## **CHAPTER V**

## CONCLUSION, IMPLICATION, AND RECOMMENDATION

## 5.1 Conlusion

This research has been conducted in more than 40 junior high schools in Bandung. This study uses a cross-sectional survey design method with a questionnaire. Students' perceptions of the use of animals in science learning were investigated. The results of this study shows that junior high school students are also concerned into the ethics of using animals in science education. The following are some of the conclusions drawn in response to the research questions:

- 1) According to the results of this survey, the things that students pay close attention to when it comes to the use of animals in science learning are the following: the purpose of using animals in science learning must be clear and useful, the types of animals used must be appropriate so that they do not cause animal extinction and do not disrupt the existing ecosystem, the ethics of using animals, and the principles that serve as a guideline.
- 2) Based on the results of this research survey, the factors of gender and pet ownership did not significantly influence students' ethical perceptions of the use of animals in science learning. Where female students tend to have feelings of pity and fear of animals compared to male students. Although several previous studies have shown the effect of animal ownership on students' perceptions, this study did not find any significant effect of pet ownership on students' perceptions of the use of animals in science learning.
- 3) From the results of survey data processing that has been carried out, students' ethical perceptions of the use of animals in science learning are quite diverse, but in general there are students who support the use of animals in science learning because it provides many benefits, and increase motivation to learn science. On the other hand, there are students who think that animals should not be used in science learning because it will have an impact on animal deaths. As for the ethics of using animals in science learning, almost all students agreed to study ethics and the procedures for using them before doing the lesson.

## **5.2 Implication**

Based on the results and discussion of students' ethical perceptions of the use of animals

1) Most students are already sensitive to the ethics of using animals in science learning,

starting from the purpose of use, types of animals, to the 3R principles that must be

fulfilled in science learning. In this case, it indicates that junior high school students

in Bandung have positive ethical perceptions of the use of animals in science

learning.

2) The survey results show that some students are still confused about the use of

animals in science learning. They do not know the ethics that must be done when

using animals as learning materials, meaning that science education in Indonesia

has not fully taken care of the rules or includes special curriculum for the ethics of

using animals in science learning. This can be a reference for the development of

science education both at the junior high and high school levels and higher

education.

**5.3 Recommendation** 

Based on the findings of the research, the following recommendations are made for

students, teachers, and other researchers to use and develop in the educational field:

1) For Students

The profile of students' ethical perceptions of the use of animals in science learning is

expected to be basic information for students to consider ethics when studying science,

be a motivation to develop students' curiosity in science, and help students to respect

fellow living beings and be wise in using animals in any form of science activities.

2) For Teachers

This analysis of students' ethical perceptions of the use of animals in science learning

can be a reference and basic information for teachers to assess students' understanding

and readiness to practice science.

3) For Other Researchers

The results of students' ethical perceptions of the use of animals in science learning are

expected to be basic information for further research because of innovations and the

range of that may be factors. This research can be used as a reference for subsequent

research by improving the question in the questionnaire.