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A Study on The Effect of Class of Honda Program on The Student's Self-Efficacy in The Vocational High Schools in Yogyakarta

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ABSTRACT

Vocational High Schools have to develop a good partnership with industry in order to prepare their graduates to be ready to work in certain areas of expertise, study in a higher education, or become an entrepreneur. One form of cooperation between vocational schools and industry is the special Honda class program. This program was implemented in more than 343 vocational high schools since 2015 by PT. Astra Honda Motor. It was developed as one of PT. Astra Honda Motor programs to support the development of vocational education in Indonesia. Therefore, this study aims to identify the self-efficacy of students in a special Honda class. This study used a descriptive method with a total sample of 219 from a total population of 647 students. Collecting data using a questionnaire. The results showed that the students' self-efficacy levels were high (18%) moderate (67%), and low (16%). The highest factor influencing student self-efficacy is the psychological state or student's ability to control their emotions (4.22) and the lowest is vicarious experience or student's belief in being able to do something based on observations of others (2.48).

Keywords: Special Honda Class, Self-Efficacy, Students

INTRODUCTION

Vocational High School (VHS) is one level of education that aims to equip graduates with the knowledge, attitudes, and skills to be ready to work in certain fields [1]. In addition, VHS graduates can also continue to higher education or become an entrepreneur [2]. To achieve this goal, every vocational high school has developed various types of study programs or special skills. The study program in VHS according to the Directorate General of the Ministry of Education No. 7013 in 2013 consists of nine areas of expertise, 46 Skills Programs, and 128 skill packages. One area of expertise is technology and technology expertise which consists of 18 skill programs, one of which is automotive technology which consists of 4 expertise programs including light vehicle technology, heavy equipment technology, automotive body repair, and motorcycle technology.

Motorcycle Technology is a new skills program that was officially opened in 2013. Prior to 2013, the motorcycle technology program was additional material studied in the Light Vehicle Technology study program. The motorcycle technology study program was developed because of the huge potential for the number of motorcycles (84,732,652 units) in 2013 [3]. The large number of motorcycles requires regular maintenance and repair by competent mechanics in the specific field. Therefore, skilled motorcycle technicians are needed to meet the needs of motorcycle maintenance. This mechanic can be trained by VHSs that have a motorcycle technology program. The number of VHSs that have motorcycle technology programs in Yogyakarta are 31 SMKs [4].

The strategy to improve the quality of graduates of the motorcycle technology program is to develop cooperation between SMK and industry. In previous research, it was found that graduates from vocational education were still unable to meet the needs of the industry [5]. It indicated that the education and training received by students in vocational school was unmatched with the work they would do in industry. These situations include differences in work procedures, machines, tools, and competencies learned. Hence, The Honda special class program was developed by the Astra Honda Motor Company as a solution to answer these problems. The development of the Honda Special Class program aims to improve the competence of Motorcycle Technology Vocational School graduates to match with the needs of the industry.

Honda's special class program started in 2012 with 1 Vocational High School as a pilot project. The aim of the Honda program class is to improve the quality of vocational high school graduates and to link and match industry and vocational education. In addition, the Honda program class is also an implementation of Catur Dharma Astra (corporate philosophy) which is an asset to the nation, provides the best service to

customers, emphasizes respect for individuals and fosters teamwork, and strives for excellence [6].

The Honda Class Program consists of several activities including curriculum development that integrates hard and soft skills, training for teachers in basic and advanced competency, development of workshop facilities according to Honda standards, provision of equipment and materials for practice in workshop, internships at Honda workshop network (AHAS), introduction of the latest products and technologies from Honda, industry visits, and monitoring of the implementation of Honda's special class program.

The Honda special class curriculum was developed based on the national curriculum and added a special curriculum from Honda. The materials given to vocational school students are equivalent to the basic training level materials for motorcycle maintenance and repair received by Honda employees. The development of workshop facilities is realized by providing the type and minimum amount of equipment that must be owned by a vocational high school based on the number of students. In addition, the motorcycle unit for training in Honda's special class is also equipped with manuals and catalogs to make it easier for students to learn.

Other Honda Class programs, such as internships at the Honda repair shop network, are given to vocational students who have taken Honda's special classes. Students who have completed four semesters are given priority to do internships at Honda's network of workshops. Meanwhile, basic and advanced competency training programs for teachers are carried out in order to prepare teachers to train students according to the procedures applied by Honda. The training was also added to the introduction of the latest products and technology from Honda, either by inviting students and teachers to see firsthand activities at the Honda factory or presenting the company's latest products to vocational school. Honda's special class program is monitored regularly to see the effectiveness of the implementation carried out by the school and to find obstacles encountered in its implementation. The monitoring results are discussed and followed by a solution or further action based on the findings in the real situation. For instance, it is found that students have academic or entrepreneurial potential but are less capable in terms of finance, therefore, the company can provide recommendations to these students to study at Astra Polytechnic. Meanwhile, students who have entrepreneurial potential are assisted by Honda to start their own business on a motorcycle maintenance.

Vocational high schools that collaborated to develop a special Honda class had to meet several requirements. The requirement including a permit from the district/provincial education office, a foundation permit for private schools, having

a minimum motorcycle technology major has reached grade 2 (XI), and the facilities are in accordance with the standards that must be met in the motorcycle curriculum. Honda put more emphasis on meeting the minimum standards that must be owned by schools and not pursuing the quantity target of the number of vocational schools that are expected to work together. As of November 2015, there were 343 vocational programs developed throughout Indonesia. In Yogyakarta, there are 3 vocational schools that run special Honda classes and 3 vocational schools that have signed a Memorandum of Understanding with Astra Honda Motor Corporation to develop the Honda class program in the following year.

The Honda Class Program provides great benefits to schools. While the benefits obtained by Honda in implementing this program are the fulfillment of human resources for Honda's factories and workshop networks, prospective students at Astra Polytechnic, and reducing training costs for prospective mechanics who will work at Honda. The fulfillment of human resources for Honda's factories and workshop networks cannot be fully met because there are alumni of the Honda program class who prefer to continue their studies at university rather than work in industry. In addition, graduates of the Honda program tended to choose to work at Honda's factory center in Jakarta rather than being placed in Honda's network of workshops outside the capital city.

Honda's special class program consists of professional competency training for teachers, implementation of the Honda curriculum, provision of equipment and materials according to Honda standards, and conducting competency tests in accordance with the standards applied at Astra Honda Motor. Therefore, it is necessary to study the impact of the implementation of the Honda Class program on students' self-efficacy. Self-efficacy is a person's belief in being able to complete a job [7][8]. Although self-efficacy does not directly indicate a person's actual abilities [9], but it can be a significant factor to predict the performance of each individual [10][11]. Previous research revealed that self-efficacy is positively correlated with student academic achievement [12][13][14]. Self-efficacy also has an influence on the decisions students make regarding the choice of majors in higher education and future career development [15].

Honda Class program on students' identified four main factors forming a person's self-efficacy, including mastery experience, vicarious experience, verbal persuasion, and psychological state [16]. Mastery experience is a factor that helps to grow one's confidence to be able to do a job based on the success of doing the same thing before [17]. Vicarious experience is a factor that helps increase a person's confidence to be able to do a job after seeing other people being able to do the same thing [18]. Verbal persuasion is a factor that helps foster a

person's confidence to be able to do a job thanks to the positive support from the people around him [15]. While the psychological state is a psychological or emotional factor that affects a person's level of confidence to complete a certain job [19].

RESEARCH METHOD

This research is a descriptive study which was conducted to identify and describe the level of student's self-efficacy in the Honda's special class. The research population consisted of 647 students from 3 vocational schools who had implemented a special Honda class in Yogyakarta. By using the slovin formula, the number of samples for this study was 219 students, most of whom were male (97%).

The instrument used in this study was adapted from the instrument developed by Usher and Pajares regarding student self-efficacy in mathematics [20]. The instrument developed by Usher and Pajares consists of 4 sub-variables and 24-item statements. The instrument has been proven its validity and reliability, indicated by a high level of reliability for each sub-variable: mastery experience ($\alpha = 0.94$), vicarious experience ($\alpha = 0.94$), verbal persuasion ($\alpha = 0.95$), and physiological state ($\alpha = 0.85$). In addition, each item has a validity between 0.612-0.827. Data for this study was collected by distributing questionnaires directly to students. There were 219 returned and well-filled questionnaires from the 250 questionnaires distributed to students. Furthermore, the data were analyzed descriptively to explain the level of self-efficacy of students who took part in the Honda special class program.

RESULTS AND DISCUSSIONS

Validity and Reliability of the Instrument

Based on data analysis, this study obtained the following results. The overall instrument reliability level is 0.850 (high). Meanwhile, the reliability for each sub-variable is also quite good, mastery experience (0.714), vicarious experience (0.723), verbal persuasion (0.891), and physiological state (0.846). While the level of validity for each item shows that all items have good validity with a Pearson correlation value between 0.215 ~ 0.616 at a significance level of 0.01. The results of testing the validity and reliability of the instrument indicate that the instrument is reliable enough to be used as a measure of student self-efficacy in Honda's special class.

1. Student's self-efficacy

The average level of student self-efficacy is 3.45, while the average for each sub-variable of student self-efficacy is mastery experience (3.09), vicarious experience (4.01), verbal persuasion (2.48), and psychological states (4.22). By using the formula created by Hambleton and Rogers, students' self-efficacy levels can be divided into three levels (high, medium, and low) [21]. The number of students who are

included in the high level of self-efficacy is 39 (18%) students. Meanwhile, students who are included in the medium self-efficacy are 146 (67%) students and the low ones are 34 (16%) students (table 1).

Table 1. The level of self-efficacy of Honda's special class students

No	Formula	Category	SE (%)	ME (%)	VE (%)	VP (%)	PS (%)
1	$X \geq (\mu+1\sigma)$	High	39 (18)	34 (16)	42 (19)	39 (18)	32 (15)
2	$(\mu-1\sigma) \leq X < (\mu+1\sigma)$	Medium	146 (67)	156 (71)	140 (64)	147 (67)	151 (69)
3	$X < (\mu-1\sigma)$	Low	34 (16)	29 (13)	38 (17)	33 (15)	36 (16)
Total			219 (100)	219 (100)	219 (100)	219 (100)	219 (100)

Note. X = skor, μ = rata-rata, σ = standar deviasi, SE = Self-efficacy, ME = mastery experience, VE = Vicarious experience, VP = Verbal persuasion, PS = Phsycological state.

The level of mastery experience or students' confidence to be able to do a job based on the success of doing the same thing before has an average score of 3.09. The item with the highest score for this sub-variable is item number three (3.73) with the statement that even when I study very hard, I find it difficult to participate in activities in a special Honda class. While the item that has the lowest score is item number six (2.65) with the statement, "I managed to carry out even the most difficult competency test questions in the Honda special class".

The average score for vicarious experience or a person's belief in being able to do a job after seeing other people being able to do the same thing is 4.01. The statement item that has the highest score is item number three (4.42) with the statement, "Seeing students from my lower class are able to repair motorbikes better than I encourage me to try even better". While the item that got the lowest score was item number four (3.75) with the statement, "When I see how other students repair motorbikes, I can imagine myself repairing motorbikes in the same way".

Verbal persuasion or a person's belief to be able to do a job because of positive support from people around him has an average score of 2.48. The statement that got the highest score was item number three (2.78) with a statement by parents in the family saying how smart/talented I was. While the item that has the lowest average score is item number one (2.17) with my teacher's statement saying that I am a smart student in a special class for Honda.

Psychological state or students' beliefs to do a job that grows from their emotional maturity get an average score of 4.22. The statement item that got the highest score was

number five (4.56) with the statement "I get depressed when I think about studying in a special Honda class". While the statement item that received the lowest score was number two (3.87) with the statement "repairing a motorcycle consumes all my energy". All items in this sub-variable use negative statements, so that when data processing is carried out, all items are reversed in order to get appropriate results to show overall student self-efficacy.

The Effect Self-Efficacy for Students

The students' self-efficacy levels in this study were divided into high, medium, and low. The number of students who are included in the high self-efficacy performance is 39 (18%) students. Meanwhile, students who are included in the medium self-efficacy performance are 146 (67%) students and 34 (16%) students have low self-efficacy. The number of students with high and low self-efficacy performance is almost the same and the majority are in moderate self-efficacy performance. This indicates that the implementation of the Honda special class program in general helps students have confidence to do work related to assignments during learning in Honda's special class and also competency tests at school.

The component of self-efficacy that has the highest score is the psychological state or the ability of students to manage their psychological condition so that they have the confidence to follow and carry out tasks in Honda's special class. This gives an indication that Honda's special class program is well received by students. They also feel happy and comfortable entering a special Honda class. Honda's special class program is a form of collaboration between industry and vocational schools that provides benefits in the form of additional learning facilities and infrastructure in schools. In addition, graduates from this class also have open opportunities to work in industry, continue to higher education, or become entrepreneurs. These factors make students feel comfortable and not pressured to join a special Honda class. In addition, Indonesian people in general have high optimism [22], so that this optimistic attitude helps foster student confidence to be able to complete a job.

While the self-efficacy component that has the lowest average score is verbal persuasion or students' beliefs to do a job thanks to verbal support from the people around them. A low score indicates that the support of people around students is still not strong enough. Therefore, it is necessary to socialize to parents, teachers, and fellow students to give more positive comments to students. A culture of mutual support will further increase students' self-efficacy. Furthermore, based on the highest score on the questionnaire distributed to students, it appears that support from parents is the biggest factor to strengthen students' self-efficacy. While verbal support from the teacher has the lowest contribution among

other sources. This indicates that during the learning process in Honda's special class, the teachers have not been optimal in giving verbal attention to the students in their class.

Mastery experience has an average score of 3.09. This score is lower than the students' average vicarious experience and psychological state scores. This indicates that the experience gained by students during the learning process in Honda's special class program has not been maximized. The statement items in the mastery experience sub-variable include the experiences students have while participating in the learning process in Honda's special class. The score for the mastery experience variable which is lower than the other 2 variables indicates that the successful experience of students during the learning process in Honda's special class is still limited. This could be because students did not get the opportunity to practice directly or it could also be because the scores obtained by students were not satisfactory.

The average score of vicarious experience or students' confidence to do a job grows after observing other people being able to do the same thing, which is 4.01. Based on the analysis of the statement items that have the highest average score, there are indications that students' confidence to do a job will increase when they see other people who are considered to be no more capable than themselves but have actually managed to show a good job.

CONCLUSION

Based on research data and discussion, it can be concluded that Honda's special class program helps students to have self-efficacy or confidence to do a certain job. The self-efficacy factor that has the highest score is the psychological state or the psychological condition of students during the learning process in Honda's special class. While the self-efficacy factor that has the lowest score is verbal persuasion or verbal support from people around students including parents, teachers, and peers. Based on the research results obtained, it is hoped that the teachers in the Honda special class program can be more optimal in providing support or positive comments to students. In addition, students also need to get more practical experiences so that they can add to their successful experience in completing a job. The results obtained need to be developed to determine the difference in self-efficacy of students who take Honda special classes and students who do not follow this program. In addition, the academic achievement of students in the Honda special class also needs to be investigated to find out how much influence this program has on the academic improvement of vocational students.

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