

The Positive Influence of Martial Arts Instruction on Preadolescents' and Early Adolescents' Self-Esteem

This investigation attempted to determine whether changes in attitudes toward the self resulted because preadolescents and early adolescents participated in the first level of Martial arts instruction. Findings from a pilot study that indicated both students and instructors believed student's attitudes about them-selves became more positive after receiving martial arts instruction prompted this study (Martin, 1991). This study, therefore, included both students' and their instructors' ratings of each student's self-esteem level. Coopersmith (1990) defines self-esteem as a judgment of worthiness that is expressed by the attitudes a person holds toward self. Her previous research found that students with high self-esteem approach tasks with the belief that they will succeed. Gwin (1990) claims that true self-esteem means more than teaching students to feel good about themselves. She believes that students earn self-respect when they are in instructional settings that support the idea that effort will lead to success. It was hypothesized that the instruction would influence students' self-perceptions and their instructors' perceptions of their self-esteem, creating more positive self-esteem of both types.

Method and Results

A simple random sample of 950 nine- to fifteen-year-old students enrolled in martial arts classes throughout the United States was selected. Two surveys were administered to students and their instructors: one at the beginning of training and another eight months later. Eight months represented the first complete cycle of martial arts instruction.

The martial arts training centers administered the Coopersmith Self-Esteem Inventory (School Form) which included three subscales that measure students' attitudes toward their social, academic, and personal selves (Coopersmith, 1990) during their first week of training and again eight months later. Table 1 shows significant pre-post mean differences were found for all three subscales, with significantly more positive attitudes at post-test ($p < .01$ for all F-tests).

Table 1: Martial arts students perceptions of their change in self-esteem before & after training

	Social attitude	Academic attitude	Personal self attitude
Before Martial Arts Training	18.2	14.3	21.1
After 8 Months of Martial Arts Training	22.3	26.5	27.3

The Behavioral Academic Self-Esteem Rating Scale was completed twice by the students' martial arts instructors, once during the first month of their training and again at the end of their eighth month of training. Instructors rated students on five self-esteem factors; student initiative; social attention; success/failure; social attraction; and self-confidence. Student initiative represented how often a student participated in instructional activities. Social attention measured how well a student exhibited behaviors that facilitated learning. Success/failure assessed how well a student coped with corrective feedback from instructors. Social attraction measured how compatible students were with peers. Self-confidence represented the degree to which a student verbally expressed his/her accomplishments.

Table 2 shows the pre and post means for these five measures. Significant pre-post mean differences ($p < .01$ for each) were found for all five subscales, with significantly more positive scores at post-test.

Table 2: Martial arts instructors' perceptions of their students change in self-esteem before & after training

	Student Initiative	Social Attention	Success/Failure	Social Attraction	Self-Confidence
Before Martial Arts Training	3.40	3.56	3.42	3.08	3.37
After 8 Months of Martial Arts Training	4.25	4.47	4.22	4.08	4.33

Conclusions

Students' self-esteem became higher as a result of the first instructional cycle of Martial arts training. The instructional emphasis was on teaching students to take control of themselves in a highly structured and ritualistic environment. Teacher instructions, expectations, and assessments were clear. Students, therefore, gained confidence to master defined goals—that is, students intrinsically valued the instructional process of Martial arts, and thus, applied the necessary effort to achieve. Learning environments that promote students' taking control of their own learning through structured and ritualistic activities create for students an intrinsic purpose for learning. In the Martial arts teaming environment students increased their feelings about themselves and reduced fear of failing after applying effort. As expected, *both* self-perceptions of self-esteem and instructor's ratings of self-esteem increased due to the first eight-month cycle of martial arts training. Thus, these results provide converging evidence the martial arts training raises self-esteem in these important age groups.

Answer the following based on the attached story problem.

1. What is the DV ? (3 points) _____
2. What is the IV? (3 points) _____
3. What are the conditions of the IV? (3 points) _____
4. What type of research design was used? (6 points) _____
5. What type of research hypothesis is this? (5 points) _____

6. Comment on the internal validity of this study. (10 points)

- Identify those aspects of the design and procedure that you think enhanced the internal validity

- Identify those aspects of the design and procedure that you think impaired the internal validity of this study.

7. Comment on the external validity of this study. (10 points)

- Identify those aspects of the design and procedure that you think enhanced the external validity

- Identify those aspects of the design and procedure that you think impaired the external validity of this study.

8. You have been asked to propose the design of an additional study to investigate the research hypothesis. Describe the design and procedures of that proposed study. (Be sure to cover, but not limit yourself to, the limitations in the study indicated by the author in the discussion.) (10 points)

- What would you change to improve external validity?

- What would you change to improve internal validity?