A bibliotherapy intervention was used to foster acceptance of children with disabilities by their non-disabled peers. The study involved 247 regular students in fourth, fifth, and sixth grade non-integrated classrooms at one elementary school. Treatment students read either fiction or non fiction literature, followed by discussion of the material. The investigation employed a pretest-posttest experimental design, and examined the difference in effectiveness across fiction and nonfiction genres in promoting positive attitudes toward children with disabilities. Results indicated a weak treatment effect overall, with no difference between groups. However, the sixth grade nonfiction treatment group did show a significant improvement in acceptance. Additionally, girls were more accepting of disabilities than boys across all groups and grades. Children's evaluations of the books utilized for the interventions revealed that nonfiction books were rated higher in terms of acceptability than the fiction books by both fifth and sixth graders, but the opposite was true for fourth grade students. (Contains 26 references.) (Author/DB)
The Differential Effects of Fiction and Nonfiction Literature: Increasing Acceptance of Children with Disabilities

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Abstract

An intervention using bibliotherapy was employed to foster acceptance of children with disabilities by their nondisabled peers. This investigation took place in 4th-, 5th-, and 6th-grade non-integrated classrooms. Treatment students received either fiction or nonfiction literature, followed by discussion of the material. The investigation employed a pretest - posttest experimental design, and examined the difference in effectiveness across fiction and nonfiction genres as they pertain to increasing nondisabled children’s attitudes toward children with disabilities. Results indicate weak a treatment effect overall, with no difference between groups. However, the sixth grade nonfiction treatment group did show a significant improvement in acceptance. Additionally, girls were more accepting than boys across all groups and grades. Children’s evaluations of the books utilized for the interventions revealed nonfiction books were rated higher in terms of acceptability than the fiction books by both fifth and sixth graders, but the opposite was true for fourth grade students. Implications of this study are discussed.
Introduction

The emerging practice across the nation of educating students with disabilities in regular classrooms among their nondisabled peers is commonly referred to as "inclusion" (also known as "integration" or "Regular Education Initiative"). Inclusive programming is different from mainstreaming in that the disabled students are part of the regular classroom full-time, receive in-class support (NASBE, 1992), and typically attend their home school with the same aged peers. Among the factors associated with success of inclusion efforts, the acceptance of children with disabilities by nondisabled peers is among the most significant. However, an abundance of literature reflects a lack of acceptance of these children. Wylie (1976) found that nondisabled children have negative attitudes toward the disabled. Similarly, Horne (1985) found an overwhelming amount of evidence purporting that rejection of exceptional children exists by their nondisabled peers. Overall, findings in the literature suggest that students' rejection is dependent upon the following variables: (a) context or situation (e.g., regular classrooms, nongraded schools, or resource room services); (b) student's disability (i.e., physical, sensory, psychological or mental, and emotional [Horne, 1985; Horne & Ricciardo, 1988; Weiss, 1986]); (c) sex of the child (girls tend to be more accepting than boys [Hazzard & Baker, 1982; Horne, 1985; Rothlisberg et al., 1994; Royal & Roberts, 1987; Voeltz, 1980, 1982]); and (d) grade level, although results pertaining to this variable are ambiguous (Condon, York, Heal, & Fortschneider, 1986; Gilmore & Farina, 1989; Royal & Roberts, 1987; Voeltz, 1980; Wisley & Morgan, 1981). In addition to these variables, the mere label of mental retardation attached to descriptions of potential new classmates can lead to an unwillingness to have social contact with these children (Diamond, Le Furgy, & Blass, 1993; Gilmore & Farina, 1989; Rothlisberg et al., 1994; Stone & La Greca, 1990). These findings illustrate that much still needs to be
accomplished if the goal of federal legislation designed to attain equality in education for all children is to be realized.

Attitude Change

Interventions such as bibliotherapy designed to positively influence nondisabled children's attitudes toward their disabled classmates have proven to be successful. Bibliotherapy is a technique which has an advantage over alternate methods in that it is a relatively simple, nonintrusive, and inexpensive technique. Investigations utilizing bibliotherapy to effectuate attitude change have not been without limitations, however. Generalization of the treatment effects in some studies (i.e., Bauer, Campbell, & Troxell, 1985; Beardsley, 1982; Salend & Moe, 1983) are limited because of the restricted range of disabilities attended to during the intervention. Other constraints on the generalization of findings stem from the lack of sufficient follow-up assessment of treatment and therefore the inability to declare whether these effects were maintained (Beardsley, 1982; Leung, 1979; Salend & Moe, 1983). Another inadequacy of the literature on this topic is that many of the investigations bearing successful results did not solicit program evaluations from the students who participated in the interventions (Beardsley, 1982; Bauer et al., 1985; Leung, 1979; Salend & Moe, 1983). This makes it difficult to assess what those characteristics of the books are that might have led to improvement in attitudes; including content, humor, or the storyline to name only a few. Awareness of those characteristics which enable successful attitude change is crucial to the selection of the literature for an intervention. Although books of fiction (F) and nonfiction (NF) genres are different in many respects, some investigations have successfully employed both modalities interchangeably with no speculation as to possible differences among them (i.e., Leung, 1979; Salend & Moe, 1983). Both Beardsley (1982) and Bauer et al. (1985), who used only F genres,
have yielded results with inexplicably poor or weak treatment effects. In fact, nowhere in the literature has any researcher attempted to look at the differential effects of F and NF literature on changing nondisabled children's attitudes toward children with disabilities, even though the effects of messages labeled F and NF have been found to differ in their influence upon an individual's beliefs regarding particular social groups (Slater 1990).

Based on the limitations of the literature pertaining to changing nondisabled children's attitudes toward their disabled peers, it was deemed imperative that the following issues be critically assessed: (a) the differential effects of F and NF literature on fostering acceptance of children with disabilities by their nondisabled peers, (b) the differences in the efficacy of F and NF literature among males and females, as it pertains to changing attitudes toward children with disabilities, (c) the differences in the efficacy of F and NF literature across grade levels, as it pertains to changing attitudes toward children with disabilities, and (d) the differences between the acceptability of F and NF literature as rated by intervention participants.

Method

Participants

The sample consisted of 247 students (fourth, fifth, and sixth graders) from San Marcos Elementary School in Chandler Unified School District, Arizona (Metropolitan Phoenix), which does not serve special populations other than students with only mild disabilities. This school was specifically selected for two reasons: (a) to obtain a sample of students that do not have concurrent contact with children who have apparent disabilities, and (b) using classrooms not yet fully integrated is crucial in order to preclude the potentially harmful reception a disabled child may experience, by preparing the nondisabled students to accept the incoming child with disabilities (Gilmore & Farina, 1989). Another characteristic of this school which is relevant to
the investigation is their unique scheduling system, referred to as "multi-track". This was
designed to accommodate the excessive population of students serviced by the school. In this
"multi-track" system, the student body is divided into four groups referred to as "tracks"
("yellow", "green", "red", and "blue"). The instructional and vacation periods (nine and three
weeks, respectively) of each track are staggered so that at least one track is on vacation at all
times. The implications of this "multi-track" system are that it is often not possible, when
conducting an intervention, to involve all students at the same time. Therefore, for the purpose
of this investigation, only students from the "yellow", "red", and "green" tracks were included in
the sample.

With regard to demographics, the students comprised a multi-ethnic sample (Caucasian -
31.2%, Hispanic - 56.9%, African American - 6.7%, and Native American - 3.1%) of males and
females from low to middle socioeconomic status families, with approximately one third of
Hispanic students classified as English as a Second Language (ESL) learners. Monolingual
Spanish speakers participated in the interventions, but were not included in the sample.

Materials

The Acceptance Scale. Attitudes were measured by completion of the Acceptance Scale
(Meyer, 1994). Specifically, the elementary level version (1994) was used since it is intended
for use with children in grades 3-6. The elementary level version of the Acceptance Scale
contains 34 items (a few of the items were slightly altered in order to appropriately fit the
subject population) designed to assess nondisabled school aged children's attitudes toward
children with disabilities. The instrument is designed to yield an overall measure of attitudes
toward children with disabilities as well as individual measures on four subscales representing
the following attitudinal dimensions: (a) "Social contact willingness", (b) "Actual contact", (c)
"Teasing", and (d) "Deviance consequation/avoidance".

Treatment Acceptability Questionnaire. Questionnaires were utilized to obtain children’s
appraisals of the books used in the intervention. The questionnaires contain one item each
pertaining to the materials used per disability session. Responses are measured on a 5-point scale
in which each child circles the number (1 - 5) which best describes how much he/she liked each

Bibliotherapy

Both F and NF books were obtained from public libraries located within the Phoenix
Metropolitan area and were appropriate for the age group of the sample (ages 9-12). The main
characters of the stories portray children and adolescents with particular disabilities. The books
contain characteristics which are considered to make them appropriate for use in fostering
constructive attitudes toward persons with disabilities (e.g., void of prejudices or misconceptions
regarding the person or disability, or written in a positive manner which depicts the characters as
empowered individuals not to be pitied [Friedberg, Mullins, & Sukiennik, 1992; Robertson,
1992]). In addition to meeting the preceding criteria, book selection was also based upon their
applicability to the intervention (i.e., length and suitable matches for both treatments).

Nonfiction. The books from this modality were strictly didactic in nature (informational
NF) in order to avoid any similarities with books of Fictional formats. A typical style for NF
books of this nature (i.e., topic relating to disabilities and appropriate for ages 9-12 ) is to
combine several stories (some shorter than others) into one large book. Therefore, several books
were chosen with the intent to select stories that appropriately meet the criteria for this
investigation. Three books, with a total of six stories were selected. One story pertained to
mental retardation, two represented blindness, and three discussed physical disabilities. Multiple stories were chosen for two of the categories in order to approximate the length of the F books selected on the same disability.

**Fiction.** The F books were of a typical story format (imaginative prose) in order to be clearly distinguishable from the NF books. A total of four books were used from this category, relating specifically to blindness (43 pp.), physical disability (38 pp.), and mental retardation (10 pp and 30 pp., respectively).

**Results**

The investigation made use of a pretest - posttest experimental design to assess the effectiveness of the treatments across groups (control, F, and NF) for enhancing nondisabled children's attitudes toward their peers with disabilities. The **Acceptance Scale** constituted the dependent measure. Eighty-two cases were excluded from the analyses due to invalid protocols or missing data, leaving 165 total cases. Due to the high number of excluded cases, results at this point should be considered preliminary until further data is obtained.¹

**Pre-post**

Analyses of the intervention utilized a three factor analysis of covariance (ANCOVA), with pretest scores on the **Acceptance Scale** as the covariate and posttest scores as the dependent measure. Independent variables consisted of grade (4, 5, & 6), gender (M, F) and treatment (control, F, & NF). This analysis has been recommended by Cook and Campbell (1979) in order to account for possible initial differences among groups which cannot be determined through

pretest analyses. The ANCOVA has power to detect treatment differences among groups without the possible biases associated with initial non-equivalence of groups.

Results indicate no main effect for groups or grade levels, but do impart the existence of a significant interaction between these two variables, $F(4, 146) = 3.92, p < .01$. Further analysis revealed the group by grade interaction was significant at the level of sixth grade/NF ($M = 44.0$). That is, the sixth graders in the NF group had significantly higher scores on the acceptance scale than either of the other two sixth grade groups, or any of the other grade and group combinations (with means ranging from 34.35 to 41.38). In addition, the sixth grade/NF group was the only group to show significant improvement from pre ($M = 38.04$) to posttest ($M = 44.0$), $F(1, 44) = 13.36, p < .01$ (see Table 1). Lastly, a significant main-effect for gender was also detected, indicating as expected, that females were significantly more accepting of children with disabilities than males, $F(1, 146) = 4.44, p < .05$.

**Treatment Acceptability**

Differences between the treatment groups in terms of book evaluation were obtained by a two-way analysis of variance (ANOVA), which revealed significant differences among groups, grade level, and the presence of a grade by group interaction, $F(2, 594) = 20.59, p < .01$. In other words, this procedure detected that overall, the children in the NF group liked their books significantly more than those in the F groups, $F(1, 594) = 14.73, p < .01$ ($M = 4.09$). According to grade (both groups combined), the fourth grade students enjoyed the stories significantly more than the fifth- and sixth graders, $F(2, 594) = 7.16, p < .01$. The grade by group interaction was a bit more complex. The NF groups in both the fifth and sixth grade evaluated their books significantly higher than those in the F groups, $F(1, 163) = 9.38, p < .01$ and $F(1, 180) = 38.92, p < .01$, respectively, but the fourth graders liked F books significantly more than the NF, $F(1,
Lastly, the sixth grade NF group ($M = 4.34$) reported significantly higher book evaluations than the fifth grade NF group with a mean of 3.99 (see Table 2).

**Discussion**

Results of this investigation should be considered somewhat tentative because additional data from the "blue" track will be available shortly and will provide an additional four classrooms (95 students) to the sample. The data, inclusive of "blue" track students will then be re-analyzed. In addition, a six week follow-up is forthcoming in order to assess the maintenance of effects. Accordingly, any conclusions drawn from the investigation at this point would be premature (see Footnote 1).

The present study sought to improve upon interventions using bibliotherapy by distinguishing which of two genres, F or NF, is more effective at increasing nondisabled children's attitudes toward their peers with disabilities. To date, interventions using bibliotherapy have used these two modalities interchangeably with no speculation as to the possible differences between them. Thus far in this study, the NF literature has been found to be the only effective approach, but limited to the sixth grade only. With this only exception, neither of the two bibliotherapy interventions were effective in increasing nondisabled students attitudes toward children with disabilities (see Figure 1). The sixth grade increase however is quite convincing given the reported effect size of .31, which can be interpreted as a "medium" size effect according to Cohen's Effect Size index (Rosenthal & Rosnow, 1991, p. 444). The finding that females reported more positive attitudes than males on both the pre- and post-test was congruent to theoretical expectations. What was not expected was the students' differential preference for the treatment books (see Figure 2). Typically, both children and adults enjoy F
over NF books, and perceive NF as obligatory and not to be read for pleasure (Appleyard, 1990, Hill, 1981).

Only moderate treatment effects at this preliminary juncture might be due to a number of factors. First, the "multi-track" schedule (absence of "blue track") and the disproportionately high number of subject attrition due to invalid protocols (reflective of the attitude instrument), resulted in an inadequate sample size and an ensuing loss of power. Also, the insufficient performance of the Acceptance Scale was a significant limitation in this investigation. Although initially selected for its focus on several types of disabilities and presumable appropriateness for the age range of the participants, the measure contained many unforeseen limitations not compatible with this investigation, including:

1. The readability of the scale was not appropriate for many of the fourth grade students. Although the scale is reportedly intended for use with students as young as third grade, the Flesch-Kincaid Readability Index places this instrument at the fourth grade reading level. This is problematic for the specific population in question because many of the students have reading abilities below grade level.

2. Students found the format of the scale and protocol frustrating. The original sentences contained many contractions, and the presence of some double negative sentence/response sequences were difficult to decipher, particularly for the Hispanic ESL students whose native language imbues a different meaning for sentences constructed in such a manner. A response format of "true/false" as opposed to "yes/no" might have been more intelligible.

3. The scale lacked sensitivity to gradual change in attitudes. For example, out of 60 possible points, 12 refer to actual contact with disabled persons which was unlikely to change during the short duration of this intervention. This factor inadvertently instituted a low ceiling on the scale.
The above shortcomings might not necessarily be inherent to the scale, but rather indicative of a poor match between instrument and subject. The primary concern regarding the student population was the obvious confusion and poor comprehension regarding the attitude survey and/or stories. This was particularly (although not exclusively) evident in the fourth grade classrooms.

Conclusion

As discussed previously, this is the only investigation of its kind which examines the differences between the use of F and NF in bibliotherapy interventions designed to increase the acceptance of children with disabilities by nondisabled children. It is anticipated that the additional forthcoming data will yield more powerful results. Nevertheless, findings of this study confirm that the presentation of bibliotherapeutic material in F and NF genres does make a difference, at least in some cases. Future research is needed to address and improve upon the aforementioned weaknesses of the present investigation, including utilizing an attitude instrument which is more agreeable with diverse student populations.
References


# Pre-Post Means for Acceptance of Children with Disabilities

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<tr>
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* p < .01

Table 1
TREATMENT ACCEPTABILITY MEANS

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*P < .01

Table 2
ACCEPTANCE OF CHILDREN WITH DISABILITIES

Figure 1
CHILDREN’S EVALUATIONS
OF THE LITERATURE

Mean Treatment Acceptability

Grade

4th
5th
6th

GROUP
Fiction
Nonfiction

4.3
3.9
3.5
3.4
4.0
4.3

Figure 2

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