

**THE CORRELATION BETWEEN STUDENTS' SELF-EFFICACY  
AND THEIR ACHIEVEMENT IN LEARNING SCIENCE  
IN DIFFERENT SCHOOL SYSTEMS**

RESEARCH PAPER

Submitted as Requirement to Obtain Degree of *Sarjana Pendidikan* in  
International Program on Science Education (IPSE) Study Program



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**INTERNATIONAL PROGRAM ON SCIENCE EDUCATION  
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Oleh:

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Sebuah skripsi yang diajukan untuk memenuhi salah satu syarat memperoleh  
gelar Sarjana Pendidikan pada Fakultas Pendidikan Matematika  
dan Ilmu Pengetahuan Alam

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**APPROVAL SHEET**

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## DECLARATION

I do hereby declare that every respect which is written in this research paper entitled “The Correlation between Students’ Self-Efficacy and Their Achievement in Learning Science in Different School Systems” is genuinely pure result of my own original ideas, effort, research, work and not copied or plagiarized from other papers. The opinion or findings of others which is contained in this research paper have been quoted or referenced based on scientific code of conduct and accordance with ethical science that applied in scholarly society. This declaration is created truthfully and consciously, when subsequently it is found an infringement towards scientific ethics, or if there is a claim of any others towards the authenticity of this research paper, hence I am willing to responsible and accept academical sanctions correspond to applicable rules.

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## **Abstract**

Based on PISA 2018 result, the science achievement of Indonesian students was below average. Students' achievement in learning science influenced by some factors. Such as motivation, emotion regulation, self-efficacy, and school system. This study investigates students' self-efficacy in learning science in different school systems. The present investigation aimed to discover the level of self-efficacy that students in public and private schools belong to. By looking at students' self-efficacy levels, this study tried to find out its correlation with science achievement. There were 170 students from three different public schools and 107 students from three different private schools in Bandung City that involves in this study. This study employed the quantitative research approach, descriptive method, and a correlational research design. The correlation analysis between students' self-efficacy and their achievement in learning science was done in each school. Thus, Spearman-rank correlational analysis was used to investigate the correlation between students' self-efficacy and their achievement in learning science in three public schools and two private schools. For the other one private school used Person correlational analysis. This study shows that students' self-efficacy in both public and private schools was in the medium levels. There were 78.8% of public school students and 76.6% of private school students classified at the medium level. However, there was no correlation between students' self-efficacy and their achievement in learning science both in public and private schools.

Keywords: Self-Efficacy, Self-efficacy Level, Science Achievement, Public School, Private School

# HUBUNGAN ANTARA *SELF-EFFICACY* DAN PRESTASI SISWA DALAM PEMBELAJARAN IPA/SAINS PADA SISTEM SEKOLAH YANG BERBEDA

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## Abstrak

Berdasarkan hasil PISA 2018, prestasi sains siswa Indonesia berada di bawah rata-rata. Prestasi siswa dalam belajar IPA/sains dipengaruhi oleh beberapa faktor, seperti, motivasi, regulasi emosi, *self-efficacy*, dan sistem sekolah. Penelitian ini meneliti *self-efficacy* siswa dalam belajar IPA/sains pada sistem sekolah yang berbeda. Penelitian ini bertujuan untuk menemukan tingkat *self-efficacy* yang siswa di sekolah negeri dan swasta. Dengan melihat tingkat *self-efficacy* siswa, penelitian ini juga bertujuan untuk mengetahui korelasi antara *self-efficacy* siswa dengan prestasi mereka pada pembelajaran IPA/sains. Ada 170 siswa dari tiga sekolah negeri dan 107 siswa dari tiga sekolah swasta di Kota Bandung yang terlibat dalam penelitian ini. Penelitian ini menggunakan metode deskriptif, pendekatan kuantitatif, dan desain penelitian korelasional. Analisis korelasi antara *self-efficacy* siswa dan prestasi mereka dalam pembelajaran sains dilakukan di setiap sekolah. Dengan demikian, analisis korelasi Spearman-rank digunakan untuk menyelidiki korelasi antara *self-efficacy* siswa dan prestasi mereka dalam belajar sains di tiga sekolah negeri dan dua sekolah swasta. Untuk satu sekolah swasta menggunakan korelasi Person dalam menganalisis korelasi antar variabel. Hasil penelitian ini menunjukkan bahwa *self-efficacy* siswa di sekolah negeri dan swasta berada di level sedang. Ada 78,8% siswa sekolah negeri dan 76,6% siswa sekolah swasta yang diklasifikasikan di tingkat menengah. Namun, tidak ada korelasi antara efikasi diri siswa dan prestasi mereka dalam belajar IPA/sains baik di sekolah negeri maupun swasta.

Kata kunci: *Self-Efficacy*, Tingkat *Self-Efficacy*, Prestasi Belajar IPA/Sains, Sekolah Negeri, Sekolah Swasta

## PREFACE

All the praise belongs to Allah SWT because of His Mercy and Grace, the author could finish the research paper titled “The Correlation between Students’ Self-efficacy and Their Achievement in Learning Science in Different School System”. *Shalawat* and *Salam* might be sent upon the prophet Muhammad, his family, companions, and all those who follow him until the end of the world.

The research conducted to analyze the profile of students’ self-efficacy in learning science both in public and private schools around Bandung. Besides, conducting this research also to analyze the relationship between science students’ self-efficacy and their achievement in learning science. This research paper is the requirement to obtain degree of Bachelor Education in International Program on Science Education.

The author realizes that there are many mistakes, weakness, and limitation of this research that need to be improved. Thus, suggestion and recommendation are welcome for the better result of the future research in students’ self-efficacy. Hopefully this research might bring benefits for science education.

Bandung, August 2020

Rena Siti Hasanah

## TABLE OF CONTENTS

APPROVAL SHEET .....	i
DECLARATION.....	ii
ABSTRACT.....	iii
PREFACE .....	v
ACKNOWLEDGEMENT .....	vi
TABLE OF CONTENTS .....	vii
LIST OF TABLES .....	viii
LIST OF FIGURES .....	ix
LIST OF APPENDICES .....	x
CHAPTER I INTRODUCTION .....	1
1.1 Research Background.....	1
1.2 Research Problem.....	3
1.3 Research Questions .....	3
1.4 Limitation of problem .....	3
1.5 Research Objective.....	4
1.6 Research Benefit.....	5
1.7 The Organization of Research Paper.....	5
CHAPTER II LITERATURE REVIEW .....	7
2.1 Science Self-Efficacy .....	7
2.1.1 Students' Self-Efficacy Level .....	9
2.2 Students' Science Achievement .....	11
2.3 School Systems.....	13
CHAPTER III RESEARCH METHODOLOGY.....	17
3.1 Research Method and Research Design .....	17
3.2 Population and Sample.....	17
3.3 Operational Definition.....	18
3.4 Research Instrument .....	18
3.4.1 Students' Science Self-Efficacy Questionnaire .....	18
3.4.2 Observation-Question Guideline.....	21
3.5 Data Analysis .....	22
3.5.1 Students' Science Self-Efficacy.....	22



3.5.2	Correlation between Students' Self-Efficacy and Their Achievement in Learning Science .....	22
3.6	Research Procedure .....	25
CHAPTER IV RESULT AND DISCUSSION .....		27
4.1	Students' Self-Efficacy in Learning Science.....	27
4.1.1	Students' Self-Efficacy in Learning Science in Public School.....	28
4.1.2	Students' Self-Efficacy Classification in Private School.....	34
4.2	Correlation between Students' Self-Efficacy and Their Science Achievement.....	41
4.2.1	Correlation between Students' Self-Efficacy and Science Achievement in Public School.....	43
4.2.2	Correlation between Students' Self-Efficacy and Science Achievement in Private School.....	47
CHAPTER V CONCLUSION AND RECOMMENDTION.....		52
5.1	Conclusion.....	52
5.2	Recommendation.....	53
REFERENCES.....		54

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