Conference Paper

Is Modelling Technique Effective to Improve Achievement Motivation of Junior High School Students?

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Abstract

This research has purpose to find out the effectiveness of modelling technique toward achievement motivation of Muhammadiyah 2 Junior High School Students, Mlati. It was a quasi-experimental research by using non-equivalent control group design. Techniques of collecting data were achievement motivation scale to find out level of achievement motivation actions. The subject were 20 low scored achievement motivation students. The techniques of analyzing the data were nonparametric statistic method using Wilcoxon test by using 5% significant level. The findings showed improvement of achievement motivation of experiment group, 8.4%. Meanwhile, the control group improved 0.13%.

Keywords: Modelling Technique; Achievement Motivation.

1. Introduction

Improvemental aspect in adolescence age lasts between 12 – 21 year old by categorizing the ages as: 10 – 12 year is as initial adolescence age, 15 – 18 year as middle adolescence age, and 18 – 21 year as final adolescence age (Santrock, 2004). In early adolescence age, 12 – 15 year, from social Improvement, children experience stresses in identity seeking process. An individual must be guided to differ by himself which one he should do and should not do (Lie, 2003:105) and critical age of adolescents in developing their identities are to be competent and full achievement student (Hughes, Im, and Alee, 2015).

Being full of achievement is an effort to achieve the best preferred thing and it should gain more attention by teachers and schools. It aligns with purpose of National Education stated in Indonesia Constitutions Number 20 Year 2003 Chapter II Article 3 about Improvements of ability and characteristics and useful civilization with dignity to educate our nation. Student achievement motivation theory claims students have motivation to
be full of achievement, successful to achieve the targeted objects, better in developing self-confident trust upon his owned ability, and be able to motivate an individual to have better achievement motivation (Notwendig, 2010:10), actions to achieve and to avoid failures in situation in which individuals do their activities (Ishihara, Morita, Nakajima, Okita, Sagawa, Yamatsu, 2018:3). “Achievement motivation is an internal process that activities, guides, and maintains behavior over time. There are different kinds, intensities, aims, and directions of motivation” (Slaivn, 2012:309). Achievement motivation is a need to motivate individual to develop his or her ability to successfully achieve their demanded dreams on activities of daily lives.

To allow them easily gaining and safely passing through their transition, they need more knowledge and understandings about achievement motivation both academically and non-academically. Based on preliminary study on the field, it was gained results of achievement motivation instrument scale given by researcher to 100 seventh graders of Muhammadiyah 2 Junior High School, Mlati, Yogyakarta 7.0% of them were in very high category, 50% high category, and 43% moderate category. Meanwhile, achievement motivation given to 149 graders of MuhammadiyahPakem Junior High School was 13.4% of them were in very high category, 67.11% high category, and 19.5% moderate category.

From the categories above were supported by observation done to some part of students experiencing low achievement motivation with habitual indications such as being lazy to learn, delaying their tasks, feeling less confident, having no interest in school activity, and being easy to get bored due to the tasks. Based on the problems faced by in question students, there was a need a service to improve achievement motivation. In guiding and counseling service, there are some counseling approach technique, especially behavioral approach theory by using modelling (Corey, 2013:19). Modelling technique is an expert model and it has demanded competency to imitate. Through their revealed actions and thoughts, a competent model transmits knowledge and teaches observers effective skills and strategies to manage environmental demands (Bandura, 1997:4). Components of modeling technique are important in social cognitive domain, referring to changes of cognitive and affective behaviors originating from observation of a model or some models. The expected modelling behaviors can stimulate to imitate other model which has had purpose to achieve.

Related research about modelling technique was ever done by some researchers. The first was done by Zulfa on 2018 with her findings showing that modelling technique was effective to improve academic self-efficacy and student learning. The next was done by Damayanti, 2016, with her findings showing decreasing aggression through
behavioral counseling using modelling technique. Arinata, Sugiyono & Purwanto in 2017, found that modelling technique was effective to suppress bullying.

The previous study existences showing ineffectiveness was toward aggressive behavior in which caused the researcher to doubt the model whether the model will lead to similar result if it is implemented through modelling technique in group counseling toward achievement motivation improvement of seventh graders. This research has purpose to find out the effectiveness of modelling technique toward achievement motivation improvement of Junior High School students by using achievement motivation scale as meant to reveal problems, consisting 61 items spread to the students.

2. Material & Methodology

The used method of the research was quasi-experiment with nonequivalent control group design (non-equivalent pretest-posttest). Johnson & Chirstonson (2014) stated the first procedure in nonequivalent control group design is giving experimental group and control group pretest and then, treatment condition (experimental intervention) is given to experimental group. The treatment is group counseling by using modelling technique given to group of students with low achievement motivation. Different provision will cause comparison to test the effectiveness of certain intervention. The used instrument was achievement motivation scale through expert judgments and validity test review and its reliability. The instrument consisted of 61 items given to 100 students of Muhammadiyah 2 Junior High School, Mlati, Yogyakarta. The sampling technique was purposive sampling with moderate achievement student criteria. Based on achievement motivation scale assessment, were 10 students categorized to be moderate then grouped into two groups: ten students of experimental group whom were given the intervention and control group whom was given the already guiding and counseling approach.

The data analysis was using Wilcoxon Test to find out the differences of paired group. Based on the assessment of the test using software SPSS (Statistical Package for Social Science) 21.0, it was gained significant level with qualification if Sign < 0.05, then Ho is denied and Ha is accepted. The statement means there is improvement of the students after intervention by using modelling technique.

3. Results and Discussion

The result of achievement motivation scale given to 249 students had shown most of them were in high category. However, there were some of them included in moderate so
if they were just let so, their condition would disturb their academic and non-academic achievements.

Based on distribution score of pretest and posttest of achievement motivation scale toward both teams showing the average score of the teams improved. Here is the result of the distribution of the scale of both teams.

| No | Group             | Pretest | Posttest |
|----|-------------------|---------|----------|
| 1  | Experimental Group| 60,45   | 68,85    |
| 2  | Control Group     | 60,53   | 60,66    |

Based on table 1, it is known that the average score of pretest of experiment group was 60,45 and posttest was 68.85. Meanwhile the average of control group pretest was 60.53 and posttest was 60.66. Overall, the improvement from pretest and posttest of achievement motivation of both teams is shown below:

Although both teams experienced improvement but the average of experimental group was higher than the control group. It can be seen from the posttests of the teams. Experimental group gained 68.85 and control group gained 60.66. Based on the data, it can be concluded intervention by providing service by using modelling technique was effective to improve achievement motivation of the students.

Achievement motivation is grouped into six aspects according to McClelland (Agustin, 2014:12), they are responsibility, bravery to take risk, feedback, creativity and innovation, determination to accomplish tasks, and having realistic purposes. Those achievement motivation aspects based on pre-test of experimental group are:

Based on the table above, the Improvement of achievement motivation aspects between after intervention and before it by using modelling technique got improvement.
Table 2: The Improvement of Achievement Motivation Aspects of Experimental Group.

| No | Aspect                          | Pretest | Posttest |
|----|--------------------------------|---------|----------|
| 1  | Responsibility                 | 59.75   | 69.50    |
| 2  | Bravery to take risk           | 59.55   | 67.50    |
| 3  | Feeling like of feedback       | 65.00   | 68.64    |
| 4  | Creativity and Innovation      | 57.50   | 65.56    |
| 5  | Determination to accomplish tasks | 59.38  | 71.88    |
| 6  | Having realistic purposes      | 61.25   | 69.38    |

The improvement scores occurred on each aspect of achievement motivation. Here is all achievement motivation aspect improvement explained through this figure:

Figure 2: The Improvement of Achievement Motivation Aspects of Experimental Group.

Each aspect improvement of experimental group was known to have improvement on pretest and posttest scores. The highest percentage improvement was on determination aspect. Meanwhile the lowest one was creativity and innovation aspect. Furthermore, there was improvement of the aspects on control group as follows:

Table 3: The Improvement of Achievement Motivation Aspects of Control Group.

| No | Aspects                          | Pretest | Posttest |
|----|--------------------------------|---------|----------|
| 1  | Responsibility                 | 62.00   | 61.50    |
| 2  | Bravery to take risk           | 61.82   | 61.36    |
| 3  | Feeling like of feedback       | 61.82   | 61.59    |
| 4  | Creativity and Innovation      | 58.61   | 61.39    |
| 5  | Determination to accomplish tasks | 60.21  | 59.58    |
| 6  | Having realistic purposes      | 57.81   | 58.13    |
Data of the aspects of control group was known to have improvements on pretest and posttest scores and there were some known to have equality. Here is the improvement of the aspects of control group explained on the figure:

![Graph showing improvement in aspects of control group]

Figure 3: The Improvement of Achievement Motivation Aspect of Control Group.

The improvement of the aspects of control group gained improvement. Aspect with digression was determination to accomplish task, while aspect with improvement was creativity and innovation. Modelling technique activity done in this research used Bandura stages (Omrod, 2012: 124), suggesting four needed process before an individual could model other people’s actions: attention, retention, motor, reproduction, and motivation.

4. Conclusion

Based on the discussion, it could be concluded that counseling service using modelling technique was proven effective to improve students’ achievement motivation. During the process of providing the technique, students gained new learning and experience. The result of the model could also provide chance in learning to be brave, confident on his owned ability, independent, and responsible. It was caused since in the process of the model, students were facilitated to observe. Generally, it could be concluded that modelling technique was effective to improve achievement motivation of Junior High School students.

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