This report details the activities and accomplishments of a 4-year federally supported project concerned with: (1) validating a new strategy designed to promote the social relationships among young children with and without disabilities; (2) creating a training manual for use by teachers to promote acceptance of young children with disabilities; and (3) dissemination of results. Overall results indicated that the intervention with kindergarten students resulted in demonstrated increases in social behavior directed toward peers with disabilities and more acceptance at posttest of children with disabilities on sociometric measures. Change across time was reflected on the Acceptance Scale for Kindergartners. Analysis of qualitative data found benefits in the following areas: greater understanding of individuals with disabilities; greater acceptance of individuals with disabilities and/or individuals who are different; support of reading at home; and improved development of social, language, and play skills. Year-by-year project achievements are reported for procedural objectives, expected outcomes, evaluation results, supplemental information/changes, and budget information. Appended are lists of publication and presentation dissemination activities. (DB)
Strategies for Promoting Social Relationships
Among Young Children
With and Without Disabilities

Final Report
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Strategies for Promoting Social Relationships Among Young Children With and Without Disabilities

Project Summary

The purpose of this project is to extend a line of research on attitudes toward preschoolers with mild to severe disabilities by a) validating a new strategy designed to promote the social relationships among young children with and without disabilities, b) creating a training manual that can be utilized by teachers to promote acceptance of young children with disabilities, c) dissemination the results of this investigation with regard to three lines of inquiry: the relationship between stated levels of acceptance and social behavior among young children without and without disabilities; the maintenance of levels of acceptance after intervention has ceased; the validation of a newly developed attitude survey for kindergarten-age children. In addition, research reports concerning the effects of intervention strategies to promote social relationships among young children with and without disabilities will be written including a) change in levels of acceptance of nondisabled kindergarten-age children, b) change in social behavior (i.e., frequency of socially directed behaviors within the structured play groups) and, c) gains in social skills development of young children with disabilities.

The intervention occurred as projected in the approved grant application. The participants in the intervention demonstrated increases in their socially directed behavior toward children with disabilities at posttest and, more acceptance at posttest on sociometric ratings. Change across time was reflected on the Acceptance Scale for Kindergartners, and data is sill being analyzed to determine where those differences occurred. Using a content analysis of qualitative data, initial findings indicate that all teachers and parents of children who participated in the intervention endorsed the program as a beneficial activity for kindergarten-age children. They reported benefits in the following areas: promotes understanding of individuals with disabilities; promotes the acceptance of individuals with disabilities and/or individuals who are different; supports reading at home; facilitates the development of social, language, and play skills.

Project Status: Year One (1995-1996)

The grant proceeded as planned with two exceptions to the projected activities or timelines for completing these activities: a) the training video was produced in the spring as opposed to the fall because the teachers reported this would interfere with the progress of the intervention; b) the
data analysis was delayed because of the accessibility to SPSS. We are presently resolving this issue. In addition, the results of the investigation and the training manual for teachers are being created.

**Procedural Objectives**

All of the following objectives were met and occurred as described. (The objectives from the approved application appear in bold print below followed by what was actually done this year. These objective can be found on page 6 of the program narrative of the approved grant application. See page 32 of the program narrative for specific activities and timelines that correspond with objectives.)

1.1 (August) Unidentified staff will be recruited and secured; participants for year one activities will be recruited; consent for participants will be secured; participants will be assigned to treatment groups; materials for study will be ordered and/or duplicated.

1.1 (August) Two doctoral students were recruited as research assistants.

Participants for year one activities were recruited (48 nondisabled children and 16 children with disabilities). The population did address the competitive priority with 77% African American and 23% Caucasian in the sample (see p. 45 from the approved grant application). Consent for participants were secured with 16 participants assigned to each treatment group. Materials for the study were ordered and/or duplicated.

1.2 (August - October) Social behavioral measure will be developed; inter-rater reliability will be accomplished.

1.2 (August - October) Social behavioral measure was developed with an inter-rater reliability of .94 achieved on 30% of the observations.

1.3 (September) Teachers and/or support staff will receive training on the intervention package; pretest data will be collected.

1.3 (September) Teachers and/or support staff were presented with an overview and received training on the intervention package. Pretest data was collected using the Acceptance Scale for Kindergartners (ASK), Social Skills Rating Scale (SSRS), Individuals with Disabilities Representation (IDR), (Appendix F, A, and I, respectively, from the approved proposal) and sociometric assessment.

1.4 (October-December) The 9 week intervention will be implemented; probes will be taken (once a week) on social behavior within structured play.

1.4 (October-December) The 9 week intervention was implemented (see p. 12-13 in the approved grant application). Nine 5 minute probes were taken (one per week) on social behavior within structured play. To monitor fidelity of treatment, the implementation
checklist (Appendix J in approved proposal), attendance report, and parent reports on the home reading component (Appendix K in approved proposal) were collected.

1.5 (December-January) Post test data will be collected.
1.5 (December-January) Post test data was collected using the ASK, SSRS, IDR, and sociometric assessment (See p. 13-16 in the approved grant application).

1.6 (January - March) Year 1 in put of data, data will be analyzed, including ASK scores, behavioral probes, and social gains
1.6 (January - March) Initial data was coded, entered into a data base, and analyzed, including ASK scores, behavioral probes, and social gains. A training video was produced and final edits have just been completed. (It will be used for training of next year's teachers and at conference presentations.)

1.7 (May and September) Follow-up data will be collected.
1.7 (May) Follow-up data (ASK) was collected. All quantitative data is being reanalyzed with the follow-up data. We are also using different analyses (correlations) to examine consistency between different methodology (ASK, behavioral data, sociometric) and correlations between reliability data from pretest and posttest by treatment groups. This analysis is still in progress.

All of the following objectives are currently being addressed and completion is moving in a positive direction. The objectives can be found on page 6 of the program narrative of the approved grant application. These activities should be completed by the projected time lines (see p. 32 of the program narrative).

1.8 (April-June) Year 1 research reports will be prepared. Modifications in Year 1 procedures will be formulated into a training manual and incorporated into Year 2 experimental procedures.
1.8 (April-June) Year 1 research reports are being prepared (and are described below in Objective 1.9). Modifications in Year 1 procedures are being formulated into a training manual and will be incorporated into Year 2 experimental procedures. A behavioral observation training manual is also being developed for next year's data collectors.

1.9 (July) Dissemination of outcomes for Year 1 will occur.
1.9 (July-August) Dissemination of outcomes for Year 1 will occur. We anticipate four papers will be generated from this study: a) Strategies to Promote Acceptance of Young Children
with Disabilities (to be submitted to Journal of Early Intervention) will describe the methods and results of this study (including change in acceptance as measured on the ASK, sociometric rating, and behavioral observations), change in child behavior outside of the intervention, and reliability of the ASK; b) Measuring Acceptance of Preschoolers with Disabilities: A Comparison of Methodologies; (to be submitted to Early Childhood Research Quarterly) which compares the different methods used to assess attitudes and the issues and strengths of each of these with a young population; c) Selecting Materials and Activities that Facilitate the Inclusion of Children with Disabilities (to be submitted to Teaching Exceptional Children) which describes how teachers can evaluate the classroom environment with regard to materials and activities that depict individuals with disabilities and guidelines for choosing books and activities that facilitate acceptance of and inclusion of children with disabilities; d) How Attitudes are Formed: Implications for Promoting Positive Attitudes Toward Individuals with Disabilities (to be submitted to Early Childhood Education Journal) which describes the factors that influence attitude formation with suggestions for promoting acceptance of individuals with disabilities.

In addition, dissemination of this year's study has occurred (or will occur) in conference format. Specifically, a presentation entitled "How Attitudes are Formed: Implications for Promoting Positive Attitudes Toward Individuals with Disabilities" was presented at the Southern Early Childhood Association (Little Rock, Arkansas, March 1996). We have been accepted at the Tennessee Association for the Education of Young Children (Nashville, TN., Oct. 1996) and DEC Early Childhood Conference on Children with Special Needs (Phoenix, Arizona, Dec. 1996). Our presentation entitled, "Strategies for Promoting the Social Relationships Between Young Children With and Without Disabilities" will describe the methods and results of the Year One Study. In addition, the paper entitled "Measuring Acceptance of Preschoolers with Disabilities: A Comparison of Methodologies" was submitted to the 1997 CEC International Conference and "Selecting Materials and Activities that Facilitate the Inclusion of Children with Disabilities" was submitted to the 1997 Southern Early Childhood Association National Conference.
Expected outcomes provided below can be found on page 6 of the approved grant application.

1. A new, validated approach to promoting social relationships among nondisabled, kindergarten-age children and young children with disabilities that is economical and naturalistic for teachers and support staff to implement within their daily class routines.

With regard to Outcome One, the preliminary analyses of the data indicates that the intervention is effective in promoting change in child behavior. Kindergarten students participated in a nine week intervention designed to promote the social relationships among young children with and without disabilities. The intervention occurred as planned. (A 100% implementation rate was documented using the Implementation Checklist found in Appendix J of the approved grant application.) A school attendance rate of 94% and the home reading activity rate of 83% was recorded for participants in the intervention. A repeated measures MANOVA was used to measure pretest, posttest, and follow-up test differences across treatment groups on the ASK. A treatment group by time interaction was found (p < .04). Post hoc analysis has yet to be completed. MANOVA was used to examine differences across time with regard to socially directed behavior towards children with disabilities in structured play groups (see Appendix G in approved grant application). Differences approached significance (p <.08). The initial data analysis of sociometric ratings indicates at pretest, nondisabled kindergarten children received higher sociometric ratings than children with disabilities. (Children with disabilities received more of the lowest ratings than kindergarten children (F = .002).) At posttest, children with disabilities were rated more like nondisabled children, with no significant difference between the two groups of children. The results from the Inventory of Disability Representation (IDR) indicate that participants had relatively little or no exposure to persons with disabilities in their class room setting. (See Appendix I in the approved grant application for a copy of the IDR.) In addition, data analysis that has yet to be completed includes a) the qualitative analysis of changes in child behavior outside of the intervention as reported by parents and teachers and b) the analysis of change across time in the social skills of children with disabilities. The intervention appears to be a naturalistic
strategy for promoting greater acceptance of children with disabilities as measured on sociometric ratings and behavioral observations.

2. **A set of procedures within a training manual for teachers and support staff to use the methods developed and researched through this grant activity.** A training manual depicting the details of the intervention is presently being written and will be completed in July of 1996. In addition, a training video was produced highlighting the major components of the intervention. It will be utilized at conferences and local training sessions with the teachers who will participate in next year’s investigation and will be available upon request. A training manual for the behavioral observations is also being written. This will be used by data collectors in Year Two investigation and will be made available upon request (for other research projects).

3. **Research reports on the three areas currently under-represented in attitude literature: a) the relationship between stated levels of acceptance and social behavior among young children without and without disabilities, b) the maintenance of levels of acceptance after intervention has ceased, c) the validation of a newly developed attitude survey for kindergarten-age children.** Research reports (described in Outcome Three) are underway. Specifically, manuscripts (described above in Objective 1.9) will discuss the findings related to three lines of inquiry that are currently under-represented in the literature: a) the relationship between stated levels of acceptance and social behavior among young children without and without disabilities, b) the maintenance of levels of acceptance after intervention has ceased, c) the validation of a newly developed attitude survey for a different population (African American) kindergarten-age children. For example, the reliability of the **Acceptance Scale for Kindergartners (ASK)** (Favazza & Odom, in press) (see Appendix F in the approved grant application) was reexamined in this investigation as it was administered to a predominately African American population (77%). [When the ASK was developed, it was normed on a predominately Caucasian population (88%) with an alpha coefficient of .79 and a Spearman-Brown Split Half of .76.)] During this investigation an overall Cronbach alpha coefficient of .58 and .75 was found at pretest and follow-up test, respectively, and a Spearman-Brown split half of .51 and .75 was found at pretest and follow-up, respectively. These findings suggest that the ASK is a reliable instrument for this age and population, providing additional validation of the ASK which was previously normed on a different population. However, the low pretest reliability data
indicates some changes in the administration of the ASK is warranted (i.e., provision of an explanation of "handicap" prior to test administration, administration to smaller groups of children).

4. Research reports concerning the effects of intervention strategies to promote social relationships among young children with and without disabilities. Effects to be measured include a) change in levels of acceptance of nondisabled kindergarten-age children, b) change in social behavior (i.e., frequency of initiations, responses, sharing, affection and/or greeting behaviors within the structured play groups) of children with and without disabilities within play groups and outside play groups and, c) gains in social skills development of young children with disabilities.

Research reports (described in Outcome Four) are underway and will depict the following: change in levels of acceptance of nondisabled kindergarten-age children, change in social behavior within the structured play groups and outside play groups and, gains in social skills development of young children with disabilities. Manuscripts reflecting these research findings and new lines of inquiry are described above in Objective 1.9.

An evaluation plan was included in the original project application. The objectives, projected outcomes, and timelines from the approved grant application provided direction for evaluation of the Year One investigation. In addition, three sources contributed to the ongoing evaluation of the project activities: project staff, outside consultants, and teachers and administrators who participated in the project (see p. 35-37 of the approved grant application):

1. Project staff met on a regular basis. Documentation from staff meetings were maintained and served as a way to monitor the progress of the grant in addressing the objective (stated above). These were collected and filed in chronological order. These on-going meetings / discussions assisted in addressing the issues associated with the grant during the course of the year and kept the grant moving on the projected time line. (Evidence of this is provided above. Specifically, the grant has achieved every objective in the time frame that was projected in the approved proposal.) (See Appendix A for a copy of the Time Line from the approved grant application.) There was one departure from the original grant application in this area. Grant meetings (with the principle investigator and 2 staff) occurred more than once a week during the intervention phase,
pre- and post-test data collection phase, and reliability training phase. Staff met 3-5 times a week to attend to these activities which warranted frequent on-site meetings.

2. Conferences calls were utilized (as planned) with the outside consultants. In addition, individual calls, face-to-face meetings, and the use of electronic mail and fax were instrumental in these communications. Discussions with the consultants covered the following areas: overall accomplishments of the project, the adequacy with which objectives were met, the appropriate utilization of staff, grant and other resources, the educational significance of the research outcomes (i.e., additional reliability information on the ASK with a new population, correlation between methodologies), and the achievement of project objectives in relation to time lines. Many of these discussions focused on day-to-day issues in running the grant, development of a behavioral observation system, data collection issues, data analysis, and recommendations for changes in implementation for next year’s study. Documentation of these communications was maintained and filed in chronological order.

3. Input from teachers and school administrators was gathered during the project and at the end of the project. Some of the suggestions during the project did facilitate minor changes (i.e, the place and time the intervention occurs, how the play groups could be run simultaneously). In addition, teachers were given an opportunity to provide suggestions for improving the intervention package. These suggestions (i.e., selecting toys that are more easily manipulated by children with motoric deficits) are on file and, where possible, will be incorporated into the next year’s investigation.

SUPPLEMENTAL INFORMATION / CHANGES

Next year’s investigation move forward according to the plan from the approved grant application with regard to project strategies, activities, and outcomes with the following exceptions:

1. We added one measure (sociometric assessments) which is not represented in the approved grant application. This addition enables us to make a comparison of methodologies (a global measure of acceptance, behavioral observations, and sociometric ratings) used to assess acceptance. This comparison of methodologies with younger populations is not represented in the literature and will strengthen the findings of the investigation. We will continue to collect sociometric data in the Year Two investigation.
2. The original control site had to be changed because the socio-demographic background of children who registered and attended this school did not serve as a good match for the children from the intervention site. This reduced the use of travel monies as the control site that was used was closer to the University. In addition, it was close to my home, so many trips to this site were not from the University and did not warrant use of travel money. Instead, I paid for trips and, other staff did not need to make as many trips there. Later this summer, I will locate a better control site than was used this year. Because the switch was last minute, I did not have time to explore better options (in terms of socio-demographic match).

3. We were able to have the whole intervention at one site. When the grant was written, we hoped and anticipated being at one site, but we also knew that we might be at multiple sites if enough children did not return consent letters. The school has enough children to support the study, and the support of the teachers and principle. But the school is a low income area, as we are meeting the competitive priority of serving an under represented population (see p. 45 of the approved grant application). When the grant was developed, teachers reported to us that parents of children at this site typically are not involved in their children's school activities. We found this to be true in the Year 1 study. One example of this is the difficulty we face in getting consent letters returned. It took six weeks to get enough parents to return consent letters allowing their child to participate in the study. Since we had enough children at one site, it reduced the amount of travel money used. I anticipate having the same issue in next year's investigation. We hope to be located at one site for the intervention (the same site as this past year), but we are unable to predict parent responsiveness to grant activity. In Year 2 we will be adding 2 more treatment groups to the investigation, requiring a higher number of participants. We are planning to be at one site, but realize that we may not be able to have all treatment groups at the same site if students do not return consent letters.

4. One of the consultants (Dr. Odom) was supposed to come for a visit to the grant site. Instead, I had more trips scheduled to Nashville because of other University work or conference activities. (In the approved grant application, we had planned for one meeting where I would drive to Nashville, and one of the consultants would come here.) Because I had multiple meetings in Nashville, I was able to meet with Dr. Odom about the grant, when I was there for other business. Dr. Odom approved of this decision as these meetings were in addition to planned conferences.
calls, fax communications, electronic mail communications, and a video of the intervention. This resulted in unused funds from the travel line. Dr. Odom is relocating to North Carolina, and the other consultant (Dr. McEvoy) is in Minnesota. Because of this, even if I have other business in Nashville during the Year 2 study, we will not be able to have meetings there, as occurred in Year One (1995-1996).

5. I am currently seeking approval to transfer of funds from the travel line to an equipment line because of issues that have occurred during this first year of the grant. Specifically, this spring, SPSS was taken off the computers in our laboratory causing delays in data analysis. This was the facility used to run the analysis generated from the investigation. Our office for statistical support and computer supports for the College of Education have both recommended that the I install SPSS in on my computer, as this would be the most user friendly platform. However my computer is not powerful enough to install the statistical analysis programs needed to analyze the data on the grant. In addition, I am unable to install software that can read or save documents in multiple programs. This has been requested by publishers when grant-related research is submitted or accepted for publication and when networking with other researcher in my field. These issues will continue with greater frequency and warrant some changes.

6. The duration of the intervention will be six weeks (instead of nine) and the intensity will increase. (Three books per week about children with disabilities will be read, instead of two books per week.) This change is based on the behavior observation data collected. A visual inspection of graphed data indicates that nondisabled children's rates of socially directed behavior toward children with disabilities increased across time. These increases can be attributed to the first 6-7 weeks of the intervention. After the Thanksgiving break, the frequency dropped to the same level as was found at pretest. It appears that a break in the intervention negatively impacts the effects of the intervention. This decision was made after consulting Dr. Odom who was in agreement with the change in length of the intervention.

7. Next year, the number of children in each group will be 16, instead of 24. The reason for this change is as follows: The purpose of the second year investigation is to examine the components of the intervention to determine if any one of its components is as effective (or more effective) than the whole intervention package. The purpose of the third year investigation is to examine the feasibility of the intervention as a class-wide activity. (In other words, will the
intervention be as effective when administered to a larger group of children as opposed to a small group of children?) By increasing the number of participants in each treatment group in the second year, we may not be able to determine if effectiveness (or lack of effectiveness) is the result of the component or is related to an increase in the sample size. After consulting with Dr. Odom, he agrees that the number of children per treatment group should remain consistent with the Year One Study and that this change is necessary to maintain that consistency. In addition, he agreed that an “n” of 16 is sufficient to detect treatment group differences.

8. It would be useful to our project if we could document that kindergarten classrooms typically do not have curriculum, materials, books, activities that depict individuals with disabilities. We can easily document this by administering the IDR (See appendix I of the approved grant application) to a larger number of kindergarten teachers (n= 25) in next year’s investigation. This will be administered in January of 1997.

9. Two codes will be added to the behavioral observation system in Year Two investigation: a code identifying the gender of the recipient of socially directed behavior and a code for identifying the level of the positive social behavior (i.e., snatching objects versus asking for objects). The reasons for these additions are two-fold. Gender differences in acceptance of individuals with disabilities is a reoccurring theme. By adding the gender code, we may document that choice of play partner is also gender specific. In addition, by providing a more fine grain code of the nature of the positive social behavior we will be able to determine the kinds of play activity kindergarten children engage in when playing with children with disabilities. Relating this to the gender issue, girls may engage in different types of play with children with disabilities when compared with boys (i.e., cooperative versus competitive or aggressive). This information may explain ASK ratings and sociometric ratings of specific children in the study. Both codes could be added to the current behavioral observation system with a reasonable expectation of reliability.

Project Status: Year Two (1996-97)

The grant has proceeded as planned. We are currently involved in writing up the results of the second year of the investigation, revising the training manual for teachers, and planning for the next presentation and for next year’s investigation.

Procedural Objectives

All of the following objectives were met and occurred as described. (The
objectives from the approved application appear in bold print below followed by what was actually done this year. These objectives can be found on page 6 of the program narrative of the approved grant application.) These occurred within the timelines from the approved grant. See Appendix A for publications and presentations associated with this grant.

2.1 (August) Year 2 participants will be identified; consent for participants will be secured; participants will be assigned to treatment groups; materials for study will be ordered and/or duplicated.

2.1 (August) Two doctoral students were recruited as research assistants. Participants for year one activities were recruited (96 nondisabled children and 32 children with disabilities). The population did address the competitive priority with 98% African American and 2% Caucasian in the sample (see p. 45 from the approved grant application). Consent for participants were secured with 16 participants assigned to each treatment group. Materials for the study were ordered and/or duplicated.

2.2 (August - September) Inter-rater reliability will be accomplished on social behavioral measure.

2.2 (August - October) Social behavioral measure was developed with an inter-rater reliability of .88 achieved on 30% of the observations.

2.3 (September) Teachers and/or support staff will receive training on the intervention package; pretest data will be collected.

2.3 (September) Teachers and/or support staff were presented with an overview and received training on the intervention package. Pretest data was collected using the Acceptance Scale for Kindergartners (ASK), Social Skills Rating Scale (SSRS), Individuals with Disabilities Representation (IDR), (Appendix F, A, and I, respectively, from the approved proposal) and sociometric assessment. Two researchers, trained in Q-sort methodology will be trained and collect data to ascertain social characteristics of typically developing children associated with acceptance.

2.4 (October-December) The 6 week intervention will be implemented; probes will be taken (once a week) on social behavior within structured play.

2.4 (October-December) The 6 week intervention was implemented (see p. 12-13 in the approved grant application). Six 5 minute probes were taken (one per week) on social behavior within structured play. To monitor fidelity of treatment, the implementation checklist (Appendix J in approved proposal), attendance report, and parent reports on the
home reading component (Appendix K in approved proposal) were collected.

2.5 (December-January) Post test data will be collected.
2.5 (December-January) Post test data was collected using the ASK, SSRS, IDR, and sociometric assessment (See p. 13-16 in the approved grant application).

2.6 (January - March) Year 2 data input, data will be analyzed, including ASK scores, behavioral probes, and social gains
2.6 (January - March) Initial data was coded, entered into a data base, and analyzed, including reliability of the ASK, ASK scores, behavioral probes, sociometric ratings.

2.7 (May and September) Follow-up data will be collected.
2.7 (May) Follow-up data (ASK) was collected. All quantitative data is being reanalyzed with the follow-up data. We are also using different analyses (correlations) to examine consistency between different methodology (ASK, behavioral data, sociometric). This analysis is still in progress.

All of the following objectives are currently being addressed and completion is moving in a positive direction. The objectives can be found on page 7 of the program narrative of the approved grant application. These activities should be completed by the projected time lines. (See p. 33 of the program narrative from the approved grant application or refer to Appendix A within this document).

2.8 (April-June) Year 2 research reports will be prepared. Modifications for Year 3 procedures will be formulated based on findings of Year 2 and incorporated into Year 3 experimental procedures. Training manual will be revised based on Year 2 results.
2.8 (April-June) Year 1 research reports are being prepared (and are described below in Objective 2.9). Modifications in Year 2 procedures are being incorporated into the training manual and will be incorporated into Year 3 experimental procedures. Specifically, the following components have been added to the manual: all guided discussions, criteria for book selection and toy selection, copy of the IDR, copy of the ASK, suggestions for teachers and parents in setting up the storytime, guided discussions and play groups.

2.9 (July) Dissemination of outcomes for Year 2 will occur.
2.9 (July-August) Dissemination of outcomes for Year 2 will occur as follows. We have had 3 papers published related to this grant activity. The titles can be found in Appendix A of this
Two papers will be generated this summer/fall from this past year's study. They are entitled: *Strategies designed to promote and measure acceptance: A follow-up study of efficacy and reliability* (Favazza, Phillipsen & Kumar, 2000) and *Representing young children with disabilities in classroom environments* (Favazza, LaRoe, Phillipsen, & Kumar, 2000). See Appendix A for complete reference.

The first manuscript describes the methods and results of this study which examined the components of the intervention to determine if one component was more effective than the other in promoting acceptance of children with disabilities. In addition, this paper includes the changes made in the ASK and the new reliability data of the ASK, change in acceptance as measured on the ASK, and findings from the sociometric rating. The second manuscript describes how children with disabilities are depicted in early childhood settings. This manuscript includes data collected from 93 early childhood classes serving 1,702 children. It is described in more detail under Additional Changes, No. 6 on page 11 of this document. In addition, dissemination of this year's study has occurred (or will occur) in conference format. The title of these conference presentations can be found in Appendix B. Expected outcomes provided below can be found on page 6 of the approved grant application.

1. A new, validated approach to promoting social relationships among nondisabled, kindergarten-age children and young children with disabilities that is economical and naturalistic for teachers and support staff to implement within their daily class routines.

With regard to Outcome One, the preliminary analyses of Year 2 data indicates that the whole intervention is more effective in promoting increased acceptance than any of the individual components. However, the only statistically significant differences were found between the whole intervention treatment group and the control group.

Kindergarten students participated in a 6 week intervention designed to promote the social relationships among young children with and without disabilities. The intervention occurred as planned. (A 100% implementation rate was documented using the Implementation Checklist found in Appendix J of the approved grant application.) A school attendance rate of 94% and the home reading activity rate of 83% was recorded for participants in the intervention. A repeated measures MANOVA was used to measure
pretest, posttest, and follow-up test differences across treatment groups on the ASK. A treatment group by time interaction was found \((p < .04)\). Post hoc analysis has yet to be completed. This is discussed in detail in #3, p.6 of this document.

The results from the **Inventory of Disability Representation** (IDR) indicate that participants had relatively little or no exposure to persons with disabilities in their classroom setting. (See Appendix I in the approved grant application for a copy of the IDR.) This did not change in any of the classes at posttest or follow-up test.

The data for the **socially directed behavior** has been entered. A MANOVA was used to examine differences across time with regard to socially directed behavior towards children with disabilities in structured play groups (see Appendix G in approved grant application). Results of these initial analyses can be found in #3, p.7 of this document. The data from the **sociometric ratings** has been entered. The analysis is not yet complete. The data analysis that has yet to be completed on the qualitative analysis of changes in child behavior outside of the intervention as reported by parents and teachers and the analysis of change across time in the social skills of children with disabilities.

These analysis have been delayed due to 3 maternity leaves of personnel working on the grant. These will be completed with results incorporated in manuscripts that are already underway. Based on the results from the ASK-R data, initial findings indicate that the intervention is an effective strategy for promoting greater acceptance of children with disabilities as measured on the ASK-R.

2. **A set of procedures within a training manual for teachers and support staff to use the methods developed and researched through this grant activity.**

   A training manual depicting the details of the intervention is being revised. It, along with the training video (produced in Year 1) is utilized at conferences and local training sessions with the teachers who will participate in next year’s investigation and will be available upon request. The training manual for the behavioral observations has been written. It was revised for Year 2 based on data from Year 1. Specifically, the positive social behavior definition was redefined to include high and low social behaviors. This change was made because the data collectors observed many inappropriate social behaviors during Year 1 that did not fit the definition of negative behavior, but were definitely not representative of the most appropriate social behavior (snatching a toy versus
asking for it). These changes will be incorporated into the new BOS Training Manual. As a result, we will be running additional analyses on this data to determine if there are any differences in frequencies of low and high social behaviors directed toward children with and without disabilities. The manual was used by data collectors in Year Two investigation and is available upon request (for other research projects).

3. **Research reports on the three areas currently under-represented in attitude literature:** a) the relationship between stated levels of acceptance and social behavior among young children without and without disabilities, b) the maintenance of levels of acceptance after intervention has ceased, c) the validation of a newly developed attitude survey for kindergarten-age children.

   Research reports (described in Outcome Three) are underway. Specifically, manuscripts (described above in Objective 2.9) will discuss the findings related to three lines of inquiry that are currently under-represented in the literature: a) the relationship between stated levels of acceptance and social behavior among young children without and without disabilities, b) the maintenance of levels of acceptance after intervention has ceased, c) the validation of a newly developed attitude survey for a different population (African American) kindergarten-age children. Initial findings are delineated below.

   The reliability of the *Acceptance Scale for Kindergartners* (ASK) (Favazza & Odom, 1996) (see Appendix F in the approved grant application) was reexamined in this investigation as it was administered to a predominately African American population (77%). [When the ASK was developed, it was normed on a predominately Caucasian population (88%) with an alpha coefficient of .79 and a Spearman-Brown Split Half of .76).] During Year 1 investigation an overall Cronbach alpha coefficient of .58 and .75 was found at pretest and follow-up test, respectively, and a Spearman-Brown split half of .51 and .75 was found at pretest and follow-up, respectively. These findings suggested that the ASK is less reliable instrument for this age and population. The low pretest reliability data from Year 1 indicated some changes in the administration of the ASK were warranted. The following changes were made in the ASK during Year Two: 1) provision of an explanation of “handicap” prior to test administration, 2) include the terminology “disability” in the protocol, 3) administration to smaller groups of children (2-3 as opposed to 8), and 4) shortening the directives given throughout the administration of the survey. As a result, our new reliability data generated a Cronbach Alpha of .87 and split-half coefficient
(Spearman-Brown) of .91. These changes will be reflected in a newer version of the ASK-Revised.

Analysis are still being completed, with the expectation of publication of the following manuscript: *Issues associated with Special Friends Programs* (Favazza, & Kumar, Phillipsen, (Manuscript in progress) (See Appendix A). The untimely death of the third author has delayed the work on this manuscript.

4. Research reports concerning the effects of intervention strategies to promote social relationships among young children with and without disabilities. Effects to be measured include a) change in levels of acceptance of nondisabled kindergarten-age children, b) change in social behavior (i.e., frequency of initiations, responses, sharing, affection and/or greeting behaviors within the structured play groups) of children with and without disabilities within play groups and outside play groups and, c) gains in social skills development of young children with disabilities.

Research reports (described in Outcome Four) are underway and will depict the following: change in levels of acceptance of nondisabled kindergarten-age children, change in social behavior within the structured play groups and outside play groups and, gains in social skills development of young children with disabilities. Manuscripts reflecting these research findings and new lines of inquiry are described above in Objective 2.9. A complete listing of manuscripts and products for dissemination related to this grant activity can be found in Appendix B of this document. In addition, materials from this grant activity have been distributed at every conference presentation, and from e-mail request from programs and persons from across the United States, Korea, Poland, Japan, England, Greece, South Africa, and Canada.

An evaluation plan was included in the original project application. The objectives, projected outcomes, and timelines from the approved grant application provided direction for evaluation of the Year One investigation. In addition, three sources contributed to the ongoing evaluation of the project activities: project staff, outside consultants, and teachers and administrators who participated in the project (see p. 35-37 of the approved grant application):

1. Project staff met on a regular basis. Documentation from staff meetings were maintained and served as a way to monitor the progress of the grant in addressing the objective (stated above).
These were collected and filed in chronological order. These on-going meetings / discussions assisted in addressing the issues associated with the grant during the course of the year and kept the grant moving on the projected time line. (Evidence of this is provided above. Specifically, the grant has achieved every objective in the time frame that was projected in the approved proposal.) (See Appendix A for a copy of the Time Line from the approved grant application.) There was one departure from the original grant application in this area. Grant meetings (with the principle investigator and 2 staff) occurred more than once a week during the intervention phase, pre- and post-test data collection phase, and reliability training phase. Staff met 3-5 times a week to attend to these activities which warranted frequent on-site meetings.

2. Conferences calls were utilized (as planned) with one of the outside consultants (Dr. Odom). Face-to-face meetings with the new consultant (Dr. Phillipsen) occurred regularly (every 1-2 weeks as she is housed locally. In addition, the use of electronic mail and fax were instrumental in these communications when necessary. Discussions with the consultants covered the following areas: overall accomplishments of the project, the adequacy with which objectives were met, the appropriate utilization of staff, grant and other resources, the educational significance of the research outcomes (i.e., additional reliability information on the ASK with a new population, correlation between methodologies), and the achievement of project objectives in relation to time lines. Many of these discussions focused on day-to-day issues in running the grant, development of a behavioral observation system, data collection issues, data analysis, and recommendations for changes in implementation for next year’s study. Documentation of these communications was maintained and filed in chronological order.

3. Input from teachers and school administrators was gathered during the project and at the end of the project. Some of the suggestions during the project did facilitate minor changes (i.e, the place and time the intervention occurs, how the play groups could be run simultaneously). In addition, teachers were given an opportunity to provide suggestions for improving the intervention package. These suggestions (i.e., selecting toys that are more easily manipulated by children with motoric deficits) were implemented when possible.
BUDGET INFORMATION

The current status of budget expenditures for Year Two are consistent with the approved budget. Expenditures will not exceed approved budget limits. Current expenditures for this fiscal year represent approximately 80% of total approved budget. Budget commitments through the end of the fiscal year (through 8/20/97) will utilize the remaining funds. The only significant change that resulted in the modification of the approved budget was the transfer of funds from graduate assistant stipends to supplies. This change was occasioned by the early graduation of one graduate assistant. These funds will be used to purchase instructional and office supplies needed for grant activity. It is not expected that the grant will have unexpended funds at the end of the budget period. If the grant has unexpended funds at the end of the budget period, it is estimated that this figure will not exceed 3.5% of the total approved budget. Should this occur, we request that this small amount be forwarded.

SUPPLEMENTAL INFORMATION / CHANGES

Next year's investigation moves forward according to the plan from the approved grant application with regard to project strategies, activities, and outcomes with the following exceptions. All of these have already been discussed and endorsed by the two consultants (Drs. Odom and Phillipsen).

1. We anticipate being in six intervention sites (as was proposed in the approved grant application), representing an equivalent distribution with regard to race and SES. The past two years have been spent in sites that represent predominately low SES and African American populations. Because we are testing the effectiveness of the intervention with the whole class, both consultants believe it was better to seek sites that represented a more diverse population.

2. The control sites will be kindergarten classes that are housed on the same campus as the intervention site. This will eliminate any differences with regard to school.

3. We have made revisions within the ASK-R protocol based on the changes that were made during Year Two. These revisions and the new reliability information will be incorporated into the manuscript written about the Year Two study.

4. One of the consultants (Dr. Odom) was supposed to come for a visit to the grant site. Because Dr. Odom has relocated to South Carolina, more of these communications have occurred long distance and through an annual face-to-face meeting at the DEC conference this past
year. This has worked well in the past year and may occur the same way in the upcoming year if schedule conflicts cannot be worked out. (In the approved grant application, we had planned for one meeting where I would drive to Nashville, and one of the consultants would come here.) Because one of the consultants is now housed here, it has not become so critical to see both consultants. Dr. Odom approved of this decision as these meetings were in addition to planned conferences calls, fax communications, electronic mail communications.

5. Next year, the number of kindergarten children in each group will be approximately 20 per class at 6 sites (n=120). Because of this large sample, we may not be able to complete the behavioral observations as we have done in the past two years. During Year 1 and 2 of the grant, we collected 5 minute observational probes on every kindergarten participant. Because of the increased number in the sample size, and the limited number of data collectors (2) and reliability collectors(1), it will not be possible to collect a probe on every participant during Year 3. After talking with Drs. Odom and Phillipsen, we were encouraged to gather some of this data during Year 3. We may try to gather the same type of data on 30% of the sample. After consulting with Dr. Odom, he agrees that the number of children observed (n =40) is sufficient to detect differences across time within intervention.

6. During Year 2 we undertook a mini study within the larger study. Specifically we administered the IDR to 54 kindergarten teachers (serving 1171 kindergarten children), 13 preschool special education children (serving 133 preschool children with disabilities), and 26 or community based preschool teachers (serving 398 typically developing preschool children). We documented that early childhood classrooms (serving children with and without disabilities) typically do not have curriculum, materials, books, or activities that depict individuals with disabilities. All participating teachers were presented with a resource packet for selecting and obtaining materials that would facilitate their creation of an early childhood setting reflecting individuals with disabilities.

Project Status: Year Three (1997-98)

The grant proceeded as planned with three exceptions to the projected activities or timelines for completing these activities: a) behavioral observations, while viewed as important, will not be collected. The number of students needed as data collectors makes the undertaking prohibitive, from a financial standpoint, and the labor intensive nature of the BOS; b) sociometric reports will
be collected.

**Procedural Objectives**

3.1 **(August)** Year 3 participants will be identified; consent for participants will be secured; materials for study will be ordered and/or duplicated.

3.1 (August) Two doctoral students were recruited as research assistants. Participants for year three activities were recruited. The population did address the competitive priority with 98% African American and 2% Caucasian in the sample (see p. 45 from the approved grant application). Consent for participants were secured with all participants. Materials for the study were ordered and/or duplicated.

3.2 **(August - September)** Inter-rater reliability will be accomplished on social behavioral measure.

3.2 This measure was not used. Inter-rater reliability was obtained on sociometric ratings.

3.3 **(September)** Teachers and/or support staff will receive training on the intervention package; pretest data will be collected.

3.3 (September) Teachers and/or support staff were presented with an overview and received training on the intervention package. Pretest data was collected using the Acceptance Scale for Kindergartners - Revised (ASK-R), Social Skills Rating Scale (SSRS), Individuals with Disabilities Representation (IDR), (Appendix F, A, and I, respectively, from the approved proposal) and sociometric assessment.

3.4 **(October-December)** The 9 week intervention will be replicated with larger number of participants receiving the intervention package; probes will be taken (once a week) on social behavior within structured play.

3.4 The length of intervention was reduced to 6 weeks based on behavioral observation data from Year One. Probes did not occur, as the BOS was no longer utilized to collect data.

3.5 **(December-January)** Post test data will be collected.

3.5 All post test data (ASK-R, sociometric observation, IDR, Social Skills Rating Scales) were collected as planned.

3.6 **(January - March)** Year 3 data input, data will be analyzed, including ASK-R scores, and social gains.

3.6 (January - Aug) Year 3 data input, data will be analyzed, including ASK-R scores, sociometric data, IDR, and social gains.

3.7 **(May and September)** Follow-up data will be collected.

3.7 The follow-up data (May, 1998) was collected as planned. The September follow-up data collection was postponed. The project director determined that collecting the follow-up data the following May (1999) would make a greater contribution to the existing research, as follow-up studies of this magnitude are not found in the literature. Given this decision, the project director sought an extension of the grant. This decision was supported by both consultants.

3.8 **(April- July)** Year 3 research reports will be prepared. Training manual will be revised for dissemination based on Year 3 results.

3.8 Findings were written up according to plan. See attached appendix for a listing of all publications produced or in progress. Because the dissemination of results and manuals became more labor intensive than anticipated, the project director sought an extension of the grant. This decision was supported by both consultants.
3.9 (August) Dissemination of outcomes for Year 3 will occur; final report will be written.

Dissemination of Year 3 materials occurred as planned, but took much longer. See Appendix A for listing of publications produced and in progress. Writing of Final Report was postponed until the completion of the extension of grant.

Expected Outcomes provided below can be found on page 6 of the approved grant application.

1. A new, validated approach to promoting social relationships among nondisabled, kindergarten-age children and young children with disabilities that is economical and naturalistic for teachers and support staff to implement within their daily class routines. The results of year three are written up for dissemination. Initial analysis of data indicate that the intervention was successful in promoting acceptance, there are many issue to implementing such programs in schools. These findings are being addressed in the following manuscript:


2. A set of procedures within a training manual for teachers and support staff to use the methods developed and researched through this grant activity. The Special Friends Program and the ASK-R were revised for publication. An additional 9 months was needed to work on these revisions. A copy of the ASK-R and Special Friends Manual is enclosed with this Final Report.

3. Research reports on the three areas currently under-represented in attitude literature: a) the relationship between stated levels of acceptance and social behavior among young children without and without disabilities, b) the maintenance of levels of acceptance after intervention has ceased, c) the validation of a newly developed attitude survey for kindergarten-age children. Research reports (described in Outcome Three) are completed or underway See Appendix A and B for dissemination activities. Due to the number of hours involved in the implementation of Year # Interventions, we anticipate requesting an additional 9 months to work on dissemination of research findings.

4. Research reports concerning the effects of intervention strategies to promote social relationships among young children with and without disabilities. Effects to be measured include a) change in levels of acceptance of nondisabled kindergarten-age children, b) change in social behavior (i.e., frequency of initiations, responses, sharing, affection and/or greeting behaviors within the structured play groups) of children with and without disabilities within play groups and outside play groups and, c) gains in social skills development of young children with disabilities. Research reports (described in Outcome Four) are underway, depicting the following:
change in levels of acceptance of nondisabled kindergarten-age children, change in social behavior within the structured play groups and outside play groups, documentation of low levels of materials and programs that represent individuals with disabilities, issues related to Special Friends Programs. A complete listing of manuscripts and products for dissemination related to this grant activity can be found in Appendix A and Appendix B of this document. In addition, materials from this grant activity have been distributed at every conference presentation, and from e-mail request from programs and individuals nationally (from across the United States) and internationally from Korea, Japan, Greece, South Africa, Poland, United Kingdom, and Canada.

An evaluation plan was included in the original project application. The objectives, projected outcomes, and timelines from the approved grant application provided direction for evaluation of the Year One investigation. In addition, three sources contributed to the ongoing evaluation of the project activities: project staff, outside consultants, and teachers and administrators who participated in the project (see p. 35-37 of the approved grant application):

1. All documentation of this activity is the same as occurred in Year 2 (reported above).
2. Input from teachers and school administrators was gathered during the project and at the end of the project. Some of the suggestions during the project did facilitate minor changes (i.e., the place and time the intervention occurs, how the play groups could be run simultaneously). In addition, teachers were given an opportunity to provide suggestions for improving the intervention package. These suggestions (i.e., selecting toys that are more easily manipulated by children with motoric deficits) were implemented when possible. Issues associated with implementing Special Friends Programs were presented at the DEC International Conference (1998) (Appendix B) and is currently being written up for dissemination.


BUDGET INFORMATION

The current status of budget expenditures for Year Three were consistent with the approved
budget. Expenditures will not exceed approved budget limits. We requested that any remaining funds be carried forward and that grant activity be extended for 9 months to address the following activities: writing for dissemination of results from grant activity (publication and presentation activity) and, collection of follow-up data (one and a half years) after intervention.

SUPPLEMENTAL INFORMATION / CHANGES

Next year's grant activities will focus on completion of publication activities, collection of additional follow-up data. These activities are consistent with objectives and projected outcomes from the approved grant proposal. All of these are endorsed by the two consultants (Drs. Odom and Phillipsen).

1. Due to the large volumes of data generated, the project director has requested an extension (9 months) to complete dissemination activities (writing for publication) and complete the final follow-up data collection and analysis.

2. During Year 3 we undertook a mini study within the larger study. Specifically we anticipate readministered the IDR to kindergarten or community based preschool teachers. Then we provided the teachers with classroom materials (books, posters, etc.) that reflect individuals with disabilities. The ASK-R was used to determine if changes in acceptance in children resulted after these environmental changes. In addition, teachers were asked to comment on changes in child behavior. Qualitative analysis will be used to document these reported changes. It will not require additional funds, but will require some additional time in terms of data collection and analysis. This data has yet to be analyzed.

Project Status: Year Four (1998-1999)

On June 25, 1998, Dr. Favazza (Principal Investigator), exercised her authority to extend the grant activity (in writing) to Doris Andres (FAX#202-205-8105 PHONE # 202-205-8125) at the U.S. Department of Education, Washington, D.C. The memo read (in part) as follows:

Per our conversation on 24th of June, 1998, I am writing to exercise my authority to extend the above mention grant for a period of 9 months, and thus carry forward any remaining funding. The purpose of extending the grant will be to address the following activities:

1. Completion of all data analysis
2. Rewrites and resubmissions of Year 1 results for publication
3. Write/disseminate results of Year 2 for publication
4. Write/disseminate results of Year 3 for publication

5. Meet with publishers to publish training manual and ASK-R at DEC Conference (1998)

6. Disseminate findings from Year 3 (DEC Conference, 1998)

7. Collect follow-up data (one and a half years after intervention ceased)

All of these activities were in line with the activities from the original grant proposal. A copy of this returned fax was forwarded to our Grants Accounting Office. In addition, any remaining funds in the grant were then forwarded to the Extended Year of the grant (1998-99).

At that time (March 17, 1998) our grants accountant (Sabrina Qualls) stated there was $3709.27 left in the budget. The request to carry forward remaining funds from the 1996-97 budget to 1997-98 budget was approved for carry forward.

**Procedural Objectives**

1. **Completion of all data analysis**

   All data analysis has been completed with the following exceptions:
   
   1a. Social skills gains for all children across 3 years will be combined and examined as a single unit, with pre and post levels of social skills examined as associated with participation in the intervention.
   
   1b. Qualitative data analysis from Year 2 and 3 on benefits and issues associated with Special Friends Programs is still in progress.
   
   1c. Follow-up data has been analyzed and is being written up for dissemination.
   
   1d. Results from the environmental mini-study (described under #2 of the Supplemental Information on page 24 of this report) have yet to analyzed.

2. **Rewrites and resubmissions of Year 1 results for publication**

   Year One data has been submitted 3 times without success. It will not be submitted further. Flaws in data collection and reliability issues prevent this manuscript from being accepted. However, the findings were very instructive in redesigning data collection instrument (ASK-R) and adding sociometric measures to future studies.

3. **Write/disseminate results of Year 2 for publication**


4. Write/disseminate results of Year 3 for publication


5. Meet with publishers (Roots and Wings) to publish training manual generated from grant activity

Meeting completed at DEC (1998) Conference with following publications generated:


6. Disseminate findings from Year 3


7. Collect follow-up data (one and a half years after intervention ceased)

Data has been collected and analyzed. The initial data analysis indicate that the impact of Special Friends Programs may be limited if schools do not continue to promote acceptance of children with disabilities. These analyses are incomplete, at the writing of this report. Upon completion, the finding will be written up for publication.

BUDGET INFORMATION

With the extensions completed there is $1297 remaining in the budget. I have requested that these funds be returned. Our grants accountant (Sabrina Qualls) has verified this figure and informed me that the remaining funds will be returned.
Appendix A
Publication Activity


Appendix B
Presentation Activity
(*) indicates refereed presentations

International/National Presentations


Regional Presentations


Promoting the Social Relationships Between young Children With and Without Disabilities: Implications for Practice. TN. Association for the Education of Young Children. Nashville, TN.


Other Products of Scholarship


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