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The Effects of Martial Arts on Academic Achievement

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Abstract

The purpose of this study is to determine the effects of taking Marital Arts on academic achievement as determined by scores on a standardized test. The objective of this study is to provide information that could benefit educators. Subjects are middle school students (grades 5–8, ages 11–14) chosen at random from a list obtained from the Tangipahoa Parish School System. Students already enrolled in a martial arts program are compared to students who have not had type of martial arts training. A baseline score is set using the fourth grade Louisiana Educational Assessment Program tests scores. The same students are measured at the end of their eighth grade year using the eight grade Louisiana Educational Assessment Program (LEAP) test to determine any significant differences in academic achievement.

The Effects of Martial Arts on Academic Achievement

Purpose

The purpose of this study is to determine the effect of taking karate on academic achievement among middle school students. The independent variable that will be studied is overall academic achievement of middle school students with respect to those students who take karate and those that do not.

Review of Related Literature

Today’s students are involved in many more activities than in the past years. With all of these things, Schoolwork seems to be shoved aside for sometimes later or never. It is very important that students balance schoolwork with extra-curricular activities (Vail, 2001).

What are martial arts? It is so many different things that trying to categorize it leaves out more than it defines (Reinstein, 2001). Martial arts can be a catalyst for developing self-confidence, assertiveness, calmness, concentration and self-control (Glanz, 1994). All students can benefit from this type of program, even those who suffer from attention deficit disorder. The martial arts classes emphasize over and over that they cannot be used for aggressive play. Those who disobey usually are expelled from the class.

Martial arts can help students understand different cultures and bridge the gap that holds others back. It offers a chance to look at the history of other countries. Students can explore the language and writings of these other countries. As these students learn they can share with their peers this information (Reinstein, 2001).

Helping students develop self-knowledge and self-control is one of the goals in martial arts (de-Souza, 1999). All martial art is not about winning or losing but about the formation of character. The instructors of martial arts impose the importance of being courteous, respectful, honest, sincere, and disciplined. Students are told that it takes more courage to walk away from a fight than it does to
There is more to martial arts than just kicking and punching. It involves intensive physical and mental training, dedication, success concentration, and discipline. Another goal of martial arts is striving for excellence, acceptance, and belief in one’s self (Mayesky, 1980). Martial arts can help students develop in a holistic way through exploration in movements as well as the importance of not breaking the rules (Brooking-Payne, 1998).

Those students who choose not to follow the rules are not allowed back into class. Some students do not understand the proper use of martial arts. (Fukkit, 2001). For some of the violent adolescents there is hope (Kids explore America, 1994). The old style, stressing physical and psychological, meditative and philosophical aspects will help to decrease aggression, lower anxiety and increase self-esteem (Twemlow & Sacco 1998).

Martial arts are one of the few activities that can be practiced throughout the entire lifetime. The traditional training always places principles of morality, virtue, peace, and goodness, above fighting. It also teaches that peaceful alternatives can be found for almost any conflict. True martial arts is not a violent activity, nor is it a self-defense program, nor does it preach Eastern religious values (Berry, 1991). It is anything but boring. The benefits of any martial arts training cannot easily be described, they have to be experienced.

Hypothesis

It is hypothesized that middle school students enrolled in martial arts will score statistically significantly higher on achievement tests than those students who are not enrolled in martial arts.

Operational Definitions

Middle school students are students enrolled in grades 5 though 8. A martial art is defined as any program that consists of disciplining the body in order to improve the spirit. The achievement test that will be used is the Louisiana Educational Assessment Program for the 21st century (LEAP 21).

Methodology

Research Design

This study will use the casual-comparative or ex post facto design research. For this study, the independent variable will be martial arts; the specific levels are those students who are enrolled in martial arts and those who are not enrolled in martial arts. The dependent variable will be academic achievement. This type of research does not allow for cause and effect conclusions.

Sample/Subjects

A cluster sample of middle school students will be used. I will select nine middle schools from a list obtained throughout the Tangipahoa Parish School System. All students in the chosen schools will be used. The students will be separated into two groups. Group A will be those students enrolled in a martial arts program or who have ever been enrolled in such a program, and Group B will those students not enrolled in a martial arts program.

Instrumentation

This study will use the Louisiana Educational Assessment Program for the 21st century. LEAP 21 for
the fourth grade and eight grade is a criterion-referenced test. This Criterion-reference test measure how a student mastered the new state content standards and is aligned with the content standards of the six major subject areas. The test is administered in the fourth and eighth grades. It is directly aligned with new state content standards and is designed to be as rigorous as the test of National Assessment of Education Process (NAEP). The students will be placed into five rankings: advanced, proficient, basic, approaching, basic, or unsatisfactory. The test is divided into four parts: English, Math, Science, and Social Studies.

The state criterion-referenced test in English Language Arts concentrated on multiple-choice test and demand more of students by including longer reading passages and a greater variety of item types, including some open-ended question requiring written responses to what they read. In addition students at each grade level are expected to write a composition in respond to a writing prompt that will be predetermined by the testing company.

The Mathematics test: consist of two major parts and assess concepts and skills in all six strands of mathematics in multiple-choice format. Whenever possible, concepts and skills will be assessed in realistic contexts. All items in Part A will be scored right/wrong, or if applicable, in terms of number of item parts answered correctly. Part B of the Mathematics test will consist of four relatively complex mathematical tasks involving a number of separate steps and requiring application of multiple skills. The tasks will be designed to assess one or more of the Benchmarks requiring students to demonstrate the connection of the strand to the other strands and to real-life situations.

The social Studies test is divided into 2 major parts. Part A consists of 50 to 60 multiple choice test questions. These questions use the skills of assessing knowledge, conceptual understanding, and application of skills in all 3 Social Studies strands.

The Science test consists of three sessions. Session 1 assesses concept and skills in all five strands of Science in a multiple-choice format. Session 2 has four short answer questions and assesses the four content strands. Session 3 is the comprehensive science task that integrates science as inquiry content strand and at least one other content strand. The questions vary in format (constructed response, data table or short answer).

In addition to the criterion-referenced test, a questionnaire generated by the researcher will be used in order to determine whether or not the students have participated in a martial arts program.

Procedures

The participating middle schools in this study will be randomly selected from a list obtained from the Tangipahoa Parish School System. After obtaining all of the consent forms. A questionnaire will be given to students in the fourth and eighth grade, to determine in which group the student will be placed. Group A for those students enrolled or who have ever been enrolled in a martial arts program and Group B for those who have never been enrolled in a martial arts program. The LEAP scores from the fourth grade will be used to set the baseline for academic achievement for each group. At the end of the eighth-grade year, the LEAP 21 test will be given and the results will be used to determine the academic achievement of the groups. In addition to the LEAP, the survey will once again be used to check for enrollment into a martial arts program. After all of the data is collected, the researcher will be able to determine the academic achievement of the groups.

Data Analysis

Data from the researcher should be calculated to address the question of the research. Does martial arts affect academic achievement? An analysis of data from the criterion-referenced tests and the
survey will provide the answers. The survey data will be analyzed to determine into which group the student will be placed. For the criterion-referenced test, a two sample t-test will be used to determine the significance.

Reference


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