Abstract

Mexican-American school children are handicapped by poor academic performance and low self-esteem. This study hypothesized that reinforcement and reward techniques used to promote self-esteem should include activities relevant to both Mexican and American cultures. Specific predictions were that (1) the most effective treatment would be reinforcement of achievement behavior using rewards acceptable to the Mexican community, (2) the second most effective treatment would be reinforcement of affective behavior using non-Mexican rewards, and (3) the least effective treatment would be reinforcement of affective behavior using Mexican rewards and reinforcement of achievement behavior using non-Mexican rewards. Subjects were 56 low achieving Mexican-American children, grades 1 to 4. Children were randomly assigned to treatment groups that stressed simple academic tasks, and rewards for selected behaviors. Results from pre- and posttesting on a variety of tests did not confirm specific predictions, but did support the general hypothesis of a bicultural approach to improve Mexican-American children's self-esteem. (DR)
EFFECTS OF SOCIAL REINFORCEMENT ON SELF-ESTEEM OF MEXICAN-AMERICAN CHILDREN

Long Abstract

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Problem: Mexican-American children generally display in school a low level of performance along with feelings of inferiority and lack of pride, reflecting a low level of self-esteem (Parsons, 1965; Madsen, 1964; Landes, 1965; Coleman, 1966). Teachers frequently express the belief that these children are unable to respond successfully to conventional school learning experiences (Parsons, 1965).

Teacher attention may often be directed toward Mexican-American youngsters in situations where they perform poorly and reflect insecurity or lack of pride. If attainment of a goal has a reinforcing effect upon recent past behavior, (Bijou, 1966) one would expect these children, seeking teacher attention as a rewarding goal, to repeat behavior likely to elicit teacher attention, i.e., low performance and other behavior suggesting low self-esteem. Teacher beliefs about the Mexican-American child's low academic abilities may lead them to act as if their beliefs were true, turning originally false conceptions into reality (Coladarci, 1965).

Purpose: The difficulties that Mexican-American children face in school seem to lie in two main areas: performance and self-esteem. The present study attacks the problem with a focus on self-esteem rather than performance, assuming that enhancement of self-esteem will facilitate the child's adjustment to school and openness to learning. Studies have shown self-esteem to be positively related to academic performance (McDonald, 1965; Wattenberg and Clifford, 1962; Brookover and Erickson, 1964) and personal adjustment (Rogers, 1949; Crandall and Bellugi, 1954; McCandless, 1967).
Rationale: This study assumes that a) perception of the individual's own abilities affects his perception of himself (Breer and Locke, 1965), especially when his successful behavior is known by important people (Lewin, 1948) b) the estimation by others of the individual's abilities is a potential influence on his self-concept (Sullivan, 1953) and that c) parents and teachers represent a powerful source of reinforcement (Skinner, 1953; Kantor, 1959, Bijou and Baer, 1961). The study examines the effect of social reinforcement (defined as teacher approval of children's successful behavior) on the self-esteem of low achieving Mexican-American children.

The reward value of success for an individual's activities depends on cultural values (Sears, 1964), requiring that reinforcement varies according to the cultural values of the recipient in order to affect self-esteem (Zigler and Kanzer, 1962). The Mexican-American child has been exposed to two cultures, predominantly Mexican at home and American at school. Home life involves closely knit large families with values stressing success in socio-emotional areas rather than areas of academic achievement (Lewis, 1961). At school, independence, competition for achievement, and striving for success in academic work (Williams, 1964) are expected. Thus, values of both cultures underlie the Mexican-American children's behaviors. The teacher's knowledge of these values would suggest meaningful reinforcement techniques for use in enhancing self-esteem.

A general hypothesis of the present study was that reinforcement and reward techniques used to promote self-esteem must involve activities relevant to both Mexican and American cultures. Two modes of behavior, socio-emotional and achievement, were chosen as typical of Mexican and American cultures, respectively. Also, either Mexican or non-Mexican rewards were chosen to strengthen teachers' approval of the selected behaviors.
Hypotheses: Specific predictions were formulated as to the effectiveness of each combination of reinforced behavior and reward for raising self-esteem among low achieving Mexican-American children. The most effective treatment was expected to be reinforcement of achievement behavior using Mexican rewards (Hypothesis 1); the second most effective treatment was expected to be reinforcement of socio-emotional behavior and use of non-Mexican rewards (Hypothesis 2); the least effective treatments would be reinforcement of socio-emotional behavior using Mexican rewards and reinforcement of achievement behavior using non-Mexican rewards (Hypothesis 3).

The treatments represented in hypotheses 1 and 2 include aspects of both cultures. These treatments were expected to be more effective in raising self-esteem than those emphasizing only one culture. The justification for hypothesis 1 is that achievement behavior at school has been highly valued both by the teacher and by Mexican-American parents who realized the importance in American society of "doing well" in school. However, to be effective, recognition of successful achievement must be supplemented by familiar Mexican rewards providing cultural balance. For hypothesis 2, the alternative bi-cultural approach reinforces social-emotional behavior which is probably less emphasized by parents and teachers than school achievement, but uses American rewards to provide cultural balance. Hypothesis 3 refers to mono-cultural treatments which were expected to be least effective in raising self-esteem.

Self-esteem should relate to more general responsiveness to the learning situation. Thus, additional dependent variables representing responsiveness were included in the study but no specific hypotheses were formulated. It was generally expected that self-esteem and responsiveness to learning situation would correlate positively.

Under the assumption that males and females have strikingly different roles in Mexican-American families, it was expected that the reinforcement procedures would affect boys differently from girls. Sex was included as
an independent variable. Selected aptitude and achievement measures were also added to help clarify the major results.

Method: Four treatments were defined: a) social reinforcement of achievement behavior using Mexican rewards (A-M); b) social reinforcement of achievement behavior using non-Mexican rewards (A-NM); c) social reinforcement of socio-emotional behavior using Mexican rewards (SE-M); d) social reinforcement of socio-emotional behavior using non-Mexican reward (SE-NM). The sample consisted of 56 low achieving Mexican American elementary school children (1st to 4th grades, 28 boys and 28 girls). Fourteen subjects (7 boys and 7 girls) were randomly assigned to each treatment, after stratification according to self-esteem scores. A total of 16 classroom sessions each lasting 35 minutes included a) simple academic tasks, in which the children were expected to be successful, b) experimenter's praise of selected behaviors and rewarding activity defined according to the treatment variables. Four experimenters were rotated regularly among treatment groups.

Measures used as pre and posttests were: a) Self-Esteem Pictures and Self-Esteem Report (adapted from Sears, 1966); b) Circles (Torrance, 1966) including Fluency, Flexibility, and Originality; and Mini-Battery (Ward, 1966), an adaptation of Wallach and Kogan's (1965) full battery of creativity-intelligence tests; c) Raising Hands, using pictures from Shaftel (1967) as a stimuli for group participation; d) School Attendance. Also included was a Reading posttest, as represented by the California and Stanford Achievement Tests, and the following aptitude variables: a) IQ and Mental Age from the Peabody Picture Vocabulary Test (Dunn, 1959); b) "Amount of Exposure to Mexican and American Cultures: as measured by individual interviews; c) Birthplace, representing degree of Mexican ancestry assessed by questionnaire; d) Father's occupation; e) chronological age.

Results and Discussion: The results of analysis of variance performed on the self-esteem scores did not confirm the specific predictions. No significant
main effects or interactions were found using behavior, reward or sex as independent variables. Regression analysis of posttest on pretest self-esteem scores showed some differences in slopes for the four treatments. Children initially low on Self-Esteem Pictures had the highest scores at the posttest in socio-emotional behavior treatments while children initially high on Self-Esteem Pictures scored higher at the posttest in achievement behavior treatments. In both cases the Mexican reward was superior. Similar analyses for Self-Esteem Report did not provide regression slopes differences.

These findings offer indirect and tentative support to the major hypothesis regarding the bi-cultural approach and suggest further research on a more detailed hypothesis. Mexican-American children with low self-esteem should receive a socio-emotional treatment (typically Mexican) as a first step to enhance self-esteem. After self-esteem has been raised to some extent the achievement treatment (typically American) may become more appropriate for promoting further self-esteem enhancement. In classrooms with children at different levels of initial self-esteem, teachers should use both reinforcement treatments, perhaps varying the mix from child to child, to make use of the values of both cultures.

Correlations among self-esteem measures were considerably higher at the posttest than at the pretest. This finding suggested that the practice effects increased the similarity of the two measures and/or that the treatments made the children more aware of the concept of self-esteem and more systematic in their responses. Measures of responsiveness to the learning situation correlated positively with self-esteem. These correlations were also higher at posttest than at pretest.

No significant main effects or interactions were found using the Circles or Mini-Battery measures. The results on "raising hands" indicated that while three groups showed no change across observations, group A-NM (the typically American) decreased in frequency of raising hands (P<.05). All measures
of responsiveness except raising hands displayed positive correlation with "Mexican" and "American" exposures. The higher "the level of exposure" to both cultures, the greater the responsiveness to the learning situation. Additional support to the importance of the bi-cultural approach was found in the results of school attendance. Mixed treatments (A-M and SE-NM) showed significant overall improvement in attendance. Group SE-M (typically Mexican) showed improvement only for girls; group A-NM (typically American) showed no changes. Further regression analyses were applied to selected aptitude and dependent variables, with some potentially useful results.

It is hoped that the findings of this study suggest appropriate adaptation of the educational environment for Mexican-American children in American classrooms. It is also hoped that the additional hypotheses arising from these results will stimulate further investigation in this area.