This is the final report of a project that studied sex role stereotyping behavior among children in four preschools in Albuquerque, New Mexico, and attempted to intervene in the development of such stereotyping. The three phases of the study, which included contacting the schools, data collection and analysis, and information dissemination, are described. The report suggests a need for more research involving American Indian and Hispanic American children, and ongoing participation by parents and teachers in the development of intervention strategies. Appendices include the texts of instruments used to assess gender knowledge, verbal and behavioral sex-typing in toy play, and occupational sex-typing. (JCD)
Multicultural Sex-Role Development in Young Children:

Intervention Strategies

Final Report

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This final report covers the period from September 1, 1978, through September 30, 1979. A brief description of the grant's purpose follows, then the report on the various aspects of the Project.

NATURE AND PURPOSE OF GRANT

The purpose of this small grant was to extend and expand our 1977-78 project, Sex-role Stereotypes and Behaviors in Young Children, to include American Indian children and their care centers. Most of the sex-role work that is done with young children and their care centers uses White and/or Black children. Very little work is available on either American Indian or Hispanic children. In addition, intervention with two other groups of influential adults who are less directly involved with young children's education is included: parents and educational researchers.

As of 1976, nearly one-half of the young children in America attended care centers -- that is, preschools, daycare centers, or kindergartens. These centers teach children many things, including sex-role attitudes and behaviors. These care settings are really the beginning of educational inequity for females. By providing teachers, parents, and educational researchers with information about young children's sex-roles, they can start to help children form attitudes, behaviors, and expectations that are consistent with their interests and skills, rather than with their gender.

We are concerned with systematic change in the early educational environment by:

1. identifying the interrelating sex-role stereotypes and behaviors in three ethnic groups of children -- American Indian, Hispanic and White; and

2. intervening in the sex-role development process through in-service training for teachers, parents, and educational researchers designed to help these adults and the children they care for to develop more flexible sex-role ideas and behaviors, within the context of their ethnic group.

Since effective change is accomplished through the involvement of the community, this project utilizes teachers and parents of both sexes from at least three ethnic groups.

PROJECT OBJECTIVES

This project had three phases: (1) contacting schools; (2) data collection and analysis; and (3) information dissemination.
CONTACTING SCHOOLS

Four preschools in Albuquerque were to be used. Three were used in the 1977-78 project; a fourth was to be added for piloting the instruments for Phase 2. All schools were contacted and permission received to use their facilities and children. In Summer, 1979, the State-supported school (one used in 1977-78) was closed due to lack of State funds.

Schools on American Indian reservations were also to be used. The Cultural Consultant was to have primary responsibility for this activity. However, just before notification of the grant award, Ms. Smiley-Marquez resigned her position with the New Mexico Department of Education without informing project staff. At first we were told she was "on leave"; it was some time before we ascertained that she had left the state for a new position.

Dr. Schau met the first Head Start program director in July, 1978. Tentative approval was received, but in late fall the director of the program resigned. November and December saw Tribal Council elections and religious ceremonies. In early spring all applicants for Head Start program director were rejected and a new search begun. This tribe would like to work with us, but felt that these extenuating circumstances would prevent their participation this year.

The director of the Six Sandoval Pueblos educational programs was contacted during the fall of 1978. Two of her Head Start programs expressed interest in working with us. One, with about 10 children, was considered too small. The second requested various information from us in November, January, and February. We were told that the teachers approved and the Tribal Governor approved, but in April they decided that the school year was too nearly finished to begin a major project, although they were interested in the concept.

The third Head Start program was approached in February. The director, teachers, and parents at all three Head Start schools were very excited about the project; there are about 100 children at these schools. However, as permission was not granted by tribal bureaucracies until mid-April, we decided that with only one month for data collection, the number of children we could interview at this one Pueblo would not be generalizable to American Indian Pueblo culture, and certainly not to the American Indian culture as a whole. Therefore, we continued to work with the Head Start director during the summer and planned to start data collection in September. Parental permission to talk with the children already was received for all children in the program. We have met several of the children and talked with them; they are vibrant, enthusiastic children.

For each American Indian Pueblo the following procedures (not necessarily in this order) must be followed to receive permission to talk with the children: (1) contact Head Start director; (2) talk with director and teachers; (3) present project to monthly Parent-Teacher Organization meeting; (4) talk with tribal education leader(s); (5) present project to monthly Tribal Council meeting; (6) contact Tribal Governor; and (7) request permission from individual parents. At any point in this process
a project can be rejected or returned to an earlier level for further explication.

Thus, Phase 1 was essentially completed.

DATA COLLECTION AND ANALYSIS

Revision of the instruments used in the 1977-78 project was completed. Parents and teachers within the specific Pueblos with whom we planned to work reviewed and commented upon each instrument. Based on their comments, five of the instruments were revised (see Appendix A for copies). The sixth instrument (Peer Sex-typing) was dropped. The time spent on this instrument was not deemed worthwhile since the 1977-78 Peer Sex-typing results showed no significance and were of little interest.

Actual data collection was not begun because of the problems in getting permission to work with the Pueblo children. The children in Albuquerque were not used because there was no need to pilot the instrument. The major reason for this, of course, was the lack of subjects. However, the changes in the instruments suggested by the American Indians were so minor that the need for piloting was questionable. It would seem that the original instruments are basically culture-fair.

INFORMATION DISSEMINATION

Six specific outcomes, all methods for disseminating information, were stated in the grant proposal with revisions in the Interim Report. These are: (1) an evaluated workshop outline, with materials, for parents and teachers; (2) an article for a teacher magazine; (3) an article for an educational research journal; (4) an article for a nationally distributed magazine; (5) a presentation at a national teachers' conference; and (6) a presentation at a national educational researchers' conference.

Since the data collection and analysis (Phase 2) of the project never occurred, these objectives must be narrowed. However, they have not been summarily eliminated. A great deal of information was collected during our informal talks with the American Indian Pueblo children, their teachers, and Pueblo students at the University of New Mexico. When combined with data from the 1977-78 project, some of the 1978-79 commitments can be met.

Workshop

A workshop, "Sex Roles of New Mexico's Children," has been presented at the 1980 New Mexico Association for the Education of Young Children Annual State Spring Conference. The workshop has also been presented at the Pueblo which had agreed to work with us. The outline and materials will be completed shortly.

Teacher magazine

Based on the workshop experiences, comments from participants, and a literature review, article(s) will be written for a teacher magazine stressing the importance of culture-fairness in the classroom and suggesting
methods for attaining this. Specific problems of sex-role development for American Indians and Hispanics will be included. The probable magazine to which we will submit is Young Children.

**Educational research journal**

The article for an educational research journal will be deleted. This type of journal requires data collection and analysis.

**Nationally distributed magazine**

An article similar to that for the teachers' magazine will be prepared for a magazine such as Parents. By writing for both parents and teachers, we will be contacting two of the groups from whom children learn about others.

**National conferences**

Presentations for both types of national conference are currently under consideration. It is likely that at least one submittal will be made, but a decision has not been made.

Even though the scope of the work has changed drastically, the outcomes are essentially intact.

**STAFFING**

Because the data collection phase of the project was eliminated, staffing remained incomplete. As already mentioned, the proposed Cultural Consultant was no longer available to us. We did, however, receive a great deal of information and support from two American Indian women attending the University of New Mexico. One of them was hired on an as-needed basis as a cultural assistant; she helped us at the Pueblo which accepted our proposal and made preliminary suggestions for instrument revision.

The Advisor Board consisted of three White women and one Black woman from the Albuquerque preschools and one American Indian woman from the Pueblo which had given us final approval. However, the Board never met as a group. Individual contact was made with each Board member twice, and additional contacts were made with the Pueblo member.

In addition, a White woman was hired on an hourly basis as a typist. One or two additional people may now be hired on a short-term basis to assist with the literature review.

**EVALUATION**

Instruments from the 1977-78 small grant were evaluated by parents and teachers from the American Indian Pueblos involved with this small grant. Based on their comments, the instruments were revised to assure cultural fairness.
Overall evaluation of the project is not necessary. However, each outcome will be evaluated by outside people as they are completed and submitted for presentation/publication.

**INTERORGANIZATION ARRANGEMENTS**

We are not working with other organizations.

**OTHER**

The project has not proceeded as planned due to the bureaucracies through which we had to work. We do not feel, however, that the year was a loss. We learned a great deal about American Indian Pueblo culture and have made important contacts. One Pueblo has requested assistance in improving the Head Start program; several parent/teacher workshops are being planned. Research involving American Indian and Hispanic children is needed. With contacts made this past year, it is quite possible that small-scale research can now be developed and completed.

We maintain our view that this work is vitally important. Probably the most important aspect is that which is being completed: contact with parents and teachers through the development of intervention strategies. Doing the research and reporting to others in the field is but one step. In order to have an impact on lifestyles and cultural empathy, teachers of all levels and parents must be reached. If our work can help provide the contact, through workshops and teacher/parent magazines, so necessary for this understanding, we will have succeeded in a major portion of our goals.
APPENDIX A

Instruments

The instruments were revised to ensure cultural fairness and to improve validity. Changes were made in the Gender Knowledge instrument and the faces used for Toy Verbal and Occupations.
Interview A: Gender Knowledge

Materials: Boy and girl paperdolls from ethnic set indicated, tape recorder

Directions: Parts of this interview may be too hard for the very young children. And parts of it may be embarrassing to the older children. Give the children lots of support and make the situation as light as possible. But we don't want them giving nonsense (to them) answers.

I. Identity

1. (Show boy paperdoll with hair) "Is this a girl or a boy?" (Repeat answer)

2. (Show girl paperdoll with hair) "Is this a girl or a boy?" (Repeat answer)

3. (Point to yourself) "Am I a man or a woman?" (Repeat answer)

4. (Point to the child) "Are you a boy or a girl?" (Repeat answer)

If the child hasn't answered or won't answer the above four questions correctly, stop the interview.

II. Constancy

A. (Set cut the girl paperdoll in front of the child. Have him/her put her hair on.)

1. "When Janie/Juanita/Dawn was a little baby, was she a little girl or was she a little boy baby?" (Repeat answer) "Was she ever a little (opposite of S's choice)?" (Repeat answer)

2. "If Janie/Juanita/Dawn plays with trucks and does things that boys like, would she turn into a boy or would she still be a girl? Why?" (Repeat answer)

3. "If Janie changes her name to Johnny/Juan/Eagle, a boy's name, would she still be a girl or would she turn into a boy?" (Repeat answer)

4. "If Janie/Juanita/Dawn changes her name to Johnny/Juan/Eagle and puts on boy's clothes like this" (have the child put the boy's clothes on the girl doll) "and fixes her hair like a boy's" (have the child put on the boy's hair) "and plays with trucks and does things that boys like, would she turn into a boy or would she still be a girl? Why?" (Repeat answer)

B. (Remove the girl doll and set out the boy doll. Have the child put the doll's hair on.)

5. "When Johnny/Juan/Eagle grows up, will he be a man or will he be a woman? Will he ever be a (opposite of S's choice)?" (Repeat answer)
6. "If _Johnny/Juan/Eagle_ really wants to be a girl, can he turn into a girl?" (If they say YES): "How?" (Repeat answer) (If they say NO): "Why not?" (Repeat answer)

7. "If _Johnny/Juan/Eagle_ wears his hair like girls do, like this" (have the child put the girl's hair on the boy doll), "would he turn into a girl or would he still be a boy? Why?" (Repeat answer) (Have the child put the boy's hair back on the boy doll)

8. "If _Johnny/Juan/Eagle_ puts on girl's clothes, like this" (have the child put the girl's clothes on the boy doll), "would he still be a boy or would he turn into a girl? Why?" (Repeat answer) (Have the child put the boy's clothes back on the boy)

9. (Spread out the girl's clothes, hair, etc. around the boy doll) "What could you do to _Johnny/Juan/Eagle_ to make him into a girl?" (After the child is through): "So (child's responses) will really make _Johnny/Juan/Eagle_ into a girl?"

C. (Remove paperdolls): "Let's talk about you."

10. "When you were a little baby, were you a little girl or a little boy baby? Were you ever a little (opposite sex of S's choice) baby?" (Repeat answer)

11. "When you grow up, will you be a man or a woman? Will you ever be a (opposite sex of S's choice)?" (Repeat answer)

12. "Let's say that you wanted to turn into a (opposite sex of S). How could you do it?" (Repeat answer) "Could you ever really be a (opposite sex of S)?" (If they say YES): "Do you mean really, or just pretend?"

13. "How do (opposite sex of S) look different from the way you look?" (Repeat answer) "How do (opposite sex of S) act different from the way you act?" (Repeat answer)
Interview B: Toy Play

Materials: 9 toys, videotape recorder

Directions: Set up and test the videotape before you start. Do not do this interview if you cannot get the videotape tape to run properly. One very common problem is incorrect threading. Follow the diagram exactly.

The object of this interview is to see what toys the children play with. It's also to measure how often they talk to you, ask for help, etc. Don't actually play with them, but if they need help (e.g., they don't remember how to work a toy), show them but then let them play alone. Don't be stand-offish.

Set the toys up before you bring the child in. It is best to set them up on a low table but some of the care centers won't have one available. Judy and I will check this out and leave you a note at the care setting as to where you should set the toys up. If there is no table, use the floor. Make certain that the toys are set up such that they are separate from each other. Put them in a different order each time you do the interview; do not put all the boy's toys together, etc. If the child wants to put them together to play with them, that's fine. When you bring the child in, name each toy and show the child how it works:

"Here are some toys. This is a doll house. See the people and furniture. And the doorbell rings.
This is a movie camera. You look through this end, and turn the handle on the side.
This is a tool box. Here is a screw driver. You can use the tools to fix things.
This is a McDonald's hamburger stand. See the cars and the person who sells hamburgers and the trays?
This is a drill. You pull the string and this goes around to drill holes.
This is a stove. Here are some pans and some food and an apron. You can cook on it.
This is a cash register. You put the money in here and push this key. And you can turn this handle, a bell rings, and the drawer comes open.
This is a truck garage. Here are the trucks. You can put the boxes in the trucks like this and you can put the boxes here and here.
This is a sewing machine. You pull the string and this part goes up and down to sew.

You can play with any of these toys that you would like. I have to do some work with this machine, which will be running. If you need my help, just call me. Okay?"

(Be as unobtrusive as possible in taping them. Look like you are busy with the recorder part, rather than with the camera. Time them for five complete minutes. Then thank them. Ask them if they had a good time playing.)
Interview C: Toy Verbal

Materials: Drawings of three groups of children -- 4 girls' faces, 4 boys' faces, and 2 girls' and 2 boys' faces, photos of the nine toys, arranged in the order indicated on the bottom of the photos, tape recorder

"Let's play a game. Here are some pictures of groups of children. (Go through the directions presented in the "General Interviewer Instructions" sheet.) Here are some pictures of toys. You can be in charge of telling me which group of children would like to play with each toy the best."

(Turn on the tape recorder; show them photo #1)

1. "OK, (child's first name, or complete name if you have been assigned two children with the same first name). This is a doll house. Put this photo with the group of children who you think would like to play with it the most." (Repeat or add explanation as necessary. Then repeat their choice) "The (their choice) would like to play with the doll house the most? Would you like to play with it?" (Repeat their answer) "You (their answer)?"

2. (Remove photo 1 and show them photo 2) "This is a tool box. Put it with the group of children who would like to play with it the most." (Repeat their answer) "Would you like to play with it?" (Repeat answer)

3. (Photo 3) "This is a movie camera. Who would like to play with it the most?" (Repeat answer) "Would you like to play with it?" (Repeat answer)

4. (Photo 4) "This is a sewing machine. Who would like to play with it the most?" (Repeat answer) "Would you like to play with it?" (Repeat answer)

5. (Photo 5) "This is a McDonald's hamburger stand. Who would like to play with it the most?" (Repeat answer) "Would you like to play with it?" (Repeat answer)

6. (Photo 6) "This is a cash register. Who would like to play with it the most?" (Repeat answer) "Would you like to play with it?" (Repeat answer)

7. (Photo 7) "This is a truck garage. Who would like to play with it the most?" (Repeat answer) "Would you like to play with it?" (Repeat answer)

8. (Photo 8) "This is a stove. Who would like to play with it the most?" (Repeat answer) "Would you like to play with it?" (Repeat answer)

9. (Photo 9) "This is a drill. Who would like to play with it the most?" (Repeat answer) "Would you like to play with it?" (Repeat answer)

(Make certain that all of the photos are out of sight) "Tell me what toys you saw." (Repeat each toy name clearly)
Interview D: Occupations

Materials: Drawings of three groups of adults — 4 men's faces, 4 women's faces, and 2 men's and 2 women's faces, tape recorder

"Let's play a game. Here are some pictures of groups of adults/grown-ups."

"Let's talk about some jobs that adults do."

1a. "What does a nurse do?" (Probe until the child uses a pronoun [he or she] that can be understood on the tape and then repeat child's answer, omitting the pronoun. If the child absolutely won't say anything or answers incorrectly, say:) "A nurse is a person who helps the doctor take care of people when they are hurt or sick."

b. "Who do you think would like to be nurses the best? Men or women or both men and women?" (Point to the appropriate drawing as you go through the responses. Repeat the child's response.)

c. "Let's pretend that you are sick and have to go see some nurses. Would you like to see women nurses or men nurses or both women and men nurses?" (Point, repeat)

d. "Have you ever been to see real nurses? Were they both men and women nurses or men nurses or women nurses?" (Point, repeat)

2a. "What does a sales clerk do in a store?" (Make sure the child uses a pronoun and repeat answer, omitting the pronoun, or say:) "A sales clerk is a person who sells things in a store."

b. "Who do you think would like to be sales clerks the best? Women, or men, or both men and women?" (Point, repeat)

c. "Let's pretend that you are going to buy something in a new store. Do you want the sales clerks who help you to be both men and women clerks, men clerks, or women clerks?" (Point, repeat)

d. "Have you ever been in a store and seen real sales clerks? Were they women clerks, or both women and men clerks, or men clerks?"

3a. "What does a truck driver do?" (Make sure the child uses a pronoun and repeat child's answer, omitting pronoun, or say:) "A truck driver is a person who drives big trucks, usually on long trips."

b. "Who do you think would like to be truck drivers the best? Both women and men or women or men?" (Point, repeat)

c. "Let's pretend that you are going to ride in some trucks. Do you want the drivers to be men or women or both men and women?" (Point, repeat)

d. "Have you ever seen real truck drivers? Were they women or men or both women and men?" (Point, repeat)

4a. "What does a teacher of young children do?" (Make sure the child uses a pronoun and repeat child's answer, omitting pronoun, or say:) "A teacher of young children is a person who plays with children and teaches them interesting things."

b. "Who do you think would like to be teachers of young children the best? Both men and women, or men, or women?" (Point, repeat)
c. "Let's pretend that you moved to a new town and so you are going to a new school. Would you like the teachers at that school to be women, men, or both women and men?" (Point, repeat)

d. "Do you know some people who really are teachers of young children? Are they men, or both women and men, or women?" (Point, repeat)

5a. "What does a police officer do?" (Make sure that the child uses a pronoun and repeat the answer, omitting pronoun, or say:) "A police officer is a person who makes sure the people obey laws and who works to protect us."

b. "Who do you think would like to be police officers the best? Both men and women, or women, or men?" (Point, repeat)

c. "Let's pretend that a bad person got into your room and stole all of your toys. You called the police to come and help you get them back. Do you want the police officers who come to help you to be men, or women, or both women and men?" (Point, repeat)

d. "Have you ever seen any real police officers? Were they both men and women, or men, or women?" (Point, repeat)

6a. "What does a movie star do?" (Make sure that the child uses a pronoun and repeat the answer, omitting pronoun, or say:) "A movie star is a person who acts in the movies."

b. "Who do you think would like to be movie stars the best? Men, or both men and women, or women?" (Point, repeat)

c. "Let's pretend that you get to meet some movie stars. Do you want to meet women movie stars, or men movie stars, or both women and men movie stars?" (Point, repeat)

d. "Have you ever seen real movie stars, like on TV? Were they men, or both men and women, or women?" (Point, repeat)
Interview E: Classifications

Materials: Various sets of wooden and large plastic blocks in various colors. Each set is described below and should be easy for you to differentiate.

Directions: Parts of this interview may be too hard for some of the very young children. Give the child lots of support. If the child cannot do the task, go to the next task. Make this a game. (Comments in parentheses ( ) are correct answers; they are for your information only.)

Consistent Sorting

Materials: Large plastic red, blue, and yellow circles; red, blue, and yellow triangles; red, blue, and yellow squares; and the green triangle.

"I need to put these blocks into groups that are alike. Can you help me find which ones are alike?" Ask child to explain why s/he is grouping the blocks the way s/he is grouping them. Encourage child to find as many groups as possible. (Child can group by either color or shape.)

Exhaustive Sorting.

Materials: Large plastic blocks. One red and one blue circle; one green and two blue squares; two red and two green triangles. Three empty boxes.

Ask child to pick one block (any block) and put it in a box. Then tell him/her, "I'd like you to put all the blocks that are like that one into the box with it." When the box is complete, go on to the remaining blocks until all blocks are chosen. Ask child to explain why s/he is grouping them in that way.

Multiple Class Membership

Materials: Square wooden blocks. Large squares are green and red, small squares are all red. Three bags.

Say to the child:
A. "This is a bag full of red things. Do all the small things belong in the bag with the reds? Why?" (Yes, all the small blocks are red.)
B. "This is a bag for squares. Do the greens belong in the bag? Why?" (Yes, the greens are squares.)
C. "Do the reds go in the bag for squares? Why?" (Yes, all the reds are squares.)
D. "This is a bag for small blocks. Do the greens go in it? Why?" (No, the greens are all large blocks.)

Whole is the Sum of Its Parts

Materials: Two blue wooden squares mixed in with a half-dozen red ones.

Ask the child:
"Are all of these squares? Are the red ones square? Are the blue ones square?"
"I am going to tell you a story. Mary/Maria and Joan/Juanita wanted to build a very high tower using all these blocks. Mary/Maria said they could make the highest tower if they took all the red and all the blue blocks and put them together. Joan/Juanita said they could get the tallest tower if they put all the squares together. Who was right? Mary/Maria? Joan/Juanita? Both?" (Both, since the reds and blues are all squares.)

"If you put the reds and blues together, would there be more of them, or more squares, or as many reds and blues as squares?" (There are as many reds and blues as squares, since the reds and blues are squares.)

Conservation of Hierarchy
Materials: Two blue wooden squares mixed in with a half-dozen red ones.

Ask the child:
"Are all of these squares? Are the red ones square? Are the blue ones square?"

"If I took away all the reds, are there just blues left, just squares left, or both blues and squares? Why?" (Both blues and squares, since the remaining blocks are all blue and square.)

"If I took away all the reds, would there be more blues or more squares left, or as many blues as squares?" (Since all the remaining blocks are blue and square, there are as many blues as squares left.)