Sex Roles, Vol. 32, Nos. 7/8, 1995

Gender Knowledge in Egalitarian and Traditional Families[1]

Beverly I. Fagot[2]

University of Oregon and Oregon Social Learning Center

Mary D. Leinbach

University of Oregon

In the present paper, a small sample of 27 two-parent families who were self-identified as sharing parenting equally *are compared with a more traditional set of 42 two-parent families. Both samples were primarily Caucasian. Children from the egalitarian families adopted gender labels later during the second year of life and showed less sex role knowledge at age 4 than the children in the more traditional families. Fathers in the egalitarian sample were more liberal on the Attitudes Toward Women Scale than fathers in the F-L study. Fathers in the egalitarian sample interacted with their child 50% of the time (on an equal basis with the mothers), while fathers in the F-L sample contributed only 25% of the parent–child interaction. Boys in the F-L sample received more negative reactions, but this was not true in the egalitarian families. The point is made that it is fathers who are behaving differently in the egalitarian sample; the mothers in both samples were very similar in both attitudes and behaviors.*

[1]The research reported in this paper was supported in part by the following grants: HD 17571 from the National Institute of Child Development, MH 37911 from the National Institute of Mental Health, and a grant from the Center for the Study of Women in Society at the University of Oregon awarded to the first author.

We would like to thank Rachel Robertson and Jennifer Strayer for their help in collecting the data from the Shared Parenting families.

[2]From whom copies of this article may be obtained at Department of Psychology, University of Oregon, Eugene, OR 97403.

0360-0025/95/0400-0513$07.50/0

The task of integrating gender acquisition has recently been taken up by proponents of schematic processing. Children are seen as taking in and organizing environmental input schematically by "chunking" or categorizing information as best they can (Bem, 1981, 1983; Martin & Halverson, 1981). Because children live in a sex-typed world, this process results in schemas that guide the choice of "sex-appropriate" behaviors and the knowledge of the action patterns necessary for carrying them out. Gender-role adoption occurs as the self-concept is assimilated to the gender schema and children adopt the standards of sex appropriateness they are exposed to. Schema theory offers a framework for integrating the development of gender understanding with environmental information and pressure. Schema formation undoubtedly depends on the child's own mental effort and developmental status, but the information being processed must reflect the degree and importance of sex-typing in the child's surroundings.

Early studies found little relation between the degree of sex typing in the home and children's sex-typed behavior (Huston, 1983). However, almost all studies prior to this date were done on children who had already achieved gender understanding and were well into rehearsal of culturally accepted gender scripts. It is clear that between their first and second birthday, most children establish a firm gender identity, and it is during this time period that environmental differences may have the greatest impact.

Weinraub et al. (1984) investigated several aspects of early sex typing, including gender identity, gender labeling, sex-typed toy preferences, and awareness of sex-role stereotypes in children between 26 and 36 months of age; they also examined intercorrelations among the various forms of early gender knowledge and a number of family variables. Gender labeling (identifying pictures of two men, two women, two boys, and two girls by producing appropriate labels and by sorting) and sex-role stereotyping (sorting eight pictures representing sex-typed occupational activities and eight pictures of adults' clothing and possessions) were seen in children of 26 months, the youngest age tested, and found in the majority of 36-month-olds. Stereotypic sorting of eight pictures of children's toys was not found before 31 months. Children as young as 26 months showed sex-typed toy preferences, with those who could label themselves correctly spending more time with sex-typed toys. Fathers' sex-typed personality traits (Bem Sex Role Inventory scores; Bem, 1974), their attitudes about sex roles (Attitudes Toward Women Scale; Spence, Helmreich, & Stapp, 1973), and their records of their own activities in their child's presence were correlated with several of the indexes of gender knowledge in their children, but mothers' attitudes and activities were not. For mothers, only the number of hours spent in employment outside the home predicted their children's greater awareness of gender labels and sex-role differences.

Fagot and Leinbach (1989) examined the development of gender labeling, its relation to parenting behaviors and to children's adoption of sex-typed behaviors. We expected that having traditional parents would be related to early gender label acquisition, particularly the labels *boy* and *girl*, and in turn that the child's ability to label children as boys or girls would be related to the adoption of sex-typed behaviors. We examined data from a longitudinal study of children from 18 months (a time prior to understanding of gender labels for boys and girls) to 4 years (when awareness of sex-role behaviors reaches a peak) (Serbin & Sprafkin, 1986). The children were tested on the Gender Labeling Task (Leinbach & Fagot, 1986) from 18 months of age until they passed both the adult and the boy-girl tasks, or until they were 30 months of age. The children and their parents were observed in their homes when the children were 18 months of age (prior to any successful labeling) and at 27 months (when half had passed the boy-girl labeling task, and half were still failing). In addition, parents were given several questionnaires with scales measuring sex-role traditionality. At age 4, the children were brought back to the laboratory and given the Sex Role Learning Index (SERLI) (Edelbrock & Sugawara, 1978).

Fagot and Leinbach (1989) defined early labelers as the group of children who had passed the gender labeling task prior to 27 months and late labelers as those children who passed the test at 27 months and later. Early and late labelers, when first observed at 18 months, did not differ on five behavior categories in which sex differences have often been found (large motor activity, male-typed toy play, female-typed toy play, communication behaviors, and aggression). By 27 months, when half of the children could correctly give the child labels, these two groups differed in four of the five areas. Early labeling children were more sex-typed in their toy play, with early labeling children of each sex playing more with sex-typical toys. Early labeling girls showed less aggression than late labeling girls, and less than either group of boys. Early labeling girls communicated with adults more than did late labeling girls or either group of boys.

Parents' responses to their children's behaviors were rationally clustered into three categories: instructional, negative, and positive reactions. We analyzed mother and father data separately because parents showed little agreement in their use of positive and instructional behaviors. When the children were 18 months old, fathers and mothers of those who would become early labelers were reacting to their children's participation in sex-typed behaviors with both more positive and more negative responses (that is, they provided more emotionally charged reactions) but did not differ from parents of late labelers with regard to instructional responses. By the time their children were 27 months of age, parents of early and late labelers were responding more similarly, in that both groups were responding posi-

tively to participation in sex-appropriate play. Parents' use of negative sanctions to cross-sex play at 18 months was moderately related to their child's adoption of sex-typed play at 27 months, but parent reactions at 27 months were not related to the children's sex-typed play.

Fathers of children who were early labelers gave more traditional responses to the sex-role attitude measures. Mothers' responses were in the same direction but did not achieve statistical significance, perhaps because the mothers in this study tended to respond somewhat nontraditionally. When the SERLI was administered to these same children at age 4, early labelers scored higher on the Sex Role Discrimination Scale, which tests knowledge about gender, but there was no difference on the Sex Role Preference Scale, which tests preference for sex-typed activities. In other words, children who were early labelers knew more about gender categories, but they did not necessarily have stronger preferences for same-sex activities. Preference tests may be more sensitive than knowledge tests to socialization pressures of the moment, and less related to cognitive processing.

In the present paper, 27 fathers and mothers who were self-identified as "sharing parenting equally" will be compared with the parents who participated in the 1989 Fagot and Leinbach study. The Shared Parent sample had been influenced by the ideals of the late 70's and early 80's and were attempting to rear their children in nonsexist ways. Many had read Greenberg's (1978), *Right from the Start*, and were trying to follow the dictum of the book: Try not to make a distinction on the basis of the child's sex, but treat each child according to individual interest patterns. Others were familiar with the more ideological approach of Bem (1983), who advocated attempting to raise a gender-aschematic child in a gender-schematic world. The differences among the two sets of families in terms of parental attitudes and parental reactions to children's behaviors will be examined, and children's ability to label gender in their second year of life, their preference for same-sex activities at age 18 and 30 months, and their performance on the Sex Role Learning Inventory at age 4 will be examined.

METHOD

Subjects

The primary sample (Shared Parenting) were 27 normal full-term infants (15 boys, 12 girls) and both of their parents. However, this sample differed from samples used in similar studies on a number of variables. In addition, these subject families were recruited by placing an advertisement in the local daily newspaper asking for families who had made a commit-

ment to sharing equally in the tasks of parenting. During a screening phone call, these parents indicated that, although in most cases the fathers worked outside of the home and over half of the mothers worked only part time if at all and had primary care of the subjects, these parents considered themselves to be "sharing equally" in the parenting tasks involved in rearing these subjects whenever possible.

The comparison sample included 42 children (20 boys and 22 girls) from two-parent families from a study by Fagot and Leinbach (1989). The Fagot-Leinbach (F-L) study examined six additional single-mother families who are not included in these analyses of two-parent families. The children were 16 to 18 months old (mean age = 17 months) when their families were recruited. These families answered a newspaper advertisement asking for parents to participate in a study examining the relation of parenting styles to children's social development.

The two samples were very similar in terms of income (mean income = $1,500 per month), educational level (the mean level of education was some college for both parents), parents age (fathers about 32 and mothers about 30) and occupational level, which was split between working- and middle-class jobs, with half of each sample falling in Hollingshead categories 1 to 4 and the other half in categories 5 to 9. The ethnic background of the children and their parents was also representative of Eugene-Springfield. The Shared Parenting sample consisted of 1 Asian child, 1 Hispanic child, and 25 Caucasian children. The F-L sample consisted of two Afro-American children, 1 Asian child, 1 Hispanic child, and 38 Caucasian children.

Procedure

These children are participants in two longitudinal studies. For the purpose of this paper, the following contacts were made. The first contact was when the child was approximately 17 months old when parents were interviewed and filled out a set of questionnaires including the Attitudes Toward Women Scale. Within a month of the interview, four home observations of 1 hour each were completed. When the children were 27-28 months old, they and their parents were again observed in their homes using the same observation schedule. At age 4, the mother and child returned to the laboratory for a set of tests and questionnaires that included the SERLI.

Measures

Gender Labeling Task. The first set of materials was the Gender Labeling Task which has been used in several previous studies (Fagot & Leinbach, 1989;

Leinbach & Fagot, 1986). The task consists of three separate sets of stimulus materials: a pretest in which the child points to common objects and two gender-discrimination tests, one testing discrimination of children and the other of adults. Each test consisted of 12 picture pairs, individually mounted on 5 by 8-inch white index cards, presented one pair at a time. Test-retest stability was .87 for the child-labeling test and .83 for the adult labeling test (Leinbach & Fagot, 1986). Because we had previously found no relation between the child's sex-typed behavior and his or her ability to label adults (Fagot, Leinbach, & Hagan, 1986), only scores for the child labeling test are reported in this study.

The Gender Labeling Task for child labels consisted of colored photographs of boys and girls taken from magazines and mail order catalogues, each showing only the head and shoulders of a fully clothed child. These were arranged as male-female pairs on facing pages of a looseleaf notebook, matched as nearly as possible for size of face and apparent age of the child. Subjects were asked to identify the pictures by pointing or patting in response to the words *boy* and *girl*.

Subjects received one of four permutations of the 12-item pairs in randomly selected order; the choice and position of the member of the picture pair were varied systematically. Thus, each male and each female picture was designated as the target on half of the trials, and the target picture occupied the left and right positions equally often. Passing the test required correct discrimination on 10 or more of the 12 trials. This is the number necessary for a .05 significance level given a binomial distribution. One experimenter, seated on a low chair facing the child but unable to see the pictures, asked the child to pat, touch, or point to the picture corresponding to the label *boy* or *girl*. A second experimenter controlled the stimulus materials. To avoid cueing the child, the first experimenter was blind to the location of the target picture and order of the pairs, and the second experimenter's face was concealed from the first experimenter by a screen.

Sex Role Learning Index (SERLI). The SERLI (Edelbrock & Sugawara, 1978) was designed to measure three concepts, two of which were used for this study: (1) Sex Role Discrimination (SRD) which refers to the child's awareness of sex-role stereotypes and is operationally defined in the SERLI as the degree to which the child's classification of items depicting various objects agrees with the cultural sex-role stereotypes of those items and (2) Sex Role Preference (SRP), which has been defined as the desire to adhere to sex-role stereotypes regarding appropriate masculine and feminine behavior. In the SERLI, the SRP score is based on the order in which the child chooses items stereotyped as being appropriate for the child's sex. There are a total of 20 items which children sort for males or females, such as a baseball bat, a hammer, a broom, and a baby bottle. Both adult

and child items are used, and children are given separate scores for adult and child, same and opposite sex, preferences.

Test-retest reliabilities for SRD scores ranged from correlations of .61 to .69 and differed little regardless of whether children were classifying figures of their own or the opposite sex. The SRP test-retest relations were stronger for figures of same-sex adults, $r = .84$, and children, $r = .90$, than for opposite-sex adults, $r = .57$, and children, $r = .43$.

Observation Data. Each family was observed at home when the child first entered the study (between 16 and 18 months) for a total of four 1-hour sessions. They were then observed again at 28 months in four more 1-hour sessions. All family members were present, and observations were scheduled at a time when the child was awake and not being given intimate care (bath, dinner, etc.). The family members were requested not to watch TV or make telephone calls, and to interact as normally as possible. While parent behavior may be somewhat constrained by observers, children of this age after an initial burst of interest ignore observers and continue to behave in a normative fashion. Automated data collectors were used to record the observations.

The observation code categories were taken from the Fagot Interactive Behavior Code (Fagot, 1983). The code was entered into an OS-3, an automated real-time collection device. There were five different sections of the code: context or activity codes, interactive codes, recipients, reactors, and reactions. The child was always the target of the observation. The child's activity and interaction were coded, followed by the recipient of that interaction, the individual who reacted, and the type of reaction, yielding an 8-digit representation of each interaction. If any one of the parts of the code changed, a new 8-digit sequence was entered.

Observers were trained on this system for approximately 150 hours before beginning to collect data. Observer agreement was checked throughout data collection using both covert and overt procedures. Observer reliability was high at all times: over 90% agreement on each individual code and over 85% agreement on the total 8-digit code. Kappas were routinely calculated for each section of the code and for the total code and ranged from .59 to .79.

For the present studies, several child behaviors were clustered into three content categories (male-typed toy play, and female-typed toy play). These behaviors were chosen because they comprised items for which early sex differences have been found consistently; the behaviors included in each category were tested to insure they clustered together. The reaction codes were also clustered, yielding three categories (instructional, positive, and negative responses). The code category clusters are shown in Table I.

Table I. Observation Code Categories Clusters with Kappas and Alphas for Each Cluster

Code clusters	Kappa	Alpha
Context codes		
Female-typed toy play: art activities, dolls, puppets	.74	.83
Male-typed toy play: building toys, transportation toys	.77	.89
Reaction codes		
Instructional: directive, verbal interaction, talk about activity, instructional activity, initiate	.64	.69
Positive: comment favorably, associative play/activity, positive physical, cooperative play/activity, parallel play/activity	.63	.58
Negative: criticize, verbally punish; reactor cries, whines, tattles; physical restraint or aggression	.69	.82

Attitude Toward Women Scale (AWS). The short version (25 items) of the Attitude Toward Women Scale (Spence, Helmrich, & Stapp, 1973) was used. This scale was designed to measure the degree to which individuals hold traditional or liberal views about women in several areas, such as intellectual activities, marital relationships, etc. Test-retest correlations for this measure from a large longitudinal sample of 150 children, including the children from the Fagot-Leinbach study, were .75 for mothers and .85 for fathers.

RESULTS

The two sample will first be compared in terms of the mothers' and fathers' scores on the Attitudes Toward Women Scale and then on the parent behaviors in the home. The children in the two samples will be compared in terms of their performance on the Gender Labeling Task. Finally, the children's performance at age 4 on the SERLI will be examined.

Comparison of Parent Attitudes in Two Samples

We first compared the scores of the mothers in the Fagot-Leinbach (F-L) group with mothers in the Shared Parenting group on the Attitudes toward Women Scale. The scale has a maximum score of 45, which represents the most liberal attitudes. We compared the means for mothers in the two samples using *t*-tests and they were not significant (F-L sample, mean = 36.1; Shared Parenting sample, mean = 37.8). The means of fathers in the two groups were significantly different t (68) = 3.68, $p > .001$ (F-L sample, mean = 27.1, Shared Parenting sample, mean = 35.8).

Comparison of Parent Behaviors in the Two Samples

We next compared the parent behaviors in the two groups at the 18-month home observations and 27-month home observations. We first compared the proportion of time fathers spent in interaction with their children in the two samples. In the Shared Parenting sample, the fathers interacted significantly more with their children than did the fathers in the F-L sample. Given that a child was going to receive a reaction from one adult, fathers accounted for 50% of the parent-child interactions in the Shared Parenting group, but only 25% of the interactions in the F-L group. As mothers were the mirror image of this, mothers in the F-L group accounted for 75% of all single adult interactions. It should be noted that mothers and fathers reacted together more often in the Shared Parenting sample (32% of all interactions) than in the F-L study (10% of all interactions). Children of this age were interacting with one or both of their parents 75% of the time. There were no differences in time the child spent alone in the two groups.

All parent reactions to the target child's behavior were rationally clustered into three groups: instructional, negative, and positive in the same way as was done in the Fagot and Leinbach study. (These clusters are shown in Table II). Parent composites (mother reactions, father reactions, and the reactions of both parents combined) were computed for each of the three possible reactions. In the first analyses we wished to determine if boys and girls were receiving different reactions from parents. MANOVAs (sex of child × family group—Shared Parenting or F-L sample) were performed. The 18-month and 27-month observations were analyzed separately, as all the findings are modified by a time of observation effect. Therefore, findings from 18 months will be reported first, and then findings from 27 months. There was a significant family group effect, $F(1, 63) = 4.21$, $p < .05$, but this was modified by a child sex by family group effect, $F(3, 63) = 6.75$, $p < .01$. Parents in the Shared Parenting group used fewer negatives than did those in the F-L group. As most of the negatives in the F-L group were directed at boys, this meant that boys in the Shared Parenting sample were receiving fewer negatives overall from parents. In addition, there was no difference in the amount of instruction given to boys and girls in the Shared Parenting sample, while there was significantly more instruction given to girls at 18 months in the F-L sample. When we performed the same analyses on the 27-month data, we found no significant differences between the two samples. As we had found that overall parent reaction differences to boys and girls had disappeared at 27 months in the original F-L sample, this was an expected finding. The results for the 18-month olds are presented in Table II.

Table II. Proportion of Time of Parent Reactions for the Two Samples at 18 Months[a]

Target child / Parent reaction	Sample: Shared parenting	Sample: Fagot–Leinbach
Boys		
Positive	.38 (.17)	.32 (.07)
Negative	.02 (.01)	.05 (.02)
Instructional	.59 (.15)	.51 (.11)
Girls		
Positive	.35 (.16)	.38 (.07)
Negative	.02 (.01)	.01 (.02)
Instructional	.63 (.13)	.61 (.11)

[a]Standard deviations in parentheses.

The next set of analyses were done separately for mothers and fathers in the shared parenting group only. We were interested to see if mothers and fathers in this group responded differentially to boys and girls in male and female-typed toy play. The children in the shared parenting sample looked very similar to the Fagot-Leinbach sample in terms of the amount of time spent in sex typed play with boys spending approximately 10% of their time at 18 months and 20% of their time at 27 months in male-typed play and 3% of their time in female type play at both ages. Girls spent approximately 5% of their time at 18 months and 20% of their time at 27 months in female type play and about 5% of their time in male type play at both ages. In the Fagot and Leinbach (1989) study we found that both mothers and fathers behaved very similarly in their reactions to sex-typed play in children although the magnitude of the response was moderated by whether the child was an early or late labeler. We ran separate MANOVA's for mothers and fathers' reactions (instructional, positive and negative) to male and female-typed play of boys and girls at 27 months and found no significant results. That is, mothers and fathers in the shared parenting sampling did not respond differently to boys and girls when they were engaged in male and female typed play. The mean reactions for mothers and fathers reactions to male and female typed play were very similar and mirrored almost exactly the proportions of the overall parent reactions presented in Table II.

Age of Understanding Gender Labels

In the F-L sample, the mean age for passing the child discrimination on the Gender Labeling Task was 28 months. (To pass was to label at least

10 of 12 items correctly). In the Shared Parenting sample, 8 children passed the test prior to 28 months, while 21 failed. The proportion of children passing by 28 months in the Shared Parenting sample was significantly different from the more traditional F-L sample, $Z = 2.4$, $p < .008$. As Fagot and Leinbach had found that children from more traditional families learned labels earlier, and we know that the Shared Parenting parents (particularly the fathers) were less traditional, this in effect replicates the Fagot and Leinbach (1989) findings.

Child Performance on the SERLI

The first set of tests made were to attempt to replicate the Fagot-Leinbach finding that children who were early labelers (those children who passed the task prior to 28 months) would show more knowledge of gender at age 4 than those who were late labelers. Early and late labelers on the Gender Labeling Task within the Shared Parenting sample were compared on Sex Role Discrimination and Sex Role Preferences on the SERLI. We again replicated the Fagot-Leinbach findings, in that early labelers had significantly higher scores on Sex Role Discrimination, $t(26) = -3.6$, $p < .008$, but there was not a significant difference in Sex Role Preference. We next compared scores of the children in the F-L sample with those in the Shared Parenting sample. A MANOVA (with sex of child and sample group as independent measures and two dependent variables, SRD scores and SRP scores) was run. There was a significant effect for family group, $F(2, 66)$ - 4.94, $p < .05$. The mean SRD score in the F-L sample was 82.8, and the mean score in the Shared Parenting sample was 57.5, $F(1, 68) = 6.24$, $p < .014$. The mean SRP score was 57.6 in the F-L sample and 49 in the Shared Parenting sample, which was not a significant difference. In addition, there was a significant main effect for sex, $F(2, 66) = 4.93$, $p < .001$. Only one univariate was significant, that is on opposite sex discrimination with girls showing higher scores than boys, $F(1, 68) = 3.92$, $p < .05$.

We examined the relation of the mother and father Attitude Towards Women scores to the children's SRD and SRP scores using both samples combined. None of the correlations were significant.

DISCUSSION

To a large extent the findings from Fagot and Leinbach (1989) were confirmed in this study. In particular, the finding that the father's traditionality or lack of it appeared to make a difference in terms of the child's understanding of gender was confirmed. However, caution in accepting this

result is necessary. In effect, the mothers in both of these samples were very liberal in their sex-role attitudes, whereas the fathers in the F-L sample were more varied, but as a group were considerably more traditional than the mothers. This type of study needs to be done with a sample of very traditional families where both the mother and fathers share traditional values.

It is also interesting to note that it is the fathers in families who wish to share parenting who are different. They interact more with their children and they have more liberal attitudes. Moreover, both mothers and fathers in the Shared Parenting sample are treating boys and girls in similar fashions, and this sample did not replicate previous findings that, by 18 months, boys are receiving more negatives and girls more instructions. Instead we saw mothers and fathers initiating instruction and using negative reactions equally to boys and girls at 18 months. Mothers and fathers in the shared parenting sample respond very similarly to boys and girls engaged in either male or female sex-typed behavior and in fact do not appear to differentiate these behaviors from other types of child behavior. Still as noted, boys and girls by 27 months are engaged in more same sex-typed play than they were at 18 months.

We are convinced that labeling signals the point at which tacit knowledge is becoming available to consciousness, and may serve to organize the child's gender understanding. If most children master gender labels for themselves and other children by the time they are 30 to 36 months old—some by 24 months—the period between 2 and 4 years of age must be fertile ground for the growth of gender schemas. Unfortunately, this is also an age range in which it is extremely difficult to ascertain what children know. As Levy and Fivush (1993) and Signorella, Bigler, and Liben (1993) note, the methods used to study children who can be tested with verbal techniques influence our conclusions about the extent of the child's gender schema. In addition, we all too often underestimate the child who is merely intimidated in strange surroundings or unable to understand what is being asked. For example, we once heard a 14-month-old boy in one of our play groups calling a series of unfamiliar male students "daddy," which indicates that he grouped men into a "daddy" category. Yet at this age he was completely unable to carry out our gender labeling task. It would be a mistake to assume that children who fail the tests devised by experimenters do so for lack of knowledge about the subject matter when the problem may well lie in our inability to test them adequately. Until we can do so, we will continue to underestimate a crucial component of early sex typing—the infants' own contribution.

Differences in parenting style do appear to be reflected in the child's cognitive understanding of gender, but less so in their play behaviors. Chil-

dren from less gender-typed families do appear to be later in their learning of gender labels and know less about cultural sex typing at age 4 (Sex Role Discrimination). It is interesting to note that Sex Role Preferences do not appear to be affected as much. It is our hypothesis that such preferences and behaviors are maintained by peer reactions and represent a somewhat different system than the child's cognitive understanding of gender. The children in the Shared Parenting sample were, as a group, later in learning gender labels and knew less about cultural stereotypes than children in the Fagot-Leinbach study. The shared parenting sample resembled the late labelers in the Fagot-Leinbach sample in their play behaviors at 27 months in that they were less sex typed than the early labelers, but they still were beginning to prefer activities often considered appropriate for their own sex.

It is our hypotheses that parents who call attention to gender-appropriate activities and toys, who model cultural stereotypes, and who have more traditional attitudes make gender typing more salient for children, and these children then learn gender labels earlier. The learning of gender labels consolidates much of what the child knows about gender, and gender-role adoption then accelerates. As Staub (1979) noted with regard to prosocial behavior, direct participation—rehearsal of the behavior in question—may determine to a great extent whether delayed repetition and generalization of the behavior occurs. This, in turn, provides an important source of learning. Therefore, parent attitudes, behaviors, and the child's own construction of gender—mediated first through gender labeling and practiced through gender-role adoption—predict the child's gender knowledge at age 4. However, gender-role preferences are not affected as much, since the peer group and the media have great influence at this time. The parents in this study who had chosen to rear their children in an egalitarian manner were often dismayed to see their carefully nurtured child showing traditional gender-typed behaviors, but it may be that such behavioral preferences will be less influential than the cognitive differences in the child's gender schema that we found at age two and again at age four.

REFERENCES

Bem, S. L. (1974). The measurement of psychological androgeny. *Journal of Consulting and Clinical Psychology, 42*, 155-162.

Bem, S. L. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological Review, 88*, 354-364.

Bem, S. L. (1983). Gender schema theory and its implications for child development: Raising gender-aschematic children in a gender-schematic society. *Signs*, 598-616.

Edelbrock, C., & Sugawara, A. I. (1978). Acquisition of sex-typed preferences in preschool-aged children. *Developmental Psychology, 14*, 614-623.

Fagot, B. I. (1983). *Training manual for the Interactive Behavior Code.* Unpublished instrument. (Available from Oregon Social Learning Center, 207 E. 5th Avenue, Suite 202, Eugene, OR 97401.)

Fagot, B. I., & Leinbach, M. D. (1989). The young child's gender schema: Environmental input, internal organization. *Child Development, 60,* 663-672.

Fagot, B. I., Leinbach, M. D., & Hagan, R. (1986). Gender labeling and adoption of sex-typed behaviors. *Developmental Psychology, 22,* 440-443.

Greenberg, S. (1978). *Right from the start: A guide to nonsexist child rearing.* Boston: Houghton Mifflin.

Huston, A. C. (1983). Sex-typing. In E. M. Hetherington (Ed.) and P. H. Mussen (Series Ed.), *Handbook of child psychology: Vol. 4: Socialization, personality, and social development.* New York: Wiley.

Leinbach, M. D., & Fagot, B. I. (1986). Acquisition of gender labeling: A test for toddlers. *Sex Roles, 15,* 655-666.

Levy, G., & Fivush, R. (1993). Young children's gender-typing and gender schematic processing: Sometimes a little knowledge is all it takes. *Developmental Review, 13,* 126-146.

Martin, C. A., & Halverson, C. F. (1981). A schematic processing model of sex typing and stereotyping in children. *Child Development, 52,* 1119-1134.

Serbin, L. A., & Sprafkin, C. (1986). The salience of gender and the process of sex-typing in three- to seven-year-old children. *Child Development, 57,* 1188-1199.

Signorella, M. L., Bigler, R. S., & Liben, L. S. (1993). Developmental differences in children's gender schema about others: A meta-analytic review. *Developmental Review, 13,* 147-183.

Spence, J. T., Helmrich, R. L., & Stapp, S. (1973). A short version of the Attitudes Toward Women Scale. *Bulletin of Psychonomic Science, 2,* 219-220.

Staub, E. (1979). *Positive social behavior and morality* (Vol. 2). New York: Academic Press.

Weinraub, M., Clements, L. P., Sockloff, A., Ethridge, T., Gracely, E., & Myers, B. (1984). The development of sex role stereotypes in the third year: Relationships to gender labeling, gender identity, sex typed toy preferences. *Child Development, 55,* 1493-1503.