Improving Students’ Achievement Motivation Through Role-Play

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Abstract
The background of the study is the low achievement motivation of the students in which they are unable to show their potential optimally. This study aims to increase the students’ achievement motivation through role-play. The study employed a quasi-experimental method with a non-equivalent (pretest and posttest) control group design. The participants of the study were the grade X students of Senior High School 6 Bandung in academic year 2019/2020. The result shows that students’ achievement motivation is increased through role-play. Role-play technique is able to provide changes in the students’ attitudes which are supported by the results of the assessment conducted on selected students as assessors.

Keywords: Role-play technique, students’ achievement motivation, students’ role

1. Introduction
Learning is important for every individual because humans are required to learn throughout life (lifelong learning), in which processes and activities always occur in human life in an ever-changing society. The learning process will always be related to each individual’s life which takes place in the context of an ever-changing environment. One of the most important things needed from this process is achievement motivation. Achievement motivation is needed since it will have an impact on the spirit of an individual. In addition, it is important as an encouragement for the students who always strive to improve and even maintain their high abilities with superior standards (Singh, 2011).

Activities related to the learning activities, achievement motivation is needed as an effort that must be conducted to achieve success in a competition or other competitions based on the excellence of other people's achievements or previous self-achievement (McClelland, 1987). Achieving success can be reached with the high achievement motivation by providing an important foundation for solving cognitive behaviors such as planning, organization, decision making, learning, and assessment.

In fact, not all students have high motivation, and few of them also have very good potential in their learning development, but in the end, the resulting achievement is still low or in other words, the students’ achievement motivation is still far from expectations. Students with low achievement motivation, even do not have achievement motivation will certainly face obstacles in the implementation of their learning, for example, they do not have superior achievement even they are classified as the lower group, and are unable to perform their potential optimally so that there is a gap between their potential intelligence with their achievements.

If the achievement motivation is low, the students’ achievement development process will be hampered. So, achievement motivation plays an important role in encouraging someone to achieve success in competing with the standard of excellence, derived from their own autonomous standards in the past or the achievements of others (Damrongpanit, 2019; Lin et al., 2020).

Theoretically, students who have superior potential should have high achievement motivation, especially their intellectual potential, and most likely will not experience difficulties or obstacles during the learning process since their potential is very good. Students who are not able to perform well even though their potential is superior good in the educational terms are called underachievers. Synder et al. (2019) states that underachiever is a condition when students cannot perform their potential. The characteristics of the underachiever appear in two directions of behavior
in the classroom, namely avoidance and aggression (Dowdall and Colangelo, 1982). In addition, they often say that lessons in school are irrelevant or not important, and they are more interested in other activities at school.

The underachiever characteristics are generally associated with low academic achievement including low self-perception, negative attitudes towards school, negative attitudes towards teachers and class, low motivation, low self-regulation, and low goal setting (McCoach and Siegle, 2003a). The attitudes of underachiever students always have a negative view of school which has an impact on the low motivation of the students in learning, including their achievement motivation (McCoach and Siegle, 2003b).

The results of the previous study conducted at Senior High School 6 Bandung of grade X were 25 students with low achievement motivation were found and they were indicated by the comparison of psychological measurement results (psychological tests) and learning achievement results. The tendency of the grade X students to have low achievement motivation is clarified by knowing the level of the achievement motivation after conducting the initial measurement with the results of the level of the students’ achievement motivation which is generally low. Another aspect that indicates the low achievement motivation of the students is pointed out by the presence of some students who tend to be bored with the learning atmosphere, some students who tend to come late to school, some students who do not pay attention to the teacher, some students who lack of encouragement for learning needs, some students who lack of interest during the learning process, and some of them who do not even do the assignment given by the teacher. In fact, the learning process at Senior High School 6 Bandung is quite good in general, with excellent class programs and digital-based learning.

In line with the problems above, there must be assistance to the students in order to increase their achievement motivation, not only create an interesting learning process, but also design the learning process which is appropriate to the students’ ability.

More than that, an appropriate method is needed to increase their achievement motivation, one of which is group counseling. There are several techniques that can be used in group counseling, namely information exchange activities, group discussions, problem solving, role-playing, simulations, and field trips. Guidance and counseling that can increase achievement motivation is role-play technique. Krebt (2017) adds that role-play technique can express human relationships by demonstrating, collaborating, discussing, exploring feelings, values and problem-solving strategies among participants. The theme used in role-playing must actually occur in everyday life.

According to Kolodziej (2010) achievement motivation can be increased by providing training, role-playing, and psychological skills which requires the role of the schools, such as the role of teachers, especially the role of teachers/counselors. Role-playing is a game where players play imaginary characters and collaborate to knit a story together. Role-playing technique is considered to be the most appropriate technique since Harmer (2002) states that role-play is a fun technique which can motivate the students to increase their self-confidence also provide opportunities for them to change their behavior.

The results of the previous research stated that role-play technique, learning motivation, and achievement motivation were used as references to conduct research with the assumption that role-play technique can increase students’ achievement motivation. Research using role-playing technique has been carried out by several researchers, but the research related to the students’ achievement motivation is relatively limited.

Role-play is a varied technique, namely information-giving techniques, group discussions, problem solving techniques, role-playing, and simulation games. Role-playing can be described as a guidance technique by playing a role in a group approach in an effort to provide assistance to individuals; what is meant by an approach is the use of social-psychological interaction situations that occur in groups for the purposes of achieving guidance goals (Rao and Stupans, 2012).

Effective role-playing techniques for increase achievement motivation Senior high School 6 in Bandung underachiever students I Bandung City for Academic Year 2019-2020. The effectiveness of role-playing techniques can be seen from t-test results that show a difference value of the achievement motivation aspects of student’s underachiever the experimental group with group underachiever student’s control. Besides that, the effectiveness of the technique role-playing is also supported by its existence change in attitude shown by underachiever learners before, and after giving treatment, it is proven through the results of the daily journal, that assessment underachiever students do select as assessor, along with observation.

2. Methodology

This is a quantitative research. Quantitative research is used to numerically describe the effectiveness of role-play technique to increase achievement motivation of the grade X students of Senior High School 6 Bandung in academic year 2019/2020.

The research design used was experimental, namely quasi-experimental with non-equivalent (pretest and posttest) control group design, the experimental group and the control group were not chosen randomly but based on certain considerations (purposive sampling); in this case, the characteristics of the students of grade X became the primary
consideration. Each control group and experimental group was given a pretest and posttest. After the pretest had been
given, the experimental group was given treatment through role-play technique. The control group was not given a
certain treatment during the role-play. It was conducted to find out the effect of the treatment given related to the
increase of the students’ achievement motivation. The research design of the pretest-posttest non-equivalent control
group can be seen in Table 1.

| Table 1. Quasi-experiment pre-test post-test non-equivalent control group |
|-------------------------------------------------|
| **Experimental Group (A)** | **Pretest** | **Treatment** | **Posttest** |
| **Control Group (B)** | **Pretest** | **No Treatment** | **Posttest** |

The participants of the study were the grade X students of Senior High School 6 Bandung. There were 323
students of grade X, but only few students who have certain characteristics took apart in this study. The students’
characteristics used in this study were based on the following criteria: by comparing the IQ scores of the students with
the academic achievement obtained from the average value of their report and the results of the teacher evaluations.
The sample that matched the criteria was 20 students who were divided into 10 experimental groups and 10 control
groups.

The instrument of the study used a measuring tool related to the achievement motivation developed by the
Laboratory of Educational Psychology and Guidance at the Faculty of Education, Indonesia University of Education
(2006) based on the theory of McClelland (1963). The measuring instrument is used by asking the students carefully,
in which the subject must choose one of the statements.

The research procedures were carried out in 3 stages, those are described below.

1. The preparation stage is carried out as follows. a) Identification of the problems that occur in the field; b)
   Literature review; and c) Determination of the research samples.
2. The implementation stage includes. a) Pretest with achievement motivation instruments; b) Formulating role-
   play technique which was appropriate to the description of the increase of the students’ achievement
   motivation; c) Implementing interventions using a role play intervention design to increase the students’
   achievement motivation, in Edusentris, Journal of Education and Teaching, Vol. 3 No. 1, March 2016,
   experimental group for 3 weeks; d) Testing the effectiveness of role play technique to increase the
   achievement motivation of the students with treatment during the role play technique carried out for 6 times
   with 9 stages of role play.
3. The final stage. At this stage, the achievement motivation regulation data were processed and analyzed to
   measure the level of the achievement motivation in the experimental class before and after the treatment of
   role play technique, and also compared with the results of the pretest and posttest control class.

The data were analysed by using t-test. T-test is a comparative test, in other words, it is a different test to
determine whether there is a significant difference in mean or average between two unpaired groups. T-test aims to
examine the effectiveness of a treatment in changing a behavior by comparing the conditions before and after the
treatment given. T-test was used because the sampling was carried out purposively with a normal and homogeneous
distribution. The effectiveness of the treatment can be seen from t-test using the SPSS 18 program.

3. Results and Discussion

The results of the average recapitulation of the achievement motivation aspects of the grade X students of SMAN 6
Bandung can be seen in Table 2.

Based on Table 2, before giving treatment, it is known that the achievement motivation of underachiever students
in the experimental group is in very low qualification with the percentage of 70%, and in a low qualification with the
percentage of 30%. The control group is in very high qualification with the percentage of 20%, high qualification with
the percentage of 20%, and low qualification with the percentage of 60%.
Table 2. Data recapitulation on achievement motivation aspects of the grade X students of SMAN 6 before treatment

| No | Score | Qualification       | Experimental Group | Control Group |
|----|-------|---------------------|--------------------|---------------|
|    |       |                     | F   | Percentage (%) | F   | Percentage (%) |
| 1  | ≥ 66  | Very High (VH)      | 0   | 0%             | 2   | 20%            |
| 2  | 55-66 | High (H)            | 0   | 0%             | 2   | 20%            |
| 3  | 46-55 | Mid (M)             | 0   | 0%             | 0   | 0%             |
| 4  | 36-45 | Low (L)             | 7   | 70%            | 6   | 60%            |
| 5  | ≤ 35  | Very Low (VL)       | 3   | 30%            | 0   | 0%             |
|    |       | Total               | 10  | 100%           | 10  | 100%           |

The tendency of the low achievement motivation of students is measured based on ten aspects. Those are as follows:

- The need for results (N);
- Carry out activities in obtaining results (I);
- The intensity of achievement anxiety (Ga +);
- Anxiety about failure (Ga-);
- Overcoming obstacles that come from self (Bp);
- Overcoming obstacles that come from outside (Bw);
- Subjects’ satisfaction with the results (G +);
- Disappointment with failure (G-);
- Encouragement that helps to navigate (Nup); and
- The intensity of the desire to achieve the best possible result (Ach.T).

Table 3. Overall pretest average results for each aspect of achievement motivation of the grade X students of senior high school 6

| No | ASPECT                                      | Experimental Group | Control Group |
|----|---------------------------------------------|--------------------|---------------|
|    | Average | Score Scale | Qualification | Average | Score Scale | Qualification |
| 1  | The need for results (N)                    | 34.6 | ≤ 35 | Very Low | 36.8 | 36-45 | Low |
| 2  | Carry out activities in obtaining results (I)| 36.2 | 36-45 | Low | 43.4 | 36-45 | Low |
| 3  | The intensity of achievement anxiety        | 30.3 | ≤ 35 | Very Low | 42.3 | 36-45 | Low |
| 4  | Anxiety about failure (Ga-)                 | 38.9 | 36-45 | Low | 37.7 | 36-45 | Low |
| 5  | Overcoming obstacles that come from self (Bp)| 35.5 | ≤ 35 | Very Low | 42.8 | 36-45 | Low |
| 6  | Overcoming obstacles that come from outside (Bw)| 39.8 | 36-45 | Low | 42.8 | 36-45 | Low |
| 7  | Subjects’ satisfaction with the results (G+) | 37.4 | 36-45 | Low | 39.2 | 36-45 | Low |
| 8  | Disappointment with failure (G-)             | 36.4 | 36-45 | Low | 46.7 | 46-55 | Low |
Encouragement that helps to navigate (Nup) The intensity of the desire to achieve the best possible result (Ach.T)

|   |   |   |
|---|---|---|
| 9 | Encouragement that helps to navigate (Nup) | 32.6 |
|   | The intensity of the desire to achieve the best possible result (Ach.T) | ≤ 35 |
| 10|   | Very Low |
|   |   | 39.9 |
|   |   | 36-45 |
|   |   | Low |
|   |   | 45.3 |
|   |   | 36-45 |
|   |   | Low |

The description of the achievement motivation of the grade X students of Senior High School 6 Bandung based on each aspect can be seen in Table 3.

Table 3 above shows that the students’ achievement motivation is at a low level so that it requires treatment or follow-up in order to increase the achievement motivation of the students through role-play technique. According to Kolodziej (2010) achievement motivation can be increased by providing training, role-play, and psychological skills which requires the role of the school, especially the role of teachers/counselors. Burenkoval et al. (2015) argue that role-play technique is a role that is considered specifically as a type of motive activity process that is very important, therefore, role-play is not just an activity, but it is an activity that will greatly increase learning motivation achievement motivation.

Therefore, the results of the study after giving treatment to increase achievement motivation of underachiever students of grade X of Senior High School 6 Bandung by using role-play technique, its effectiveness was carried out by comparing the pretest and posttest scores of the experimental class and control class which can be seen in Table 4.

Table 4. Results of the comparison between pretest and posttest aspects of student achievement motivation in experimental group

| No. | Initial Name | Posttest Data | Score Scale | Pretest Data | Score Scale | Difference Number Posttest & Pretest |
|-----|--------------|---------------|-------------|--------------|-------------|-------------------------------------|
| 1   | DFB          | 40            | 36-45       | 31           | ≤ 35        | + 9                                 |
| 2   | DC           | 52            | 46-55       | 22           | ≤ 35        | + 30                                |
| 3   | INC          | 49            | 46-55       | 39           | 36-45       | + 10                                |
| 4   | KSL          | 48            | 46-55       | 36           | 36-45       | + 12                                |
| 5   | MTR          | 47            | 46-55       | 33           | ≤ 35        | + 14                                |
| 6   | MWA          | 44            | 36-45       | 31           | ≤ 35        | + 13                                |
| 7   | RH           | 60            | 55-66       | 23           | ≤ 35        | + 36                                |
| 8   | RMR          | 53            | 46-55       | 43           | 36-45       | + 10                                |
| 9   | RRD          | 38            | 36-45       | 24           | ≤ 35        | + 14                                |
| 10  | RF           | 25            | ≤ 35        | 12           | ≤ 35        | + 12                                |

Based on Table 4 above, it can be concluded that there is a positive change in the experimental group after giving the role-play technique treatment because the change turns into positive value (+); it means that the students experience an increase in achievement motivation from the initial pretest to posttest data after giving the role-play technique treatment with the highest value is + 36 points, and the lowest is + 9 points.

Achievement motivation score of the control group of the underachiever students in each aspect of the pretest and posttest results can be seen in Table 5.

Table 5. Results of the comparison between pretest and posttest aspects of student achievement motivation in control group

| No. | Initial Name | Posttest Data | Score Scale | Pretest Data | Score Scale | Difference Number Posttest & Pretest |
|-----|--------------|---------------|-------------|--------------|-------------|-------------------------------------|
| 1   | AR           | 39            | 36-45       | 46           | 46-55       | -8                                  |
| 2   | BRJ          | 23            | ≤ 35        | 32           | ≤ 35        | -9                                  |
| 3   | DAP          | 27            | ≤ 35        | 34           | ≤ 35        | -7                                  |
| 4   | FS           | 45            | 36-45       | 46           | 46-55       | -1                                  |
| 5   | MAN          | 38            | 36-45       | 32           | ≤ 35        | 6                                   |
| 6   | MFG          | 20            | ≤ 35        | 31           | ≤ 35        | -10                                 |
Table 5 shows that the achievement motivation aspects of control group students have a difference in the change in numbers between the pretest and posttest results, with the majority of 8 students experiencing negative (-) numerical changes, and only 2 students experiencing positive change in numbers.

The change in the average pretest and posttest results between the students in the experimental group and the students in the control group can be seen in Table 6.

Table 6. The average differences of the pretest and posttest results between the experimental group and control group statistics

| VAR00001 | N  | Mean    | Std. Deviation | Std. Error Mean |
|----------|----|---------|----------------|-----------------|
| Value    |    |         |                |                 |
| 1.00     | 10 | 16.2000 | 9.42573        | 2.98068         |
| 2.00     | 10 | -5.0000 | 6.64998        | 2.10291         |

Based on Table 6, it is known that in the column there are a number 1 indicating the experimental group, and number 2 indicating the control group. Column N shows the number of samples for each group, there are 10 samples in each group. The next column is the mean which shows the average of the pretest and posttest results for each group. The average score of the pretest and posttest of the experimental group is +16.2. Meanwhile, the control group students get -5 for the pretest and posttest average score. Thus, role-play technique can increase students’ achievement motivation.

The results of the effectiveness of implementing role-play technique to increase achievement motivation of grade X students of Senior High School 6 Bandung City using t-test show that role-play techniques effective in reducing the tendency of aggressive behavior. The use of role-play technique is declared effective because it has succeeded in increasing the achievement motivation of the students as a whole or in every aspect, it can be seen in Table 7.

Table 7. The results of the effectiveness of role-play to improve the students’ achievement motivation

| T       | Df | Sig. |
|---------|----|------|
| 2.544   | 18 | 0.02 |

From the Table 7, it is obtained that the equal variance assumed value is 2.544. The t value is positive; it means that the average score of the experimental group is higher than the control group. Comparing t value with t table and probability, namely, t value > t table (2.544 > 2.101) and P value (0.02 < 0.05) then Ho is rejected. Because the value of t count > t table (2.544 > 2.101) and P value (0.02 < 0.05), Ho is rejected, and H1 is accepted so that there is a difference between the average achievement motivation value of the experimental group students and the average achievement motivation value of the control group students. The conclusion that can be drawn from this t-test is that role-play technique is effective in increasing students’ achievement motivation.

In addition to an increase in the achievement motivation score, changes were also seen and there was a change in students’ achievement motivation after conducting the role-play session stage. There was a change in achievement motivation in experimental group students through daily journals, assessment sheets / observers carried out by selected students in each role-playing session, and direct observations made by researchers.

The concept of role-play technique is that it involves the students’ experiences and help individuals to improve a better understanding of themselves, others, or for behavioral training (Brown, 1994). Moreover, another journal taken from Burenkova et al. (2015), she states that there is an increase in achievement motivation after the students are given training. This is in accordance with the explanation of role-playing techniques because role-playing is a form of training.

As achievement motivation increases through role-play technique treatment, underachiever students have increased their achievement motivation at a higher level than before. Based on the explanation above, the role-play technique (role-playing) can be said to be appropriate in helping underachiever students to increase achievement motivation.
4. Conclusion

Role-playing technique is effective to increase the achievement motivation of the underachiever students of Senior High School 6 Bandung in the 2019/2020 academic year. The effectiveness of the role-play technique can be seen from the results of the t-test which shows the difference of the achievement motivation aspects of the experimental group underachiever students with the control group underachiever students. In addition, the effectiveness of role-play technique is also supported by the changes in attitudes shown by underachiever students before and after treatment. It is proved by the results of daily journal and the assessments carried out by selected underachiever students as assessors, along with with observations.

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