

SELF-CONCEPT, PERCEPTION OF THE LEARNING ENVIRONMENT AND EMPLOYABILITY: A STUDY OF VOCATIONAL HIGH SCHOOL STUDENTS IN PRAMBANAN YOGYAKARTA, INDONESIA

Fatwa Tentama*, Hardani Dwi Jayanti

Faculty of Psychology Ahmad Dahlan University Yogyakarta, Indonesia
fatwa.tentama@psy.uad.ac.id

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Abstract

Purpose: This study aimed to empirically examine the role of self-concept and perception of the learning environment on the employability of students who attend Muhammadiyah Vocational High School Prambanan Yogyakarta, Indonesia.

Methodology: The subjects of this study were 132 Grade XII students of Muhammadiyah Vocational High School Prambanan Yogyakarta, Indonesia. The sampling in this study was randomized using cluster random sampling technique. Data was collected using the self-concept scale, perception of learning environment scale, and employability scale. Data analysis was done using multiple linear regression.

Main Findings: The results showed that there was 1) a very significant positive correlation between self-concept and perception of learning environment simultaneously on employability with $p = 0.000$, ($p < 0.01$), 2) a very significant positive correlation between self-concept and employability with $p = 0.000$, ($p < 0.01$), 3) a very significant positive correlation between perception of learning environment and employability with $p = 0.000$, ($p < 0.01$).

Applications of this study: This study shows that self-concept and learning environment play an important role in preparing students to gain knowledge, skills, understanding, and personality in the Muhammadiyah Vocational High School environment, and then applied in the workplace after graduation. Parents and teachers must be able to create a positive learning environment to ensure a conducive and productive learning environment. The results of this study can also be used as a reference to prepare an employability skill training module in the field of psychology.

Novelty/Originality: To the best of our knowledge, research on the self-concept, perception of learning and employability of Muhammadiyah Vocational High School students is still rarely done both in Indonesia and abroad. This study focuses on the employability of Muhammadiyah Vocational High School students. Previous studies only discussed which is still limited to employability on graduates and employees.

Keywords: employability, self-concept, perception, learning environment, vocational high school

INTRODUCTION

The government expects vocational high school to become a vehicle for the development of knowledge and skills that can answer the challenges of the workforce tangibly. Vocational high school graduates are now expected to be able to meet the demands of the industrial world, which is increasingly competitive. However, it is still too premature to expect vocational high schools graduates to become workers who are ready in terms of both their knowledge, skills, and mentality. Thus, the biggest challenge in today's world of education is to generate graduates who have good employability that is exemplified by their academic ability, ability to master skills and personality.

Data from the Central Bureau of Statistics shows that the unemployment rate of vocational high school graduates has increased. Unemployment with vocational high school background in the period of 2008 February 2014 was 847.365 people and increased in 2015 by 1.174,366 people. Then, it increased again in 2016 as many as 1.348.327 people and continued to increase in the period of February 2017 as many as 1.383.022 people. Data shows that vocational high school graduates are the highest contributors to unemployment in Indonesia. Graduating from Vocational High School will be a ready-to-use employee in the workforce, apparently not having the employability to work.

Employability skills are essential for every individual who attend educational institutions, particularly students of vocational high schools. Vocational high schools must prepare their students to have employability as a provision to secure a job in the future (Wang & Tsai, 2014). This is by the opinion of Jameson (2008) who also emphasized the importance of developing and increasing the employability of students. Numerous experts believe that employability affects how individuals can better manage their careers (Hess, Jepsen & Dries, 2012; McArdle, Waters, Briscoe & Hall, 2007). Employability can improve teamwork, communication, self-management, analytical ability, and critical thinking (Lowden, Hall, Elliot, & Lewin, 2011).

Low employability leads to low self-esteem and efforts, willingness to enter the workforce (Benabou & Tirole, 2002). Individuals with low employability tend to have a more difficult time entering the workforce or getting a job that is in line with their expected career (Yorke & Knight, 2007). The current number of unemployed people is also caused by the low employability of individuals (Ronnäs & Shamchiyeva, 2011). Other impacts of low employability are inadequate decision

making, conflicts, inappropriate leadership, little meta-cognitive skills, ineffective performance, low social responsibility, and pessimism ([Jackson & Chapman, 2012](#)).

Students with low employability have the characteristics of having less extensive knowledge, difficulty adapting to school environments, and lacking skills of mastery ([Pool & Sewell, 2007](#)). Conversely, students who have employability are defined based on characteristics such as having goals, expectations, values, beliefs, norms, fear of not having a career, interaction style, and adaptability to the environment, workforce information networks ([Fugate, Kinicki & Ashforth, 2004](#)).

[Brewer \(2013\)](#) defines employability as a skill, knowledge, and competency that increases an individual's chances to acquire a job and smoothly enter the labour market. Employability is the ability of individuals to enter the workforce, adjust to the workplace, and become a dynamic in the workplace ([Coetzee & Roythorne-Jacobs, 2007](#); [Herr, Cramer, & Niles, 2004](#)). Employability refers to the ability of an individual to continually execute and acquire or create a job through the best use of both their abilities related to meta-career work and competencies ([Hall & Chandler, 2005](#); [Van der Heijde & Van der Heijden, 2006](#)). Many factors affect employability in students, including self-concept and perception of the learning environment.

LITERATURE REVIEW

Self-concept is an essential factor in the formation of employability within the school environment ([Dania, Bakar, & Mohamed, 2014](#)). Numerous researchers have found that self-concept is related to employability ([Wu, Tsai, & Chen, 2014](#)). Low self-concept can lead to low employability ([Kim, Kim, & Lee, 2015](#)). Self-concept influences an individual's decisions of attitude and behavior ([Chaplin, 2006](#)). Self-concept allows an individual to feel confident and positive about everything he or she faces, which in turn enables the individual to appreciate his or her self and see positive actions they can take to reach success ([Calhoun & Acocella, 2004](#)). Individuals who have a negative self-concept tend to be easily jealous of what others have, less able to control their emotions, and consider themselves inferior, leading them to become less confident or hesitant to try new things ([Hadley, Hair, & Moore, 2008](#)).

Self-concept refers to the individual's valuation of his or her personality, strengths, and weaknesses ([Ormrod, 2013](#)). Self-concept is an individual's illustration of the self, towards the self, and towards his or her hopes ([Berzonsky, 2001](#)). Self-concept is a matter that individuals want to display to others but begins from self-observation, which produces an image and assessment of the self ([West & Turner, 2007](#)). Self-concept determines how an individual behaves ([Calhoun & Acocella, 2004](#)). Self-concept is a comprehensive perception of self, how individuals evaluate themselves in various aspects, including social, interpersonal, academic, behavioral, and physical ([Preckel, Niepel, Schneider, & Brunner, 2013](#)). Individuals' valuation of their physical, psychological, social, emotional, and characteristics as well as aspirations and achievement will influence their behavior, self-esteem, and individual adjustment in life ([Hurlock, 2001](#)).

Another factor that affects employability is the students' learning environment. Some learning environment is supportive while others are not ([Jatkauskienė & Andriekienė, 2013](#)). Individual perceptions of the learning environment can take various forms, such as educational, psychological, material, physical, and intellectual conditions ([Fisher, Frey, Quaglia, Smith, & Lande, 2017](#); [Grigaliūnaitė, 2002](#); [Hung & Zhang, 2008](#); [Juceviciene, 2010](#); [Kaklauskas & Kaklauskienė, 2012](#); [Lipinskienė, 2002](#); [Nilson & Goodson, 2017](#); [Strange & Banning, 2015](#)). A positive learning environment is believed to be one of the solutions for increasing the employability of individuals ([Galand, Bourgeois, & Frenay, 2005](#)). Positive learning environments can also build teamwork in problem-solving, especially problems in creating jobs ([De Graaf & Kolmos, 2003](#); [Hmelo-Silver, 2004](#)).

Perception of learning environment is defined as an individual's perception of the physical, social or cultural environment where the individual performs their learning process ([Goodyear, Jones, Asensio, Hodgson & Steeples, 2001](#)). Perception of learning environment is the individual's perception of the place or space where their learning process occurs ([Blandin, 2008](#); [Brazdeikis, 2009](#); [Bullard, 2016](#); [Lipinskienė, 2002](#); [Mazalto, 2017](#); [Trakselys & Martisauskiene, 2013](#)). Perception of learning environment illustrates how individuals perceive interactions between individuals, teachers, learning materials, and supporting facilities ([Dumont, Istance, & Benavides, 2010](#); [Jatkauskienė, Andriekienė, & Trakselys, 2014](#); [Toluitene, 2013](#)). Perception of learning environment refers to the individual's perceptions of learning objectives, the role of the teacher and the individual in the learning process, and the role of the individual in relation to culture or learning environment ([Brazdeikis, 2009](#); [De Kock, Slegers, & Voeten, 2004](#); [Jensen, 2008](#); [Joseph, Haynes, & Cobb, 2015](#); [Lipinskienė, 2002](#); [Tuit, Haynes, Stewart, & Patton, 2016](#)).

The objective of the study to empirically examine the role of self-concept and perception of the learning environment on employability among students of Muhammadiyah Vocational High School Prambanan Yogyakarta, Indonesia. The hypothesis in this study is that there is a relationship between self-concept and the perception of the learning environment simultaneously on employability, there is a positive relationship between self-concept and employability and there is a positive relationship between the perception of the learning environment and employability.

METHODOLOGY

Population, Sample and Sampling Technique

The population of this study was grade XII students who attended Muhammadiyah Vocational High School Prambanan Yogyakarta, Indonesia. The subjects of this study were 132 students who came from 4 majors, namely: electrical engineering, light vehicle engineering, motorcycle engineering, and mechanical engineering. The research subjects were randomly selected using cluster random sampling technique.

This research involves two variables namely dependent variable and independent variable. The dependent variable in this study is employability and the independent variable in this study is self-concept and perception of the learning environment.

Measurement Instruments

Data was collected using the self-concept scale, the perception of learning environment scale, and the employability scale. The employability scale is based on the dimensions of employability formulated by [Fugate, Kinicki, and Ashforth \(2004\)](#), namely: career identity, personal adaptability, social, and human capital. The scaling model used in the employability scale is the Likert scale. Examples of items in the employability scale are "I have the skills needed in the workplace," "I hope to get a job that is in line with my field," and "I can act flexibly in a less supportive environment."

The self-concept scale referred to aspects of self-concept formulated by [Adams and Berzonsky \(2008\)](#), namely: the physical self, psychological self, social self, and moral self. The scaling model used for the self-concept scale is the model of a Likert scale. Examples of the self-concept scale items are "I am proud of the results of my work," "Learning is my responsibility as a student" and "A healthy body makes it easier for me to complete tasks."

Perception of the learning environment scale is based on the aspects of perception of the learning environment according to [Pena-López \(2009\)](#), which consists of the physical environment, the school environment, and the social environment. The scaling model used for the perception of the learning environment scale is the Likert scale. Examples of items on perceptions of learning environment scale are "School provides facilities that can support the learning process," "Classrooms where learning takes place feel comfortable and clean," and "Teachers teach in a fun manner."

Validity and reliability of measurement instruments

Results of the employability scale try out that involved 40 subjects obtained a reliability coefficient (α) of 0.882, with a corrected item-total correlation between 0.310 to 0.820. Twenty-four items are considered valid and reliable and were then used in the research.

Results of the self-concept scale try out which involved 40 subjects obtained a reliability coefficient (α) of 0.847, with a corrected item-total correlation between 0.377 to 0.630. Twelve items are considered valid and reliable and were then used in the research.

Results of the perception of the learning environment scale try out, which involved 40 subjects obtained results of the reliability coefficient (α) of 0.847, with a corrected item-total correlation between 0.265 to 0.582. Twenty-one items are considered valid and reliable and were then used in the research.

Data analysis

Data analysis was analyzed using parametric statistical methods. Data analysis was performed using IBM SPSS Statistics 21.0 employing multiple regression procedure, that is a statistical analysis technique to determine the correlation between self-concept and perception of learning environment towards employability.

RESULTS AND DISCUSSION

Normality Test

Table 1: Distribution of Normality Test

Variable	K-SZ	Sig.	Description
Employability	0.767	0.599	Normal
Self-concept	1.160	0.136	Normal
Perception of the learning environment	0.818	0.516	Normal

Based on the analysis of the normality test shown in table 1, it can be seen that the significance values of employability, self-concept, and perception of the learning environment are 0.599, 0.136, and 0.516 respectively, with $p > 0.05$, which indicates that each data set is normally distributed. Thus it can be concluded that each variable has a normally distributed data.

Linearity Test

Table 2: Linearity Test

Variable	F Linearity	Sig.	Convention	Description
Self-concept	0.768	0.000	$p < 0.05$	Linear
Perception of the learning environment	0.950	0.000	$p < 0.05$	Linear

The linearity test results are shown in table 2. The linearity of self-concept towards employability obtained an F of 0.768 and a significance level (p) of 0.000. Meanwhile, the linearity of perceptions of learning environment towards employability obtained an F of 0.950 and a significance level (p) of 0.000. This means that there is linearity or a line that connects the variables of self-concept with employability and perceptions of the learning environment with employability.

Multicollinearity Test

Table 3: Multicollinearity Test

Variable	Tolerance	VIF	Description
Self-concept	0.606	1.650	No multicollinearity
Perception of the learning environment	0.606	1.650	No multicollinearity

Table 3. indicate that self-concept and perceptions of learning environment have VIF = 1.650 (VIF <10) and tolerance = 0.606 (tolerance > 0.1) meaning that there is no multicollinearity between self-concept and perception of the learning environment.

Regression Analysis Test

Table 4: Analysis Results of Partial Regression

Variable	r	Sig.	Convention	Description
Self-concept with <i>Employability</i>	0.729	0.000	$P < 0.01$	Very significant correlation
Perception of Learning Environment with <i>Employability</i>	0.499	0.000	$P < 0.01$	Very significant correlation

From Table 4., it can be seen that the correlation between self-concept and employability has a value of $r = 0.729$ with a significance level of $p = 0.000$ ($p < 0.01$), which means that there is a very significant positive correlation between self-concept and employability. The correlation between the perception of the learning environment and employability has a value of $r = 0.499$ with a significance level of $p = 0.000$ ($p < 0.01$), which means that there is a very significant positive correlation between perception of learning environment and employability.

Table 5: Multiple Linear Regression Test

Variable	R	R Square	Sig.	Convention	Description
Self-concept and Perception of Learning Environment with <i>Employability</i>	0.731	0.535	$p = 0.000$	$p < 0.01$	Very significant correlation

The multiple linear regression test results are shown in table 5., the results of simultaneous multiple linear regression analysis, it was found that self-concept and perception of the learning environment can simultaneously contribute to the employability of students in Muhammadiyah Vocational High School Prambanan Yogyakarta, Indonesia. These results indicate that the first hypothesis is accepted, which means that employability can be predicted based on self-concept and perception of the learning environment. Simultaneously, the two independent variables contributed 53.5% to employability, which means that that other factors could influence the remaining 46.5%. Other factors that affect employability include soft-skills, problem-solving skills, internship experience, exceptional skills, and academic achievements (Finch, Hamilton, Baldwin & Zehner, 2013). Additionally, Juhdi, Pa'wan, Othman, and Moksini (2010) stated additional factors that can influence employability, namely career management practices, work experience, training, and education. The contribution of self-concept to employability is 50.1%, and the contribution of the perception of the learning environment to employability is 3.4%. Thus, self-concept as an internal factor contributes far more dominantly towards employability, relative to the contribution of perception of the learning environment as an external factor towards employability.

Based on the results of the partial multiple linear regression analysis, it can be concluded that the second hypothesis is accepted, which means that self-concept plays a role in the employability of students who attend Muhammadiyah Vocational High School Prambanan Yogyakarta, Indonesia. A positive self-concept will increase the employability of individuals, leading individuals to become more positive about everything he or she faces, which in turn enables the individual to appreciate his or her self and see positive actions they can take to reach success (Calhoun & Acocella, 2004). Individuals with a positive self-concept will have a relatively unambiguous and more concrete vocational orientation; leading them individuals to be more confident about their future career choices (Wu, Tsai, & Chen, 2014). Individuals who have a negative self-concept will see themselves as incapable and helpless, which will, in turn, influence their attitude in trying to find or create jobs (Stuart & Sundeen, 2006).

[Adams and Berzonsky \(2008\)](#) argue that self-concept serves as a depiction/image of a person, both in terms of their perception of the real self as well as his or her valuation of expectations, which are a combination of physical, psychological, social, and moral aspects. Students who have a positive self-concept are characterized by having favorable views of themselves and are grateful for what they own. Students also dare to try new things, dare to make decisions or take risks, and are optimistic, confident, and enthusiastic about setting directions and life goals and can determine the outlook of what step should be made in the future. Students as individuals and objects of the learning process must be able to develop their full potential to succeed both academically and in pursuing careers in the workplace. The possibility of students is reflected in their self-concept. Self-concept has been identified as a factor that can mediate the achievement of student employability and has a role in determining students' academic ([Gerardi, 2005](#)) and future career success ([Cotton, 2001](#)).

The results indicate that the third hypothesis is accepted, which means that there is a correlation between perception of the learning environment and employability of students in the Muhammadiyah Vocational High School Prambanan Yogyakarta, Indonesia. This finding is in line with the study of [Vermeulen and Schmidt \(2008\)](#), who discovered that employability could be predicted from an individual's perception of his or her learning environment. Individuals with a supportive learning environment believe that the activities they carry out enable them to build their understanding and develop the skills needed to acquire a job ([Barkaускаite & Motiejuniene, 2004](#); [Bullard, 2016](#); [Kisoniene & Dudzinskiene, 2007](#)). Individuals who perceive their learning environment positively tend to have better employability and have a commitment to keep attempting to find the job they desire ([Brewer, Lim, & Cross, 2008](#); [Pfau & Kay, 2002](#)). Individuals with a supportive learning environment tend to have more stable emotions when faced with failure to secure a job ([Guscinskiene, 2009](#)).

The learning environment is associated with the atmosphere that is created during the teaching and learning process, and functions as a supporting element for the development of knowledge, skills, and attitudes ([Vaatstra & Vries, 2007](#)). Learning environment consists of the atmosphere of the learning environment, the cleanliness of the environment, the manner in which teacher educates and develops the most appropriate teaching method, efficient, good relations between teachers and students, intimate interaction between fellow students, and the availability of community activities that allow students to learn and develop their personality. These elements above will facilitate individuals to maximize the acquirement of knowledge, understanding, skills, and personality that is needed to identify existing career opportunities. Thus the learning environment becomes important in employability. Research by [Chappell \(2003\)](#) found that the perception of the learning environment affected employability.

CONCLUSION

Conclusions in this study are, 1) a very significant positive correlation between self-concept and perception of learning environment simultaneously on employability, 2) a very significant positive correlation between self-concept and employability, 3) a very significant positive correlation between perception of learning environment and employability. Simultaneously, self-concept and perception of learning environment contributed 53.5% to employability. The self-concept as an internal factor contributes far more dominantly towards employability, relative to the contribution of the perception of the learning environment as an external factor towards employability.

IMPLICATIONS

The implications of this study can provide insight and awareness for students, parents, and teachers. This study shows that self-concept and learning environment play essential roles in preparing students to gain knowledge, skills, understanding, and personality within the school environment, and later on be applied in the workplace upon graduation. Parents and teachers must be able to create a positive learning environment, both physically and otherwise, to ensure a conducive and productive learning environment. The results of this study can also be used as a reference for preparing training modules, especially self-concept training, which was found to have a more dominant contribution in employability among vocational high school students. Thus students will be better prepared to acquire a job and adapt faster to their work upon graduating vocational high school.

LIMITATION AND STUDY FORWARD

This study focuses on only one Muhammadiyah Vocational High School. Future studies are expected to use a larger population and sample and involve several schools. This study exclusively focuses on two factors, namely Self-concept and perception of the learning environment. Future research is expected to include other factors such as self-confidence, adaptation, learning achievement, discipline, independence, and others.

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