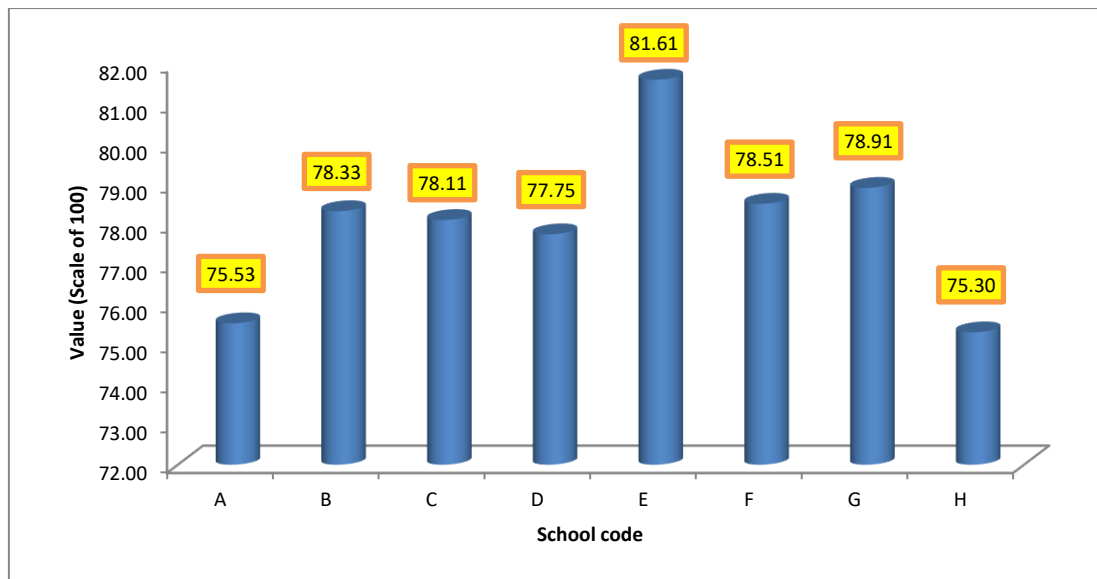


Figure 6. Self-understanding of VHS students

The self-understanding of vocational students was 75.30 to 81.61 with an average of 78 (<80), which meant it needed to be upgraded. The recommendation was delivered to the 7 schools (87%) to improve the self-understanding of their students.

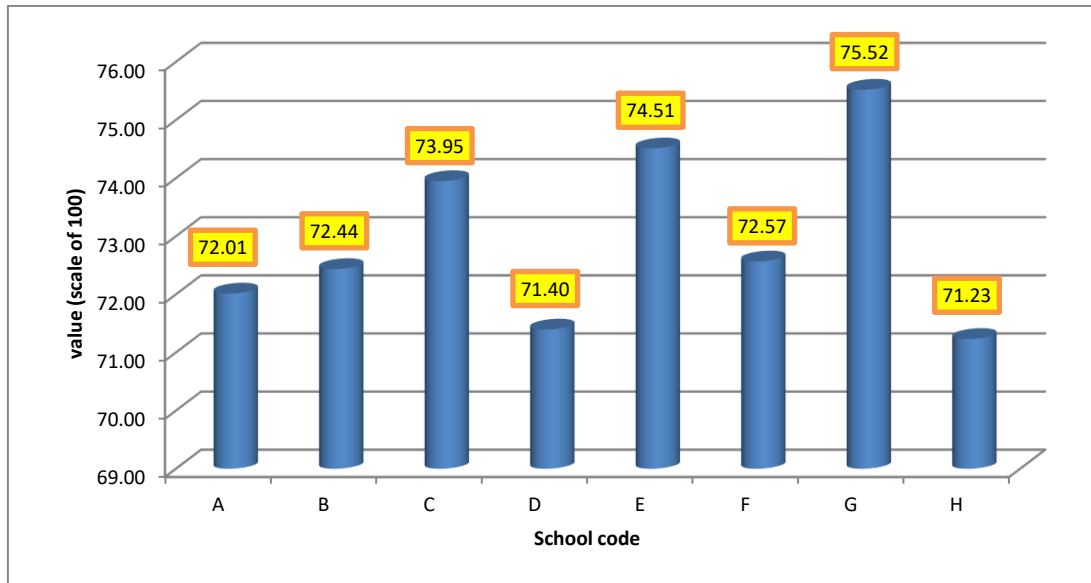


Figure 7. Career understanding of VHS students

The career understanding of the vocational students reached 71.23 to 75.52, with an average of 72.95 (<80). The recommendation was given to all schools (100%) to improve the career understanding of their students.

Vocational school students are debriefed on the skills they acquired from school subjects which plays an important role to develop their soft skills (Commission of the European Communities, 1988, Dollarhide and Saginak, 2012). Guidance and counseling are systematical, objective, logical, continuant, and an integrated method conducted by teachers or counselors to facilitate independent achievement of students' life (The Law of Minister of Education and Culture number 11 year 2014). The independence in the previous sentence means future career comprising self-understanding, career understanding, career readiness (Dollarhide, 1997), work characteristics, assertiveness, and adaptation toward the changes of a working environment, career decision, education, skill, work demand, and personal skills in the working competition (Missouri, 2016). All hopes towards students' capability of career independence are covered into the instruments used to measure their success.

The result showed the success of career guidance at the vocational level in Yogyakarta was in the range of 79.85 to 83.30, with an average of 80.86 (scale 100). This was possible to achieve since all subject schools were located in the city, which made the information easy to access. The career-related information could be found in various sources. However, there were still some aspects of the service that were yet to be achieved, and needed more attention for effective results. Eight schools utilized work characteristics to obtain high average rate, therefore, vocational school students should understand the work characteristics. Learning process emphasized on the business world and industry along with the practitioner or job fair events with the possibility for vocational students to acquire the depiction for the working environment.

By taking 80 as the minimum criteria, 4 schools with codes A, B, C, D, and H (50%) should improve their service. The sustainable improvement is conducted by increasing the minimum criteria, such as 82,50 for the 3 schools with codes C, E, and F to carry out the improvements on the other 7 at 87.50%.

Generally, the rate of career guidance service was high. However, some detailed aspects needed to be improved since it did not reach the minimum criteria (80) comprising self-understanding, career understanding, and career readiness. The result showed the career

understanding had the lowest rate of 72.95. It showed that vocational school students did not fully understand career choices. Therefore, the service of career guidance needed to increase its performance for students to get a better understanding. Vocational school students needed guidance during career development, for them to be more adaptive to the changes in the working environment. This enabled them to evaluate a variety of resources to aid in career exploration and planning by their 10th grade. In their 11th grade, they should utilize a variety of resources to aid in career exploration and planning, while their 12th grade, they should possess a utility knowledge of career exploration and planning to adopt new career and educational opportunities as the world of work changes (GLE's, Missouri Department of Elementary & Secondary Education, 2016).

Conversely, the industrial revolution 4.0 made fast changes to career paths even after it vanishes. The anticipation of various careers in this disruption era is very important to be conducted by schools. Updated information on careers was needed for students to understand and become more adaptive to the development of the working environment. Creativity from every aspect was needed to anticipate the changes by utilizing information technology and sources of the study. The curriculum and the service of guidance and counseling had to facilitate students to be ready to learn and face that the future throws at them. The changes in work demands urged anticipation from every aspect.

Besides career, self-understanding was also needed to be improved. The strategy of career guidance should make students determine their weaknesses, strength, skills, interest, and capability in order to be ready to choose the relevant career. The career readiness of vocational school students reached an average of 78.18 less than 80, therefore, students needed to be trained to integrate themselves with the life and career plans using educational plans related to evolving new interests, strengths, and limitations (10th grade). The educational, training, and personal characteristics need to achieve current life career goals and compare those characteristics (11th). Furthermore, there should be utility knowledge of the world and work, personal interests, strengths, and limitations to develop short and long-term postsecondary plans (12th).

When students understand themselves, they develop the required competencies and characters to face the working environment. Self-readiness gave a possibility for students to get jobs faster right after graduating from schools. Furthermore, it also decreases the rate of unemployment. The service conducted in vocational schools was very good with 50% <80, in the range 79.32 to 79.95 of 100, and 50% >80. The required improvements were career, self-understanding, and career readiness. Understanding education, career demand, having the capability to make a decision, and developing both self-skill and work skill to fulfill the demand of working environment were also needed. Careers were determined by the students by analyzing their educational information to identify the most relevant resources for a specific option during their 11th grade. Furthermore, they should be able to synthesize information gathered from a variety of sources, in their 12th grade, and utilize educational information in career decision making.

A whole-life prespective (Dollarhide, 1997), Career decisions involves seven steps 1) understanding of self, 2) understanding of the world of work, 3) reality testing, 4) commitment, 5) career preparation, 6) placement/career entrance, 7) evaluation and renewal (Dollarhide, 2012: 53-54). Understanding of self is a knowledge of one's likes, dislikes, abilities, skills, challenges values, needs, dreams, lifestyle goals, personality, interest. Understanding of the world of work is a knowledge of career paths, job titles, salary levels, employers, employment environments, occupational projections, training requirements. Reality testing, firsthand experivbStwhJence through employment, volunteering, internship, cooperative education jobs, lab experiences, job shadowing. Commitment is making decision, with relative confidence, in the face of uncertainty. Career preparation is accessing formal and informal training for the job or occupation. Placement is

using job-seeking skills, filling out applications, writing cover letter and resumes, participating in interviews, the accessing opportunities in the chosen occupation.

The service of career guidance should be improved along with its obstacles for a successful career path with the evaluation result used as feedback in the form of school service improvement. The activity of career guidance has been implemented at the vocational schools by conducting some events such as education, job /career expo, and a merger with special job fair (bursa kerja khusus/BKK) to promote and conduct the event. Responsive service should be administered to students with problems through intervention such as failure in choosing their interest, anxiety in determining their career, and difficulties in the activities to support career. A supportive system used to support the activity of career guidance had been implemented. This consists of a routine meeting of the guidance and counseling teachers, discussions, the participation in the scientific meeting, ABKIN, workshop or seminars, and the development of a sustainable profession.

CONCLUSION

The success rate of career guidance at vocational schools in Yogyakarta reached an average of 80.86 (scale 100), which was considered very well. With the minimum criteria at 80, 50% of schools were recommended for improvement, and these were A, B, D, and H. The aspects that needed to be improved were self-understanding (7 schools 87%), career understanding (8 schools 100%), and career readiness (6 schools 75%).

The evaluation of the success of career guidance gave a depiction of the achievement. However, the sustainable improvement was conducted by increasing higher achievement criteria. The recommendation to conduct the improvement was given to the schools, with the detailed aspects which were not yet achieving the minimum criteria.

The recommendations for the improvement (with the score criteria <80) at each school are shown below:

- a. The improvement of the self-understanding, career understanding, and readiness needed to be conducted at schools A, B, C, D, and H.
- b. The improvement of the self-understanding and career understanding at school E.
- c. The improvement of the career understanding and career readiness at school F.
- d. The improvement of career readiness at school G.
- e. The improvement of the career understanding at all schools.

The percentage of schools with its recommendation of every aspect is shown below:

- a. The improvement of the self-understanding was in 7 schools (87%), which are A, B, C, D, F, G, and H.
- b. The improvement of the career understanding was in 8 schools (100%).
- c. The improvement of career readiness was in 6 schools (75%), which are A, B, C, D, F, and H.
- d. The improvement of the result of career guidance was in 4 schools (50%), which are A, B, D, and H.

The implementation of the career guidance activity could not be separated from the school management, which comprises of planning, organization, collaboration, controlling, organizational development, a guarantee of quality, and accountability. Every aspect at school was always expected to be integrated by implementing the improvement based on their role to achieve set goals. The guidance and counseling are needed by teachers to keep developing their creativity and anticipation towards the development of every aspect of careers and its implementation on the service. The

intensity of the various meeting from every side related to the career guidance service are tools used to determine every obstacle through the collaboration of many organizations.

ACKNOWLEDGMENTS

I am indebted to the Ministry of Research and Technology and Higher Education for the Post Graduate Research grant of the dissertation with the contract number: PDD-020/SKPP/III/2018

REFERENCE

- Aiken, L.R. (1985). Three Coefficients for analyzing the reliability and validity of ratings. *Educational and Psychological Measurement*, 45, 131-142
- Allen & Yen, 1979: 121 Allen, M.J. & Yen, W.M. (1979). *Introduction to measurement theory*. Monterey, CA: Brooks/Cole Publishing Company.
- Allen, M.J. & Yen, W.M. (1979). *Introduction to measurement theory*. Monterey, CA: Brooks/Cole Publishing Company.
- Azwar, S. (2000). *Reliabilitas dan validitas*. (edisi 4) Yogyakarta: Pustaka Pelajar.
- Azwar, S. (2015). *Reliabilitas dan Validitas*. Yogyakarta: Pustaka Pelajar.
- Blustein, D.L. 1997, A Context rich prespective of career exploration across the life roles, *career development Quarterly*, 45, 260-276.
- Borg W.R. and Gall. M.D. (1983). *Educational Research*. (4th Edition). New York: Longman.
- Capuzi, D and Stauffer, M.D. 2012. *Career counseling Foundations, prespectives, and applications*. 2nd edition. USA: Taylor & Franciss group, LLC.
- Chin, W.W., 1998. The Partial least square approach for structural equation modeling in G.A. Marcoulides (ed.). *Modern methods for business research* (pp. 295-236). London: Lawrence Erlbaum Associates.
- Commission of the European Communities. 1988. *Educational and Vocational Guidance Services for the 14-25 Age Group*. Luxembourg: Office for Official Publications of the European Communities.
- Constantine, M.G., Wallace, B.C., & Kindaichi, M.M. 2005, Examining contexttual factor in the career decision path of African American adolescents. *Journal of career assesment*, 13, 307-319.
- Dollarhide, Colette T & Kelli A.Saginak (2012). *Comprehensive school counseling programs K-12 Delivery systems in action*. 2nd edition. The Merrill Counseling Seroes. United states: Pearson.
- Dollarhide, William. 1997. *British Origins of American Colonist 1629-1775*. Heritage Quest
- Dollarhide, Colette T & Kelli A.Saginak, Mary Ellen Butler-Pascoe (2002) *School Counseling in the secondary School* (1st edition). Alyyn & Bacon
- Ebel, R.L. & Frisbie, D.A. (1986). *Essential of educational measurement*. New Jersey: Prentice-Hall, Inc.
- Fernandes, H.J.X. (1984). *Evaluation of educational programs*. Jakarta: National Education Planning, Evaluating and Curriculum Development.

- Ferry, T.R., Fouad, N.A., & Smith, P.L. 2000. The role of family context in social cognitive models for career-related choices behavior: A math and science perspective. *Journal of Vocational Behavior*, 57, 348-364.
- Griffin, P. & Nix, P. (1991) *Educational assessment and reporting*. Sidney: Harcourt Brace Javanovich, Publisher.
- Herdi, Sunaryo Kartadinata, Agus Taufiq, 2017.p.162-174).
- Hair, J.F., Ringle, C.M., and Saryedt, M. 2011. "PLS-SEM: Indeed A of the Silver Bullet," *Journal of Marketing Theory and Practice* (19: 2), pp. 139-130.
- Herr, E.L dan SH. Cramer. (1979). *Career Guidance and Counseling Through The life Span*, Bouston : Brown dan Company.
- Holcomb-Mc Coy, C., Young, A. (2012). High School counseling Preparing Youth for College, Careers, and Other Alternatives. Chapter 12. 341-369 in Capuzi, D and Stauffer, M.D. 2012. Career counseling Foundations, prespectives, and applications. 2nd edition. USA: Taylor & Franciss group, LLC.*
- Holland, J.L. (1973). *Making Vocational choices: A theory of career*. Englewood Cliffd. New Jersey: Prentice hall.
- Holland, J.L. (1996). Exploring careers with a typology: what we have learned and some new directions. *The American Psychology*. 51, 397-406.
- Kerlinger, F.N. (1986). *Asas-asas penelitian behavioral* (terj. L.R. Simatupang). Yogyakarta: Gajahmada University Press.
- Lawrence, B. 1994 *Some Days You Get the Bear* (Reprint edition)
- Lent, R. O'Brien, K.M. & Fassinger, R.E. (1998), School to work transition and the role of vocational counseling psychology. *Counseling Psychologist*, 26. 489-494.
- Lovsin, Miha. (2014). The (Un) Attractiveness of vocational and technical education: theoretical bacskground. *CEPS Journal* 4 (2014) 1, S 101-120.
- Lynn's (1986), *How to Communicate Evaluation Findings* (2nd Edition)
- Mardapi, Djemari. (2000). Evaluasi Pendidikan. *Makalah* disampaikan pada Konvensi Pendidikan Nasional tanggal 19 – 23 September 2000 di Universitas Negeri Jakarta.
- Missouri Department of elementary & secondary Education, (2016) <https://dese.mo.gov/sites/default/files/cnsl-curr-gle-cd-full.pdf>
- Nunally, J. (1978). *Psychometric theory* (2nd ed). New York: McGraw Hill.
- Oriondo, L.L., & Antonio E.M.D., (1998). *Evaluating Educational Outcomes Ttest, Measurement and Evaluation*. Florentino St: Rex Printing Company, Inc.
- Ministry of Education and Culture, The Regulation of the Minister of Education and Culture Number 111 of 2013 concerning Guidance and counseling on primary and secondary education. 2013.*
- Polit, D.F., & Beck, C.T., (2006). The content validity index: are yue sure you know what's being reported? Critique and recommendations. *Research in Nursing & Health*. 29. 489 - 497.

- Popham, W.J. (1995). *Classroom assessment: What teachers need to know*. Boston: MA: Allyn and Bacon, Inc.
- Raoul Van Esbroeck. (2008). Hal 41 Chapter 2 Career Guidance in a Global World (in International Handbook of Career Guidance (James A. Athanasou & Raoul Van Esbroeck (ed) Springer Science + Business Media B.V.
- Retnowati, Trie Hartiti. Djemari Mardapi Mardapi, Badrun Kartowagiran. Suranto. (2017). Model evaluasi kinerja dosen: pengembangan instrument untuk mengevaluasi kinerja dosen *Jurnal Penelitian dan Evaluasi Pendidikan*. Volume 21. no. 2. Desember 2017 (206-214). Retrieved From <http://journal.uny.ac.id/index.php/jpep>.
- Ringle, C. M., Wende, S., dan Becker, J.M., 2015 C. M. Ringle, S. Wende, and J.-M. Becker, "SmartPLS 3," Boenningstedt: SmartPLS GmbH, 2015. [Online]. Available: <http://www.smartpls.com>.
- Shodiq, M. Suyata. Sutrisno Wibawa. (2017) Developing Quality Evaluation Instrument For Islamic Senior High School. *Jurnal Penelitian dan Evaluasi Pendidikan*. Volume 21. no. 2. Desember 2017 (189-205). Retrieved From <http://journal.uny.ac.id/index.php/jpep>.
- Stark, J.S., & Thomas A.. (1994). *Assesment and Program Evaluation*. Needham Heights: Simon & Schuster Custom Publishing.
- Sukaredi, Dewa Ketut. (2008). *Bimbingan Karir di Sekolah-sekolah*. Jakarta: Ghalia Indonesia
- Suyoso, Edi Istiyono, Subroto. (2017). Pengembangan Instrumen Asesmen Pengetahuan Fisika Berbasis Komputer untuk Meningkatkan Kesiapan Peserta Didik dalam Menghadapi Ujian Nasional Berbasis Komputer. *Jurnal Pendidikan Matematika dan Sains*, V (1), 2017, 89-97. DOI: <http://dx.doi.org/10.21831/jpms.v5i1> Retrieved From <http://journal.uny.ac.id/index.php/.JPMS>
- Kementerian Pendidikan dan Kebudayaan Republik Indonesia Ditjen GTK. (2016). *Panduan Operasional Penyelenggaraan Bimbingan dan Konseling Sekolah Menengah Kejuruan (SMK)*.
- Super, D.E. (1957). *The Psychology of careers: An introduction to vocational development*. New york, NY: Harper.
- Tennyson, et al., 1974: 146) In Memoriam; An Authoritative Text, Backgrounds and Sources, Criticism. (Norton Critical Editions)
- Wahyuningsih, Retno. Budiyo. (2014). Pengembangan Model Evaluasi Penyelenggaraan Sekolah Islam Terpadu. *Jurnal Penelitian dan Evaluasi Pendidikan* Tahun 18. Nomor 2. 2014.
- Walgito, B. (2010). *Bimbingan + Konseling (studi & karier)*. Yogyakarta: Andi Offset
- Wijaya, Adi. Sumarno. (2017). Evaluasi Dampak pendidikan dan pelatihan pengembangan keprofesian berkelanjutan guru matematika di PPPPTK matematika Yogyakarta. *Jurnal Penelitian dan Evaluasi Pendidikan*. Volume 21. no. 2. Desember 2017
- Woolfolk, A.E. & McCune, L.N. (1984). *Educational psychology for teachers*. Englewood Cliffs, NJ.: Prentice Hall, Inc.