

EFFECT OF COOPERATIVE, COMPETITIVE, AND
INDIVIDUALISTIC EXPERIENCES ON
SELF-ESTEEM OF HANDICAPPED AND
NONHANDICAPPED STUDENTS*¹

University of Minnesota

ROGER T. JOHNSON, DAVID W. JOHNSON, AND
JOHN RYNDERS

SUMMARY

Compared are the effects of cooperative, competitive, and individualistic learning experiences on the self-esteem and perceived personal acceptance by the teacher of nonhandicapped and severely handicapped students in a mainstream setting. Thirty students (18 nonhandicapped and 12 trainable retarded) were randomly assigned to conditions stratified on the basis of handicap and sex. They participated in a bowling class which met for one hour per week for eight weeks. The results indicate that those in the cooperative condition had higher self-esteem and perceived more personal acceptance from the teacher than did the students in the competitive and individualistic conditions. Handicapped students reported higher self-esteem than nonhandicapped students.

A. INTRODUCTION

Schools are moving rapidly to educate handicapped students with nonhandicapped peers in mainstream settings due to the impetus of laws such as PL-42-142. Many educators, however, fear that placing handicapped students into direct interaction with nonhandicapped peers will damage the self-esteem of handicapped students. Whether the self-esteem of handicapped students increases or decreases may depend on how the interaction between handicapped and nonhandicapped students is structured.

* Received in the Editorial Office on February 23, 1981, and published immediately at Provincetown, Massachusetts. Copyright by The Journal Press.

¹ This research was supported in part by the United States Department of Education, Office of Special Education, Grant No. G-79-2006. Requests for reprints should be sent to the second author at the address shown at the end of this article.

There are three ways in which cross-handicap interaction may be structured (1, 3): cooperative, competitive, and individualistic. In a cooperative situation students can achieve their goals if and only if all other students with whom they are cooperatively linked achieve their goals; in a competitive situation if and only if all other students with whom they are competitively linked fail to achieve their goals; in an individualistic situation student's goal attainments are unrelated and independent of each other. Each instructional goal structure promotes a different pattern of student-student interaction, which, in turn, may affect self-esteem. While there is some evidence that higher self-esteem results from cooperative than from individualistic learning situations (4), there is a scarcity of evidence concerning the relative impact of all three goals structures on the self-esteem of both handicapped and nonhandicapped students.

The present study compared the relative impact of cooperative, competitive, and individualistic situations on the self-esteem of regular junior high school students and severely handicapped students who are placed within the same instructional situation.

B. METHOD

Subjects were 30 junior high school students (18 female, 12 male) between the ages of 13 to 15 from three different schools in a midwestern metropolitan area. Nine were from a public, nine from a Catholic and 12 from a school for severely handicapped (trainable) who were selected on the basis of a diagnosis of Down Syndrome. The nonhandicapped (NH) students were selected on the basis of having had little previous bowling experience and as being interested in learning how to increase their bowling performance. The handicapped (H) students were selected on the basis of being able to understand the basic instructions given in the study and to communicate verbally well enough to indicate their needs, were able to handle the rudimentary requirements of bowling, and were judged by their teachers to be relatively free of aberrant behavior. All were randomly assigned to conditions stratified for handicap and sex, so that 10 (six NH and four H) were in each condition (six females and four males). An equal number of NH and H males and females were in each condition.

The independent variable consisted of a cooperative (COOP), competitive (COMP), or individualistic (IND) condition. In the COOP condition Ss were instructed to maximize their group bowling score to meet a set criterion (improvement of the group's score by 50 pins over the previous week); in the COMP condition to maximize their own score in order to

outperform the other Ss in their condition. After each bowling session, Ss were rank-ordered on the basis of their bowling scores and informed of their rank. In the IND condition Ss were instructed to maximize their individual scores to meet a set criterion (improvement by 10 pins over their score of the previous week).

Ss participated in a bowling class that met for one hour per week for eight weeks. At the beginning of each session the goal structure of the condition was reviewed. Bowling instruction occurred every other frame. On the alternate frames the goal structure instructions were reviewed. On the last day of the study Ss completed the self-esteem and teacher-acceptance scales. The self-esteem scale consisted of three items; "I am just as important in bowling class as the other students," "I feel I am doing a good job of learning to bowl," and "I like to have the teacher watch me bowl." The two items in the teacher-acceptance scale were; "In bowling my teacher likes me the way I am" and "In bowling my teacher likes me as much as he/she likes other students." These items were taken from the Minnesota School Affect Assessment (2); both scales have demonstrated validity and reliability. The items were read to the handicapped students. After the bowling classes were completed the purpose of the study was explained to all Ss.

The three teachers, all experienced, received over 90 hours of training in how to conduct the three instructional conditions. They were given a prompting card outlining exactly what they were to do and say in each condition. They were randomly assigned to and rotated across conditions so that each worked with each condition at least two times during the study.

C. RESULTS

Ss in the COOP condition had higher self-esteem, $F(2, 24) = 3.202, p < .06$ (COOP H = .91, NH = .61; COMP H = .58, NH = .38; IND H = .75, NH = .72), and perceived the teacher as being more personally accepting, $F(2, 24) = 2.42, p < .11$ (COOP H = .87, NH = 1.00; COMP H = .62, NH = .58; IND H = .75, NH = .75), than did the students in the other two conditions. Handicapped students had higher self-esteem than did nonhandicapped students, $F(1, 24) = 2.81, p < .10$.

D. DISCUSSION

The results indicate that cooperative learning experiences promoted higher self-esteem to a greater degree than competitive and individualistic

learning experiences; they corroborate the previous findings (4) and extend them to junior high school and to handicapped students. Competition seemed especially destructive of self-esteem for severely handicapped students. Students in the cooperative condition perceived the teacher as being more accepting of them as persons than did the students in the competitive and individualistic conditions. The finding that handicapped students have higher self-esteem than do nonhandicapped students may reflect the nature of Down Syndrome rather than be indicative of mental retardation in general.

REFERENCES

1. DEUTSCH, M. Cooperation and trust: Some theoretical notes. In M. Jones (Ed.), *Nebraska Symposium on Motivation*. Lincoln: Univ. of Nebraska Press, 1962, 275-320.
2. JOHNSON, D. W. Evaluating affective outcomes of schools. In H. Walberg (Ed.), *Evaluating School Performance*. Berkeley, Calif.: McCutchan, 1974.
3. JOHNSON, D. W., & JOHNSON, R. *Learning Together and Alone: Cooperation, Competition, and Individualization*. Englewood Cliffs, N.J.: Prentice-Hall, 1975.
4. JOHNSON, D. W., JOHNSON, R., & SCOTT, L. The effects of cooperative and individualized instruction on student attitudes and achievement. *J. Soc. Psychol.*, 1978, **104**, 207-216.

*Department of Social, Psychological, and
Philosophical Foundations of Education
330 Burton Hall
University of Minnesota
Minneapolis, Minn. 55455*