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Equipment preferences of men and women employed in early childhood education

Gordon, Tom, Ph.D.

The University of North Carolina at Greensboro, 1987

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EQUIPMENT PREFERENCES OF MEN AND WOMEN EMPLOYED IN EARLY CHILDHOOD EDUCATION

by

Tom Gordon

A Dissertation Submitted to
the Faculty of the Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

Greensboro
1987

Approved by

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APPROVAL PAGE

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Date of Acceptance by Committee

April 23, 1987
Date of Final Oral Examination

Gordon, Tom, Ph.D. Equipment Preferences of Men and Women Employed in Early Childhood Education. (1987) Directed by Dr. Rebecca M. Smith. 116 pp.

During the last four decades early childhood educators have stressed the importance of male workers entering the occupation. Claims have been made that both children and programs benefit from the presence of male caregivers. However, the actual percentage of men working with young children is very small and has not increased.

While professionals have accepted, as a matter of faith, that the presence of male workers is beneficial, no empirical data support this claim. Research efforts have failed to document unique male contibutions to the early childhood environment. The current study suggests that previous studies may have been measuring the wrong variables.

The current study measured the different equipment and supply preferences of men and women working in the field of early childhood education. Participants were each given a booklet with 50 pictures of daycare equipment and supplies and requested to choose 15 items that they would like to use to supplement an already equipped classroom. A panel had previously rated these items on a 5 point scale from very feminine to very masculine. Participants were also requested to complete an education and experience survey as well as a Sex Role Preference scale.

Analysis of variance showed that sex was a significant variable in differentiating male and female equipment preference scores. Neither

education nor experience influenced the choices, but Sex Role Preference did affect scores. Traditional women chose significantly more feminine equipment than modern women, traditional men, or modern men did. Sex was the only significant predictor of equipment preference scores in a multiple regression analysis, explaining 26% of the variance in Sex Equipment Preference Scores.

Recomendations were that studies of the educational environment in daycare should consider the variables of sex and Sex Role Preference. Further recommendations were that the dependent variable of children's behaviors should not be classified as either male or female, but that the criterion of situational appropriateness be used.

ACKNOWLEDGMENTS

I wish to express my appreciation to my Commitee Chairperson and Adviser, Dr. Rebecca M. Smith, Professor of Child Development and Family Relations, for her guidance, support, and encouragement.

I am grateful to my committee members for their interest and suggestions: Dr. Jack Bardon, Excellence Foundation Professor of Education, Dr. John Scanzoni, Professor of Child Development and Family Relations, and Dr. Nancy White, Associate Professor of Child Development and Family Relations.

In addition I want to acknowledge the assistance of the following people who provided me with lists of daycare workers: Ms. Janet Nickerson, Assistant Chief of the Office of Day Care Licensing, and Ms. Sue Creech, Programming Consultant for the Office of Day Care Licensing.

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CHAPTER I

INTRODUCTION

The call for male daycare workers is based on the assumption that preschool age children of both sexes need male and female caregivers. Extending the tenet of social learning theory (Bandura, 1969) to early childhood education suggests that significant role models with varying behavioral repertoires are necessary to promote a broad range of potential behaviors in children. Since caring for young children has traditionally been the domain of women, at home or in school, men have had little direct day-to-day contact with children. In fact, as recently as 1984, less than 5% of early childhood education workers were male (Statisical Abstract of The United States, 1986). Men who do enter the field leave quickly or move to administrative positions (Robinson, 1980). The recent call for males in daycare in not really new, though. Increasing numbers of professional pleas for more males in the field have been made over the last four decades (Milgram & Sciarra, 1974, Robinson, 1981).

A variety of theoretical bases have been suggested regarding the importance of male workers (Robinson, 1981). Some people argue that young boys without a father could benefit from the strong traditional role model offered by male caregivers. Other people hold that the androgynous qualities of male workers provide the needed model for both girls and boys (Robinson, Skeen, & Hobson, 1978). Still others argue

that men offer varied world views (Greenberg, 1977), different activities and emphasis (Johnson, 1970) or simply a much needed balance (Gordon, Draper & Walkowiak, 1983). Impressionistic, first hand accounts by males working in the field tend to support each of these arguments, but little empirical evidence exists to validate claims regarding the importance of males in early childhood education (Robinson, Skeen & Flake-Hobson, 1980).

Surveys and structured observations have had little success in demonstrating that male caregivers act significantly different from female caregivers. Male workers neither reinforce "male" behaviors to a greater extent than female workers do, nor do they refrain from punishing "male" behaviors in children (Etaugh & Hughes, 1975). Minor differences in nonverbal (including touching) behaviors have been noted, but the meaning or importance of these behaviors is unclear.

The question of actual differences created by the presence of male caregivers may prove to be influential in determining the efforts made at recruiting and retaining males. Williams (1980) said that if there are no differences, why bother to recruit. While some theorists believe that male presence is crucial regardless of findings (Kyselka, 1966), another camp argues for seeking and stressing certain human qualities rather than hiring based on biological sex (Robinson, 1981). Thus, not only do theoretical implications exist for this body of research, but social policy may also be affected by findings.

Implications from Related Research

Early literature regarding men working in early childhood education consisted primarily of first-hand accounts or unsubstantiated claims of

the important role that adult males play in the lives of young children (Robinson et al., 1980). Male teachers described their experiences and attributed great importance to them. It was held that significant long-range positive changes occurred for children exposed to male teachers (Viaro, 1966). Correlations between having too few male childhood educators and poor school performance by boys were given cause-effect status. None of these claims have been experimentally documented, however (Brophy & Good, 1973). Research areas relevant to the present study with an empirical basis are given below.

Some researchers have focused primarily on indices of teachers' control of aggressive behaviors rather than equipment and materials available to the children. These indices relied upon dichotomous distinctions between male and female behaviors which may be invalid or inappropriate for teaching situations. For example, Fagot and Patterson (1969) designed a measure that assigned children's aggressive behaviors to male categories and passive children's behaviors to female categories. Then, this instrument demonstrated that regardless of teacher sex, "male" behaviors in children are punished while "female" behaviors are rewarded. Speculative accounts had held that male teachers would reinforce male behaviors in children. However, as Robinson (1979) briefly suggested, professional demands may be such that teachers cannot reward aggressive behaviors in a learning environment. Personal experience, as well as textbooks stress the crucial importance of maintaining control in the classroom (Leeper, Skiper & Witherspoon, 1979). Since aggressive behaviors may be incompatible with management of the learning environment, it is understandable that aggressive

behaviors need to be punished and that passive behaviors need to be rewarded. Therefore, sex of teacher may not have been the influential factor at all.

Other researchers have studied sex-based differences in teacher non-verbal communications with children. Purdue and Conner (1978) observed that preschool teachers touch same sex children more than opposite sex children. Robinson (1981) confirmed this same-sex relationship with non-verbal communication when observing pre-school teachers. However, interpretations regarding the meaning of the importance of these behaviors were vague or lacking entirely. While researchers suggested that an increased pattern of non-verbal communications benefited young boys, one could plausibly argue the opposite position. An essential function of the early childhood educator is to provide an articulate language model (Leeper et al., 1979). Therefore, the increased non-verbal communication may be viewed as a trend harmful to the young child's language development.

Finally, previous studies confound issues of experience and leadership. Due to the difficulty of obtaining any male early childhood educators, researchers have tended to use any available subjects (Lee & Wolinsky, 1973). Often effects of male teachers have been measured in student teaching situations, with the male subject being the inexperienced student teacher. Hypothetically, the student teacher in this situation may not have been the dominant influence or may have been altering behaviors to conform to the standards of the supervising teacher. Fagot (1977) held that males choosing and remaining in the field longer than three years present different psychological profiles

from young, inexperienced, non-committed males. Clearer measures and subject selection must be used for definitive answers to emerge.

The search for variables related to the presence of a male worker in the early childhood environment has been extensive. Despite the attention given this area, research investigators are still unable to state conclusively that men working in early childhood education do make a meaningful difference (Robinson, 1981).

Research Questions

Lack of demonstration of differences between male and female caregivers may be attributed to the particular variables selected. The variable proposed in the present research to make the most difference between male and female daycare workers was planning the learning environment. Some support for this variable was shown by Robinson & Canaday (1977) who found that 55% of the male early childhood educators that they sampled believed that they could provide a learning environment of experiences and activities which are traditionally labeled "masculine." Among these were woodworking, more roughhouse play, physical activities and large muscle games.

Furthermore, first hand accounts have often described differences in learning environments created by males and females. Male caregivers reported that they perceive themselves as providing different and varied activities. These men said that they stressed woodworking, transportation toys, large blocks, and outdoor play; women stressed art activities, household and dramatic play, and music. Female teachers may be unaware of young boys' interests and thus create an environment in which young boys do not function well.

Is it valid to argue that there could be a correspondence of equipment and materials to actual classroom activities? Leading texts hold that early childhood curriculum is specific in goals, but non-specific in teaching strategies and content. Programming is done primarily by providing available equipment and time. The majority of the day is spent in free play activities; teachers provide the setting but children choose from available materials. Teachers suggest, facilitate and intervene only when necessary. Play is determined by availability of equipment and materials (Watrin & Furfey, 1978). Learning environments should be balanced between naturalistic activity (free-play) and pre-planned teacher-centered activities. This is not to suggest that free-play is unplanned and unstructured, however. The distinction concerns the role of the teacher in directing and guiding play. In free-play, the teacher plans and facilitates, allowing children to take initiative and to choose direction. In teacher-centered activities, teachers structure activities, provide direction, and maintain a central guidance role. Each is assumed to be determined primarily by available materials.

The major question of this research was this: Do male and female caregivers plan different environments for preschool programs? It is assumed that if the learning enviroments are sufficiently different from the current environments planned by females that children would learn different skills and different attitudes.

Purpose of the Study

The purpose of the present study was to document the difference in the contributions by men and women to the early childhood education

environment. Specifically, this research examined what materials, supplies, and equipment that male and female caregivers consider to be important in planning the learning environment. The goal of this study was to provide a broader, more empirically based picture of the input that both men and women have in planning and organizing environments and programs which directly affect the daily lives of large numbers of children.

Limitations of the Study

The most serious limitation of this and all other research involving male childcare givers was the availabily of male caregivers. As Lee & Wolinsky (1973) cautioned regarding interpretations of their findings, "Our male teacher sample was selected on a pragmatic basis, i.e., we used the ones we could find" (p.352). The paucity of male caregivers severely curtails the ability to select respondents randomly, thus external validity may be questionable. Yet, if researchers aggressively pursue males, clearly indicating that the male view is being measured, a reactive effect between selection and the independent variable may occur. Therefore, this study was presented to respondents as an investigation of early childhood curriculum and planning rather than the difference that male and female caregivers would make.

A second limitation concerns the relationship between survey response and actual behaviors. Etaugh & Hughes (1975) called for further study of this relationship. Cromwell & Olson (1975) held that exact correspondence does not exist between survey response and actual behavior and that both areas of study have limitations. Discrepencies between the two provide fertile ground for study. In addition to having

an observer present, other confounding variables limit the usefulness of classroom observation in this study. For example, if a male teacher is using materials chosen by a female administrator, little variation in programming due to sex may be possible. Classrooms in which the male teacher has the actual autonomy to plan and purchase, independent of female input or control, may not exist in sufficient number to provide the possibility of statistical analysis.

Widespread implications exist if differences between male and female caregivers are found. Providing a truly balanced environment which allows children the opportunity to participate freely in a wide range of activities may require equal participation of both men and women in the planning and design of that environment. Current caregiver environments are heavily weighted in the direction of female preferences. This seriously limits choices available to young children. Further, it may reinforce traditionally feminine patterns for young girls while not fully involving and interesting young boys. Boys may view school as an alien environment. Girls may not be exposed to early activities requisite for many later skills. For example, block building may enhance mathematical prerequisites. The equal and balanced input of both men and women may be required to provide children the multifaceted experiences necessary for the broadest possible development of both young boys and girls.

CHAPTER II

REVIEW OF RELATED LITERATURE

In the last 25 years there has been a movement attempting to encourage males to join the ranks of early childhood educators. Impetus for the movement towards more males in daycare has come primarily from professionals themselves. Lee & Wolinsky (1973) traced 20 articles within a five year time span (1967-1972) which emphasized the critical importance of male caregivers and elementary school teachers. Milgram & Sciarra (1974) held that the male early childhood educator is as "sought after as the black Ph.D." (p.245). Titles of articles written during this era are suggestive of the perceived need and of the importance attributed to male caregivers. "Wanted: 20,000 Male First-Grade School Teachers" (Viaro, 1969) or "Male Caregivers: Humanist, Heroes and Handyman" (Robinson & Canaday, 1977) typify this body of literature. Appeals have been primarily impressionist and subjective with little or weak existing research basis (Robinson & Canaday, 1978). When reasons were stated for actively recruiting additional male workers, wide and contradictory rationales have been cited.

Although societal trends of the last decade would appear to encourage the entry of males into nontraditional occupations, the proportion of males in early childhood has changed little in the last decade. There is actually a smaller percentage of male pre-kindergarten and kindergarten teachers than there was in 1972 (Statistical Abstract of The United States, 1986).

Professionals have accepted the need for male caregivers as a matter of faith and have not developed a supporting body of research based literature. The following quotations with no empirical basis demonstrate the bias inherent in the a priori belief that males are requisite in early childhood educations, and that the absence of males is detrimental to all concerned:

> The presence of males "offers distinct advantages, especially for pupils" (Viaro, 1969, p.222).
>
> "The need for men in young children's lives is, however, quite apparent (Johnston, 1970, p.144).
>
> "We realize and acknowledge how much of a young child's life was entrusted into the care of one sex...I am conscious of the effect on the lives of young children if that trend continues" (Williams, 1970, p.140).

Justifications for hiring male teachers have varied widely. Robinson (1981) referred to the 1960's and early 1970's as the age of the "macho image" whereas the late 1970's and early 1980's were called the "age of androgyny" (p.28). Most of the arguments for hiring males were made on the basis of a lack of a traditional male-female model in early chidhood education.

Traditional Male Model

The argument generally made by traditionalists runs that if boys do not have exposure to male role models, they will have serious emotional and behavioral distrubances. Both ends of the socioeconomic continuum are seen as contributing to the lack of a male model. For example, Viara (1969) referred to males on both ends as "economically deprived

citizens" (p.222). He argued that women who earn more money than their husbands threaten the husband's breadwinner identity. Their male sex identity is threatened, giving an inadequate role model for his children, (Johnston, 1970). He believed that children "have difficulty emulating or contrasting the role of a model who is rarely around" (p.145), either from too much time on their jobs or from deserting the family due to unemployment.

In the following two studies, it was assumed that male daycare providers could be an alternative male role model when the father was absent physically and psychologically. Burtt (1965) studied children from father absent homes who were in a summer pre-school program with a male teacher. The purpose of the program was to provide "a balanced relationship with a father-figure (which) could have a positive effect in healthy personality development" (p.93). Greenberg (1977) viewed the male teacher as providing an "alternate male figure from the one the child might already know: a male who is not violent, distant from children, physically abusive, or drunk; a male who does not always quarrel with the female adult or yell at other children; a male who can respond warmly and with compassion to the child's demands; or a male who is just plain fun to be around" (p.35). Additionally, he believed that a female-male teacher team models relationships in a healthy, constructive manner.

Children from the upper end of the socioeconomic continuum also experience low father availability according to Lee & Wolinsky (1973), Kyselka (1966), and Topp (1954). Both long working hours and active leisure pursuits by father deprive their sons of the opportunity to

experience male role models. A case history by Topp (1954) recounted the tale of a young boy and concluded "as George's mother became a 'golf widow', so did George become a 'golf orphan'" (p.49). Gordon, Gordon & Gunther (1963) who were critical of the suburban upwardly mobile life style, held that suburban, middle and upper class fathers find it easier to give their children money rather than be bothered relating.

The greatest benficiaries of increased male presence at home or elsewhere were held to be boys. Sexton (1969) claimed that boys' normal male impulses and instincts become distorted and perverted through their overexposure to females and lack of contact with adult males. This school of thought traced many male adjustment problems to this early lack of male contacts. All manner of difficulties were believed to stem from this unbalanced contact. Although harm is seen as befalling young girls from this arrangement, this notion that a lack of a male model still places major emphasis upon negative consequences only for boys. The strongest statement regarding young girls was made by Johnston (1970) who wrote that "the very structure of our society and conditions of our culture tend to discourage or disallow much identification of girls with males.. Girls in our society are often actually conditioned to distrust or even fear males" (p.145).

Variables such as the increased importance traditionally placed upon boys' schooling and career, as well as more visible male "acting out" behaviors, may have interacted to keep the tradition strangely silent regarding effects upon females. In the future, however, this body of thought will need to give increased theoretical and research attention to studying the effects of this "feminized environment" upon

girls. Effects may be more subtle, but they will be no less profound or important.

Traditionalist arguments for additional male role models suffer from two weaknesses. First they are made from a position of faith, rather than relying upon empirical evidence. Typical of this line of reasoning is that of Sciarra (1972), who asked, "What can be done to provide a balance of sex role models while we are waiting for men to respond to the call. The suggestions are not intended as substitutes...only stopgap measures until he comes" (p.190). Implied as an article of faith was the belief that the sex role imbalance existed and would immediately be solved upon the arrival of the male teacher and that children's problems will then rapidly diminish or disappear. This reasoning sounds disturbingly similar to traditional scripts taught to young girls which stressed that life's meaning and goal was to marry and have a husband. Other activities, prior to marriage, were stopgap measures intended to fill the time and make the female a more suitable spouse. This traditionalist script held that the husband would make everything in life meaningful and successful for her. This argument rests upon an implied superiority of men coupled with a limited and fixed view of the potentials of women.

Additionally, this argument is paradoxical and tautological. The traditionalist "advocated more males in early childhood education to provide a masculine balance" (Robinson, 1981, p.28); yet, the traditionalist notion of appropriate sex role behaviors excludes males from the nuturing roles, especially the nurturing of young children. One may argue that were the traditionalists successful in their stated

goals of providing strong "macho" images to young boys, one measure of success could be that men would be unwilling or psychologically unable to work in early childhood education. These men would view nurturing behaviors as incompatible with their sex role orientation. However, a recent survey by Culver & Burge (1985) seems to contradict this "lack of fit' notion. Vocational students enrolled in programs which were nontraditional for their sex had higher self esteem than those enrolled in traditional programs. If a great deal of dissonance existed self esteem may be adversely affected.

Inferences regarding the deleterious effects of a lack of a male role model were based upon studies proporting to find serious negative consequences for children of divorce (Heatherington, 1979). Emotional adjustment, school performance, and rates of delinquency were all held to be affected negatively by divorce. However, as Heatherington (1979) noted, the picture is much more complex than original studies suggested. First, many early studies of divorce confounded social class; low socioeconomic children of divorce were compared to middle and upper class children from intact families. Second, controls were often taken from normal well functioning homes rather than stress ridden intact homes; stress rather than father absence may have confounded results. Finally, factors such as age of children, sex of children, previous levels of stress, immediate alterations of living conditions are important variables influencing the child's adjustment to divorce. In summary, much of the theoretical base for the traditionalist argument can be discarded as overly simplistic.

Feminine School Environments

"It is often suggested that American elementary schools are overly feminine in orientation and therefore less suited to boys than girls" (Brophy & Good, 1973, p.564). Johnston (1970) believed that an important reason for having male teachers in early childhood education was that "only girls' needs and roles are provided for, leaving the boys either to fend for themselves or put on a dress and go play in the house corner" (p.147). Male teachers were seen as balancing this feminization. It was argued that schools which were staffed primarily by women created a feminine environment, that this environment was detrimental for boys and that this problem would immediately be solved with the addition of male teachers.

Sexton (1969) summarized and expanded concerns regarding the feminization of schools when she wrote that "women teachers know almost nothing about boys' games and most couldn't care less" (p.31). She also argued that "school words tend to be words of women...they have their own sound and smell. Women use different words, stress them differently" (p.31). A 1964 study by Kagan concluded that "second grade children view common objects in the classroom as more clearly associated with femininity than masculinity" (p.1055).

Feminized school environments have been given as one reason for boy's problems in school. Interpretation of statisical data supports the notion that American boys have more difficulties in school than girls do. Brophy & Good (1973) cited cross-cultural data showing that these differences do not exist or are even reversed in other societies. Male difficulties most commonly noted in schools include lower scores than

girls, lower rates of promotion to the next grades, increased reading difficulties as well as high incidence of dropout. Additionally, teachers referred boys to administration more frequently than girls for behavior problems, preferred female students and graded girls higher and boys lower than justified by their achievement (Brophy & Good, 1973; Lee & Wolinsky, 1973).

While one would have great difficulty countering arguments that boys "act out" more than girls do, causation is another matter entirely. The theorists cited above hold that this aggressive behavior is primarily a result of adaptation (to feminine environments) difficulties interacting with a lack of male role models. It is important to realize that this position is based entirely on correlations between a paucity of males in the young child's world and aggressive acting out behaviors. Campbell and Stanley (1966) wrote that "a perusal of research on teaching would soon convince one that the causual interpretation of correlational data is overdone rather than underdone, that plausible rival hypotheses are often overlooked" (p.65). Correlation does not prove causation as proponents of the above view have argued. Additionally, plausible rival hypotheses exist. Konner (1982) holds that in all societies on record, men are more aggressive than women. As an example of a plausible rival hypothesis, innate tendencies and socialiation may predispose boys towards acting out aggressive behaviors. These behaviors may be incompatible with school success and societal acceptance.

Male Teacher Influence

Impressionistic, first hand accounts suggest that males are highly

influential in altering the curriculum and activities of the early childhood program. This alteration proportedly is in the direction of more balanced, male influenced planning. The view expressed throughout the literature suggests that female teaches do not consider, understand or provide for boys' play needs. Materials, types of activities and emphasis would differ greatly were a man rather than a woman doing the planning. No research base exists to alter or affirm this belief.

Interestingly, this curriculum balancing act which males are expected to accomplish may result in their leaving the field of early childhood as quickly as they do. Robinson (1980) noted that "the profession is a transitory one for men." Males remain in early childhood for a shorter time than females do and for a shorter time span than males in other fields. This rapidity of career change may be due, in part, to pressures to perform traditionally male activities. The following quotations are examples of the reinforcement of male teacher's providing "male activities". Burtt (1965) wrote of the success that occurred when a male teacher gave a young boy "special help in developing skills with balls and in games" (p.95). Johnston (1970) believed that he provided males activities with tools and a workbench. However, he held that the greatest difference between male and female teachers is "simply one of attitude...not being afraid of handling snakes, spiders, worms, gerbils, guinea pigs or birds" (p.147). Kyselka (1966) wrote glowingly of male success with young children by describing the children who "hang on his back and crawl over him" (p.296) or "John romps with the little ones, plays gentle football with them" (p.297).

The use of "the male as a heavy" (Milgram and Sciarra, 1974, p.246)

was given as one of the difficulties in keeping men in daycare. Gordon, Draper and Walkowiak (1983) held that males may assume the traditional role in early childhood programs due to two sets of pressures. First, the known or familiar is less anxiety producing and easier to perform. Second, women staff members may pressure the male, with varying degrees of subtlety, into these roles. They suggested, however, that this is a danger to the retention of male workers.

Androgynous Male Model

There is a recent movement which argues that past calls for men to balance early childhood programs have been misguided (Robinson, 1981). A stark statement of this position is that children need to be provided with male sex role models which provide androgynous behavior patterns, rather than traditional role models. As Robinson and Hobson (1978) wrote, "It is our purpose to suggest that impassioned pleas for a male image are misguided and that men in daycare have valuable contributions to make by modeling and reinforcing not only positive masculine traits but also positive feminine traits" (p.157). This argument relies primarily upon the concept that androgyny is a healthy life style which better prepares the child for today's society. Many male caregivers surveyed by Robinson and Canaday (1977) believed that altering the traditional sex role stereotypes and providing children with "modern" (Holter, 1970) models was an important component of their guidance philosophy. They wanted children to have the opportunity to interact with loving nurturing males.

Bem (1976) viewed androgyny as a balance of both male and female

traits existing within the same individual. Traditionally, sex roles have been conceptualized as bi-polar manifestations of behavioral traits. Definitions have been narrow and variance from same-sex mean scores has been viewed as pathological deviation, that is, as sex inappropriate. During the 1970's, however, researchers began questioning this rigid definition of sex appropriateness. Society is neither static nor are rigidly proscribed roles functional or adaptive. Rather, flexibility and the ability to negotiate and choose behavioral patterns appropriate to given situations best serve individuals in this rapidly changing society (Scanzoni, 1983).

Bem & Lenny (1975) empirically demonstrated that rigidly proscribed sex role behaviors seriously restrict an individual's behavioral options. On the other hand, the androgynous individual has the psychological freedom which permits a wide range of choices. Draper & Gordon (1986) argued that men view nurturant behaviors as incompatible with masculinity. They held that an intrapsychic mechanism, "fear of nurturing" restricts male nurturing behaviors in a manner similar to "fear of success" found in some women (Feather & Simon, 1973). This restriction may be an example of the limitation which rigidly proscribed sex roles place upon an individual's behavior.

Disregarding global conceptualization of behaviors as either masculine or feminine may clarify research issues. Considering situation specific appropriateness, rather than sex appropriateness, may provide more meaningful indices of assessment. Or as Reiss wrote, "We must specify which social context we are speaking about if we are to obtain meaningful answers". (1973, p.253). Brophy & Good (1973) argued

persuasively that given the measures of masculinity, children and society both benefit from a reduction of these behaviors. Traditional masculine behaviors have been viewed as aggressive, independent, dominant, competitive and non-emotional; traditional female behaviors as nurturant, emotional, sensitive and obedient. The instrumental expressive dichotomy of Parsons (1955) was accepted and expanded with measures of sex-role behaviors, such as the Fagot-Patterson (1969) checklist. However, as Scanzoni agrued, Parson's thinking is characterized by "tautology and false teleology" (1979, p.297).

Arguing for androgyny, Robinson & Hobson (1978) asked, "How functional is a society composed of hypermasculine persons?" (p.161). An androgynous personality is considered a crucial ingredient for successful male involvement with early childhood education. Robinson & Hobson hold that "it is the unique blending of both masculine and feminine personality traits that makes the male caregiver indispensible in daycare settings" (1978, p.158). Androgynous males are more comfortable and willing to perform tasks requisite for the care of young children; tasks that had traditionally been considered female, such as nurturing, diapering and feeding (Bem, 1975). Equally important, but less obvious styles of relating to children may be incompatible with the "male" traits. Watrin and Fufrey (1978) discussed fostering creativity in children and stressed the importance of allowing the child to take the initiative, of not supplying answers but facilitating discover, and of remaining non-judgmental regarding finished products. This may be dissonant with traditional male dominance and control styles. The same applies to non-authoritarian guidance and discipline styles (Spivak &

Shure, 1978).

Robinson (1981) holds that the androgynous male can free children from the beliefs that men and boys are not permitted to be emotional and sensitive. This line of thought charged the male worker with the task of combating familial and societal socialization. There is a tradition which suggests that school experiences may be powerful enough to accomplish, partially at least, this transformation. Sullivan (1953) referred to this effect as a "validation" process and viewed it as the first opportunity for the young child to correct misconceptions perpetuated by the home environment. Scanzoni and Fox (1980) implied the strength of the daycare experience by questioning results of maternal employment studies which do not control for daycare effects. Finally, Robinson (1979) speculated that "caregivers are literally rearing today's children. With contacts of 40 hours or more a week, the caregivers may well have a more profound impact on the socialization of American children than parents themselves" (p.553). In sum, androgynous males are valued for their ability to break sex-role stereotypes and provide alternative styles of behavior.

Problems with the notion of androgynous male models need to be resolved. First, it is speculative. Face validity may be adequate for generating initial hypotheses; however, research findings are necessary to sustain and develop a body of thought. Second, it seems to rest on sexist assumptions in that the theoretical literature stresses the importance of men but not women adopting androgynous perspectives. An environment composed of traditional women and androgynous men is not a balanced environment either. Similarly, the pervasive implication is

that women and children need a man to correct all problems. Finally, research data have not supported the theoretical need for males in daycare. Rather than altering the theoretical basis, the rationale has been altered to a position requiring no research findings.

Sex Based Differential Effects

Do men in early childhood make a difference in children's behavior and can the difference be measured? Reviews of the literature have concluded that the differences are weak or virtually non-existent (Brophy & Good, 1973; Lee & Wolinsky, 1973; Robinson, 1981).

Male presence has had specific and variable effects upon indices. For example, reading is a subject that young boys traditionally score lower on than young girls do. However, only very limited and weak support exists to suggest that male teachers can significantly raise boys' reading scores. Shinedling and Pedersen (1970) found a significant improvement in scores, although their sample size was very small. Numerous other studies have found no significant effects (Asher & Gottman, 1972; Lahaderne & Cohen, 1972).

Lee & Wolinsky (1973) reported the strongest and most varied research based effects in the literature. However, they advised caution in interpreting findings since their sample of male teachers was not chosen randomly. Instead it was selected on a pragmatic basis. They said, "We used the ones we could find" (Lee & Wolinsky, 1973, p.352). Observations of teacher behaviors, student behaviors and teacher-student interactions were conducted in 18 different classrooms. Data were treated as tentative and as generating hypotheses for future research. Three conditions existed, six classrooms had two female teachers, the

other male/female combinations. Thus, the results may be generalized only to mixed teaching teams. Male-female teacher interactions may have been measured. Classes with only male teachers may exhibit differential patterns of behavior. Areas of observation and reported findings of Lee & Wolinsky (1973) are discussed below.

Male teachers were less judgmental than female teachers and their evaluations were less biased (Lee & Wolinsky, 1973). They said that "male teachers are generally more approving of boys than female teachers" (p.351). Female negative evaluation was accompanied by physical contact (type not specified) 20% of the time; this was distributed equally among boys and girls. Male teachers used physical contact 30% of the time, all directed at boys. Regarding grouping, both sex teachers related to children in groups with equal frequency. However, male teachers responded more to spontaneously formed groups than female teachers and initiated groups much less frequently. Same sex children were chosen for group leadership positions.

Classroom activities were also affected by teacher sex (Lee & Wolinsky, 1973). Similar to grouping findings, men were less inclined to respond to ongoing activities; women were more likely to initiate activities. Men were more likely to relate to male-typed activities than women and "there was a startling tendency for teachers, irrespective of sex to become involved in very few female-typed activities" (Lee & Wolinsky, 1973, p.350). Finally, children expressed different attitudes regarding male and female teachers. Both boys and girls viewed female teachers as preferring girls, and male teachers as exhibiting no preferences. Boys felt strong affiliation with the male

teachers; girls expressed equal affiliation with either sex teacher. In conclusion, each area studied produced significantly higher results in the hypothesized direction with male teachers.

Other researchers have reported more modest findings. Purdue & Conner (1978) concluded that "sex role expectations appear to influence the rate and pattern of touching observed in adult-child interactions" (p.1261). Observing behaviors in a laboratory preschool, they found that teachers touched same sex children more than opposite sex children. Male teachers also gave more helpful touches to girls, more friendly touches to boys. No differences were reported for female teachers. Regarding child to teacher touching, boys touched male teachers at a higher rate than female teachers and at a higher rate than girls did. However, teachers were undergraduate assistants. Robinson (1979) speculated that inexperienced, young, male teachers exhibit different behaviors than do older, experienced teachers. Older teachers have chosen early childhood as a profession and are more likely to have androgynous preferences and behaviors. Thus, results based upon assistant teachers may not be applicabe to experienced males.

Similarly, Robinson (1981) found that "male teachers were more nonverbally responsive to boys than girls...and more nonverbally responsive to boys (but not girls) than were female teachers" (p.285). Female teachers responded equally to both sexes. Males also joined in boys' play and initiated more new behaviors for boys than for girls. Both Purdue & Conners (1978) and Robinson (1981) found significant non-verbal communication differences. Each required greater proximity to the children; researchers therefore speculated that "male teachers

tended to be more physically proximate to boys than girls and more involved in masculine behaviors than were the female teachers" (Robinson, p.286). Male teacher self-report data corroboratd this; they believed that they offered and reinforced different activities and behaviors than female teachers did (Robinson & Canaday, 1977). However, as weak as these results were, the vast majority of studies which measure sex-based behavioral differences of early childhood educators have reported no significant findings. These will be considered next.

Research statistics and results have not confirmed the hypothesis that male teachers will reinforce more male behaviors than female teachers (Etaugh & Hughes, 1975). Robinson, Skeen & Flake-Hobson (1980) found that the data "is said to be weak and inconsistent" (p.234). Using a questionnaire, Etaugh & Hughes (1975) showed that both male and female teachers approve more of dependency than aggression for both boys and girls. Male responses were greater in this direction than female. Supporting this finding, Robinson, Skeen & Flake-Hobson (1980) found that male early childhood educators, female early childhood educators and male engineers had similar "behavioral and trait preferences for both boys and girls" (p.237). All three groups held more rigid preferences for boys than girls. That is, girls were permitted more leeway in choosing masculine or feminine activities, boys only masculine activities. Similar results were obtained by Robinson & Canaday (1978), using the Fagot-Patterson checklist (1969). More reinforcers were given for feminine behaviors, more punishers for masculine behaviors.

Additional areas of similarity were noted by other researchers. Robinson (1981) observed that male and female teachers demonstrated no

significant differences in the amount of verbal contact with boys and girls. Brophy & Good (1973) reported that despite a male teachers' "conscious efforts his presence did not affect either the boys or girls to any significant degree. There were no effects at all on sex role differentiation, interests, or motivational measures" (p.565).

In sum, research has not borne out the impressionistic accounts that males provide differentiated input into the early childhhood program. Lee & Wolinsky (1973) concluded that there is "no hard evidence that men change the pattern" (p.344). Rather, they argued that it seems clear that "females have been unsuccessful in socializing young boys...and that the male teachers might provide classroom conditions more congenial to young boys and more liberating for young girls" (p.345).

If the findings of little or no differences between men and women working in early childhood education continue, this would be an area that would deserve much research attention. It would be unique, an anomaly. Many areas, other than daycare, have shown significant differences between male and female behaviors. The range includes early infancy, in which parents and others respond differently based on both the sex of the child and the sex of the parent (Block, 1983), and extends to college administrators. Male and female college administrators exhibit different priorities, satisfactions, interactions and time management styles (Shakeshaft, 1986).

Theoretical Base

The supporting theory for the present research on male child caregivers is social learning theory (Bandura, 1969). While behavioral in origin, the stress is placed upon the role of observational learning from models. In this view, external reinforcement is not necessary for learning to occur.

Bandura (1969) holds that social learning occurs when the observer acts like and becomes like the model. He believes that self esteem is learned in this fashion and is based on significant people in the child's life who value (or not value) the child's perceived characteristics (Bandura, 1974). Additionally, he sees sex roles and identity as learned in this fashion. This is not simple mimicry, the observer actually takes on behaviors and values as their own.

Certain types of models are more likely to be imitated than other types (Bandura, 1969). Models with social power are more likely to be influential as are individuals who are similar to the observer and viewed as being nurturant.

Clearly, child caregivers fall in the category of potentially influential models. They meet the criteria of having power over the child and are nurturing. Social learning theory would predict that male models would influence the male child more strongly than female models due to increased similarity.

Social learning theory thus supports the need for a balanced early childhood environment. First, the more limited the variety of equipment available, the more limited the options for modeling. A wide variety of equipment and supplies are necessary if a caregiver is going

to model the widest possible variety of actions. Also, the greater the recognition of the unique contributions of both male and female workers, the greater the effort to recruit and retain male workers, thereby increasing the opportunity for modeling to occur (Gordon, Draper, & Walkowiak, 1983).

Adequacy of Previous Research

The preponderance of research indicates that having males teaching in early childhood education creates no measurable differences. However, a number of issues must be considered in evaluating the usefulness of these findings. First, as Campbell & Stanley (1966) noted, the "null hypothesis...can never be accepted by the data obtained; it can only be rejected or fail to be rejected" (p.35). Interpretations must be made cautiously; claims cannot be made that no differences exist, only that they have not been measured. Particularly in this instance, research findings and clinical or experimental accounts differ, extreme caution must be exercised. Only philisophical biases permit interpretations valuing research methods over first hand accounts. Cromwell & Olson (1975) noted that both observation and self-report methods have weaknesses, that each measures varying indices and that each is equally important. Wide discrepency between each area is an interesting and fertile ground for study.

Researchers may be considering and measuring areas where differences do not and cannot exist. Anastasia (1957) held that if one asks incorrect questions, one gets incorrect answers. Attempts to measure reinforcement for classroom aggression may fall into this domain. Teachers have long preferred passive withdrawal in students to

acting out. In fact, they are more likely to refer children for counseling for acting out behaviors (Wickman, 1928; Ziv, 1970). Situational appropriateness, rather than sex role preferences may be the primary determinant of the choice of teacher response to classroom aggressiveness. When teaching a large classroom of children, teachers seem to be unable to permit or tolerate aggressive behaviors. A learning environment is incompatible with these behaviors, therefore they must be controlled. Findings of no differences may be measuring teacher effectiveness or possibly survival techniques, but not sex role preference.

Finally, should an inability to measure differences determine an alteration of policy and a shift toward not recruiting males for daycare? Social learning theory suggests that the presence of both male and female models is important for children, for other staff, and for the program (Gordon, Draper & Walkowiak, 1983). First hand and clinical accounts of male and female workers, supervisors, parents and children attest to the importance of male contributions. The search for male worker contributions and effects should redefine areas of research and emphasis.

Therefore, this was the basis for examining the heretofore undocumented area of differential contributions of male and female caregivers to the learning environment of daycare settings. If, as proposed, men and women stress different equipment, equal input of both may be requisite in order to provide a balanced environment for young children.

CHAPTER III

METHODOLOGY

The purpose of this research was to compare the day care learning environments planned by male and female caregivers in order to determine if gender-based differences exist. It was expected that male caregivers would plan for a more assertive learning environment with greater stress on gross motor equipment and other items judged to be preferred by males. Females, in turn, would plan an environment which emphasized household, dramatic play, and other items judged to be preferred by females. The dependent variable was the masculine-feminine score on daycare equipment choice. The four independent variables were sex, education, experience, and sex-role preference.

Subjects

Subjects in this research were men and women working in early childhood education. Because of the small number of males available, all males who agreed to participate were included. Females were then matched by educational level and years of experience. The procedures developed by Robinson and Canaday (1977) were followed with one exception. They first contacted state agencies in North Carolina to obtain a list of male day care workers. Then, they wrote these men and requested their participation. After the men who agreed to participate had completed the research task, which included demographic

information, Robinson & Canaday contacted area daycare supervisors and requested the name of one female caregiver who matched the male's demographic characteristics. These women were then contacted regarding research participation.

This same procedure was used in the present research with slight modification. The names of all the women matching the male profiles were requested and then were randomly drawn. This was done to eliminate the potentially confounding variable of selective subject choices by supervisors. Supervisors may have selected only the best, brightest and most dedicated women, who might not be comparable to the range of male caregivers.

The following North Carolina agencies with statewide access to early childhood educators were contacted, and they agreed to provide listings of caregivers for the present research:

1. CABLE, the Head Start Training Office located in North Carolina A & T University, Greensboro.
2. The Office of Day Care Licensing in the Department of Administration, Raleigh.
3. The Office of Day Care Services in the Department of Human Resources, Raleigh.
4. Some Chairpersons of Early Childhood Education Departments in state supported universities.
5. Some Chairpersons of Early Childhood Education Departments in the community college system.
6. The North Carolina Day Care Association (NCDCA).

No study of male early childhood educators had yet exceeded 20

respondents which was the minimum number acceptable for the present research. Due to respondent matching procedures, caregivers working only within the state of North Carolina were contacted.

Power calculations were performed on best estimates of the dependent variable. Assumptions were based upon three sources of information, previous relevant literature (Eisenberg et al, 1982), pre-test scores, and discussions among the panel of coders. This calculation produced a Phi Statistic of 2.167, suggesting that if actual differences do exist between the choices of men and women, 20 subjects would be an adequate number to measure these differences.

A purposive sample of 54 (27 males and 27 females) North Carolina day care providers were matched on years of experience, and education. As a precaution for eliminating cultural bias, the state was divided into three areas and within each division equal numbers of men and women were chosen. Thus, inferences cannot be made about a larger population of daycare providers on statistical grounds alone. To the extent that this sample is representative of daycare providers in the "North Carolina region," inferences can be made about that population.

The initial contact was made by a letter (See Appendix A) asking the men and women selected if they would participate in a study measuring caregivers' supply and equipment preferences. Since calling attention to the purpose of the study might affect responses in the perceived desired direction (Cromwell & Olson, 1975), no mention was made of interest in sex-based differences. This first letter guaranteed anonymity and stated that all participation was voluntary and could be discontinued at any time. Respondents were asked to

return an enclosed card on which they could indicate their intent regarding participation. If they returned this card with an affirmative response, they were included. If not, no further contact was made.

Thirty-eight men were contacted first in this manner, and 31 (81%) of them indicated that they would participate. Of these, 24 (77%) returned their completed research materials within the requested time frame. The others were then called, and an additional three returned the materials for a total of 27 (87%) male participants.

After receiving completed male responses, daycare supervisors and Head Start training coordinators were contacted and asked to supply the names of all females within their contact area that matched specific age, experience, and education levels. Female daycare workers' names were chosen randomly from that list and contacted in a manner identical to that listed above for males. Proportions from geographic regions within the state were kept the same for both males and females. Telephone calls were made to all individuals who failed to return the research materials. All calls were made between 14 and 21 days after receiving the agreement to participate.

Of the 36 women who were contacted initially, 30 (83%) responded affirmatively. Of these, 25 (83%) returned the completed research materials within the requested time. After telephone calls, two other women returned their materials, making 27 (90%) women and equaling the 27 men.

Data Collection Procedures

Each individual received the same instructions and the same survey materials to which to respond (See Appendix B): (a) a covering letter, (b) the directions, (c) The Daycare Equipment Preference Booklet, (d) a response sheet, (e) the Education and Experience Data Sheet, and (f) the Parents of Children in Day Care Scale.

Instruments

Daycare Equipment Preference Booklet

Choices were made from the Daycare Equipment Preference Booklet (See Appendix B). This booklet is composed of photocopied pictures chosen from the 1983-1984 Childcraft Corporation Catalog (1983), a major school supplier.

Respondents were instructed to choose supplemental equipment and supplies for a program which already had basic equipment and supplies. This was done to eliminate potentially confounding biases. If respondents had been asked to equip a program from the beginning, universal basic program needs could predetermine choices. Differences between males and females were assumed to be better measured with items considered to be over and beyond basic equipment.

Fifty items were chosen for the research booklet, 10 from each of five categories of sex preference (See Appendix C). Equipment and supply items were grouped into these five categories of sex preference: 1 = very feminine, 2 = feminine, 3 = neutral, 4 = masculine, 5 = very masculine. This coding reflects quidelines established throughout the literature (Blakemore, Larue & Olejnik, 1979; Conner & Serbin, 1977; Eisenberg-Berg et al., 1979; Eisenberg et al., 1982, Fagot & Patterson,

1969). These 50 items also reflected variation in durability, cost, and curriculum balance.

Coding was done by a panel of three experts in early childhood education, each of whom has an advanced degree and has been involved in planning and purchasing for daycare. Training of coders involved first, reading relevant literature and second, engaging in discussions with each other. Coders then individually rated a list of items for masculinity/femininity which had been randomly selected from supply catalogs. They compared and discussed results and rationales. This process was repeated with three lists of items until inter-rater reliability was over 90%.

Coders then individually chose additional items from the Childcraft Catalog, following the guidelines established for cost and durability balance. Coders met as a group and discussed all items. Items with consensus were given top priority for inclusion. Discussion among the raters then proceeded regarding the sex preference categorization of these items. If consensus could not be reached on an item, it was discarded. Unanimous agreement was the criterion for inclusion of any item.

Items were then balanced by cost and durability. Equivalent durability was controlled for by using no consumable items. Although respondents were not shown item prices, original catalog prices were balanced to prevent any effects based upon preferences for high-priced items. This balance was achieved by choosing the same number of items from each price range (See Appendix C).

Within each of the five sex preference categories, two items were

chosen in the $80 to $100 range, two within the $60 to $80 range, four within the $40 to $60 range, and two within the $20 to $40 range. Often similar items were combined into an appropriate set of items in order to achieve this balance. The mean cost of items within the five sex preference groupings are the following: category one, $58.55; category two, $58.58; category three, $58.91; category four, $58,81; and category five, $57.94. Each item or set of items were photocopied and then randomly placed within the Daycare Equipment Preference Booklet. They were identified only by the name of the equipment.

A pretest of the Daycare Equipment Preference Booklet and Response Sheet (See Appendix C) was conducted with four early childhood educators. As a result of posttest interviews with the educators, modifications of design and instructions were made. The final Daycare Equipment Response Sheet had both item name and number to correspond with the placement of the photocopied pictures in the Daycare Equipment Preference Booklet. Clear dark lines were used to separate items or sets of items in the booklet as a result of suggestions from two pre-test respondents, who indicated uncertainty regarding item groupings. Pretest results and discussions with these educators confirmed that cost and durability were not considered when making item choices. The task was completed in a maximum of 20 minutes. Each respondent in the pre-test indicated that this task was enjoyable since each had previously indulged in a fantasy of being able to buy unlimited extra equipment.

Parents of Children in Daycare Scale

In addition to sex of the respondent, another factor that could

influence the equipment choices was the respondents's sex-role preference. Therefore, a short sex-role preference scale (adapted from Scanzoni, 1976) called "Parents of Children in Day Care" was included (See Appendix C). Each item had a response scale of "strongly agree" to "strongly disagree". A very traditional response score was "1" whereas a very "modern" score was "4".

The sex-role preference score is the mean of the fourteen responses to the sex-role preference scale. One male, ID number 11, failed to respond to the fourteen SRP questions, and therefore had no SRP scores. He was included in all analyses except those involving SRP. For these four male respondents (IDs 4,7,13, and 15) and three female respondents (IDs 42, 45, and 50) who skipped some SRP questions, received SRP scores that are the means of those responses which they made. Those seven respondents are included in all analyses.

Education and Experience Data Sheet

The other independent variables were amount of experience and education of the respondents, since these could influence the equipment choices. Previous research has suggested that experience contributes to an androgynous perspective (Robinson, 1981) which may be manifested in more balanced and neutral item selection. Therefore, these two variables were controlled for by matching the subjects on education and experience.

The seven responses to the question on education on the Education and Experience Data Sheet (See Appendix C) were grouped into three categories, as shown in Table 1, to form educational level. This was necessary for the analysis of variance of equipment preference. The

three categories are low (some college); medium (2 or 4 year college graduate); and high (graduate degree). Note that the medium category includes two male and four female college graduates who had some graduate education but no graduate degree.

Table 1

Frequency of Caregivers in Education Categories by Sex

Education Categories	Levels	Males	Females	Total
	1 some high school	0	0	0
	2 high school grad	0	0	0
Low	3 some college	10	9	19
Medium	4 2-year grad	3	3	6
	5 4-year grad	3	3	6
	6 some graduate	2	4	6
High	7 graduate degree	9	8	17
Total		27	27	54

The educational range for both men and women was from some college to a graduate degree, categories 3 through 7. No subjects indicated that they had less education than "some college." The mean educational achievement for men was 4.89 and for women, 4.96, both of which fell between the two-and a four-year degree category.

The responses to the question on experience on the Education and Experience Data Sheet were grouped into three categories (See Table 2) to form experience level. The three categories were low (less than 5

years); medium (more than 5 and less than 10 years); and high (more than 10 years). The experience range was from under one year to 23 years. The mean was 7.65 years for men and 7.8 years for women.

Table 2

Frequency of Caregivers in Experience Categories by Sex

Experience Category	Male	Female	Total
Low, 0-4 years	10	10	20
Medium, 5-9 years	8	8	16
High, 10 years of more	9	9	18
Total	27	27	54

Data Analysis Procedures

The sampling unit was the individual daycare provider. SAS Statistical Package (Goodnight, Sall & Sale, 1982) was used to obtain crosstabs for gender, education, experience, sex-role preference, and sex equipment preference choice. The dependent variable, Sex Equipment Preference Score (SEPS) was derived by obtaining individual and group means for the categorical values (1-5) assigned to equipment choices. One-way ANOVAS were then computed between groups of (a) sex, (b) education, (c) experience, and (d) sex-role preference. For each ANOVA

computed, and for the multiple regressions, the residuals of the Sex Equipment Preference Score (SEPS) were tested for normality, and in every case, they were not significantly different from what would be expected under the assumptions of normality. This justified the use of ANOVA for analyzing the SEPS.

Based upon the previous review of relevant literature, general hypotheses of early childhood educators' purchasing priorities can be formulated. First hand accounts as well as reseach indicate that male and female caregivers have a different programming emphasis. Therefore, the following directional hypotheses based upon respondent's sex were examined using the statistical method described.

Hypothesis 1. Males will have a significantly higher masculine mean score than females on day care equipment items chosen. The analysis was a one way ANOVA of Sex Equipment Preference Scores (SEPS) by sex of respondent.

Hypothesis 2. There will be a main effect for both education and experience. For both males and females, the greater the education and experience, the more neutral will be the SEPS. A two-way ANOVA was computed for each sex.

Hypothesis 3. Males will exhibit significantly higher modern Sex Role Preference Scores (SRP) than females will. An ANOVA was used to compare sex on the SRP means.

Furthermore, males will exhibit a negative correlation between equipment choice scores and sex-role preference scores, but females will exhibit a positive correlation. That is, more modern men will choose more neutral equipment and more traditional women will choose

more feminine equipment. A Pearson product-moment correlation coefficient was computed on equipment score and sex-role preference score. This analysis was repeated by sex of respondent.

Hypothesis 4. The strongest predictor of SEPS will be sex. Education, experience, and sex-role preference were used along with sex as predictors in a multiple regression analysis.

CHAPTER IV

RESULTS AND DISCUSSION

As hypothesized, male caregivers prefer significantly more masculine day care equipment than female caregivers do. However, experience and education had no effect on equipment choices. Although females with a traditional Sex Role Preference Score (SRPS) had a significantly lower equipment preference and chose more feminine equipment than males did, SRPS was not a significant predictor of day care equipment preferences.

Equipment Preference by Gender

The tables contained in Appendix D list the grouped data from which statistical procedures were performed. Frequencies of equipment choices for each of the 50 items by sex are shown in Table D-1. Table D-2 shows the frequency of choices for items grouped within five sex preference categories (Very Feminine, Feminine, Neutral, Masculine, Very Masculine), by sex. Table D-3 gives the frequencies on the males' and females' choices for equipment by education. Table D-4 gives the frequencies on the males' and females' choices for equipment by experience. Table D-5 gives the frequencies on the males'and females' choices for equipment by Sex Role Preference.

It was predicted in Hypothesis 1 that men would have significantly higher mean scores than women would on equipment choices. A one-way ANOVA (Table 3) and a Chi-Square (Table 4) both found SEPS differences

for sex to be significant (P<001). Men clearly preferred more masculine supplies and equipment than women did as shown by the significantly higher SEPS mean score in Table 3. Additional support is the higher frequency of very masculine (78) and masculine (124) choices by males as compared to the lower frequency of very masculine (54) and masculine (80) choices by females (See Table 4). Females clearly selected more very feminine (65) and feminine (118) items than males did. This finding of significant differences in teacher/caregiver behaviors based on biological sex of the caregiver is probably unique.

Table 3

Differences in Mean Sex Equipment Preference Scores by Sex

Sex	Mean	Standard Error
Male	3.27*	.082
Female	2.85	.069
F Value = 13.01		

*p < .0009

Table 4
Chi-Square of Frequency of Equipment Choice for Sex Preference Category by Sex

Sex	Category					Total
	1*	2	3	4	5	
Male	42	86	75	124	78	405
Female	65	118	88	80	54	405
Total	107	204	163	204	132	810

Chi-Square = 24.854

$p < .001$

* 1 = very feminine, 2 = feminine, 3 = neutral, 4 = masculine, 5 = very masculine

As was argued in the review of literature, other studies may have been measuring the wrong variables. They studied behaviors instead of equipment choices. Historically, children's behaviors were categorized in a dichotomous male/female fashion. Generally, gross motor behaviors were regarded as masculine and fine motor activities were viewed as feminine. Classroom observations have shown that female teachers rewarded feminine behaviors and punished masculine behaviors (Robinson, 1981). Based on Robinson's finding, it was believed that if there were additional male early childhood teachers, they would reward masculine behaviors, making little boys feel more accepted in the classroom. However, observation of actual practice by male teachers did not bear this theory out (Robinson, 1981). The present study suggests that no

teacher can reward loud, gross motor activities in the classroom. Simple teacher survival and classroom management dictate that the teacher must control disruptive activities. A recent study by Croll (1985) lends support to the belief that aggresive behavior cannot be allowed in the learning environment. Although he was observing older children in Britain, Croll did conclude "that the imbalance in the amount of teacher interaction with boys and girls should be seen as a problem of classroom management rather than of sexist bias" (p.220).

Another reason that the present study may have tapped differences that others did not is that this study created a research stimulus which allowed the subjects to deal with an ideal situation. A frequent comment in the pretest situation was this, "I've always dreamed that I could do this." Realistically, caregivers do not get the opportunity to pick a large number of extra items without regard to such details as cost and durability. By moving beyond day to day realities, an aspect of caregivers that is often forced to remain submerged may have been measured. This fantasy realm may be less concerned with curriculum requirements and may be more expressive of caregivers' personal preferences and beliefs.

However, use of fantasy about this ideal is not necessarily detrimental to care giving. Two staff supervision concepts support the value of the "fantasy realm." First, "regression in service to the profession" acknowledges that some forms of regression to fantasy are beneficial and desirable. In the present case, child care workers must be able to regress to fantasies of childhood in order to understand and empathize with children on an involved, emotional level rather than

just a professional level. This is partially borne out by caregiver reports on the difficulty of "switching gears" after school for events such as a parent conference. It is not just altering language and form, rather an emotional return is required for involvement on an adult level.

Second, caregivers need to choose activities that they, as well as the children, enjoy. Without teacher involvement and enjoyment, activities tend to be sterile. Prepackaged curricula, which leave little room for teacher initiative and creativity in the classroom, may contribute to teacher failure and burnout. Hypothetically, the "idealistic or fantasy realm" may be important to understanding the real desires of teachers for planning the day care environment.

An unanswered question with this and all survey results is what the relationship is between survey response and actual behavior. Measuring actual classroom behaviors in terms of mere equipment instead of actual availablity to children may prove to be impossible. A requirement for such a measure would be that an adequate number of male teachers have complete control over both purchasing and curriculum for their classrooms. This situation probably does not exist in great enough numbers for valid statistical measures.

However, developmentally appropriate early childhood education allows great amounts of time for free choice activities by children during the day (NAEYC, 1986). During these large blocks of time, children freely choose equipment and toys provided by teachers. While planning for this important segment of time, teachers may be most prone to pick equipment reflective of the sex differences that are seen in

this research.

Equipment Preference by Sex, Education, and Experience

It was predicted in Hypothesis 2 that education and experience would have a significant main effect on SEPS. A one-way ANOVA was performed on SEPS for education by sex and again for experience by sex. No significant effects were found. See Tables 5 and 6 for the mean SEPS scores. For males, SEPS was expected to decrease as education and experience increased. For females, the opposite was expected. However, this hypothesis was not supported.

Table 5

Mean Sex Equipment Preference Score for Education by Experience in Males

Education Level	Experience Level			
	Low 0-5	Med 5-10	High >10	Total
Low Some college	3.17	3.20	2.98	3.12
Medium 2 or 4 yr. grad.	3.20	3.59	3.32	3.49
High Grad. degree	3.10	3.53	3.32	3.32
Total	3.15	3.48	3.22	3.27

Table 6

Mean Sex Equipment Preference Score for Education by Experience in Females

Education Level	Experience Level			
	Low 0-5	Med 5-10	High >10	Total
Low Some college	2.78	2.91	2.60	2.79
Medium 2 or 4 yr. grad.	2.80	2.88	2.95	2.89
High Grad. degree	2.82	3.27	2.82	2.87
Total	2.80	2.94	2.83	2.85

A number of factors may account for this finding. First, previous beliefs that these variables would be significant were very speculative (Robinson, 1979). These findings were based upon different situations from the present study. Robinson said that men who choose early childhood are different from inexperienced high school workers or undergraduate student teachers. While, this may be true, the present study measured only males already working in and presumably committed to the field.

Sixty-three of the males had 5 years or more experience in the field, and 33% had 10 years or more. Therefore, when measuring male childcare givers with this much experience, experience may not be an important variable. Additionally, speculating that a fantasy realm was

tapped, experience may not be as crucial on this level. This was a game for many of our participants.

Education was not a significant variable either. Again, past literature was highly speculative on the importance of this variable (Robinson, 1981). Education may be important in outfitting the basic needs of the room. That is, trained providers may choose a more balanced environment than those with little or no education. However, on the idealistic level measured in the present research, balance may not have been a crucial component.

The questionaire was probably inadequate on education. All respondents checked some college, number 3, as a minimum. More important information would have been gathered by asking total number of credits earned. All providers were exposed to some college, either through workshops or an occasional course.

Equipment Preference by Sex Role Preference

The sex role preferences of the caregivers were also examined in this study. While no other caregiver study has measured this variable, the author believed that it might explain the sex equipment preferences. When women choose child care as a profession, it can be viewed as a traditional choice and a possible extension of traditional values. However, professional child care is considered to be a nontraditional choice for males, who have historically not been involved in the care of young children. Therefore, it was predicted in Hypothesis 3 that the Sex Role Preference Scores (SRPS) of male care givers would be more modern than the SRP of female caregivers. A two-way ANOVA was used to test Hypothesis 3, (See Table 7). There was

no significant difference between male and female SRP scores.

Table 7

Differences in Sex Role Preference by Sex

Sex	Mean	S.D.
Male	3.19*	.033
Female	3.07	.042
F-Value = 1.10		

*p>.10

Two plausible explanations could account for this lack of difference. First, the SRP scale used was related to availability of daycare services. Possibly, the vast majority of early childhood workers share similar modern views regarding daycare usage, which are supportive of the services that these people provide. Just as professors would be likely to support higher education, so might early childhood educators support early childhood education. A scale of SRP which considered other variables, such as household chores or decision making, may have been more sensitive to existing differences.

A second reason that differences may not have been found lies in the nature of the choice for both men and women. Men in early childhood education make a more modern, less traditional choice, while women in the same profession make a more traditional choice. In most

sex role studies, women tend to score as more modern than men. Therefore, it is possible that in the current study, these two trends cancel each other and no effect was found.

Significant correlations were hypothesized between SPRS and SEPS. The Pearson product-moment correlation coefficient between mean SRP and mean SEPS was -0.081 for males and +0.276 for females. Though negative for males and positive for females as predicted, neither correlation was significantly different from zero, nor were they significantly different from each other.

For the purpose of further analysis, respondents were classified by sex role preference into traditional and modern categories (See Table 8).

Table 8

Mean Scores of Sex Role Preference Categories for Males and Females

SRP Clas	Sex	n	Min	Max	Mean	SD
Trad	Male	11	2.71	3.15	2.89	0.15
Trad	Female	16	2.43	3.14	2.78	0.23
Modern	Male	15	3.21	3.93	3.41	0.24
Modern	Female	11	3.29	4.00	3.50	0.21
Trad	Total	27	2.43	3.15	2.82	0.20
Modern	Total	26	3.21	4.00	3.45	0.42
Male	Total	26	2.71	3.93	3.19	0.33
Female	Total	27	2.43	4.00	3.07	0.42
Total		53	2.43	4.00	3.13	0.38

This permitted the use of an ANOVA which found a significant difference between the traditional females and the other three groups (traditional males, non-traditional females, and non-traditional males). In other words, three groups, modern females, modern males, and traditional males did not have significantly different SEPS (See Table 9). This fits with the concept discussed earlier that child care is a nontraditional occupation for males and that their SEPS would be more balanced and more similar to modern females.

Table 9

Differences in Sex Equipment Preference Scores for Sex Role Preference by Sex

	Sex	
SRP	Male	Female
Traditional	3.33	2.73*
Modern	3.20	3.02

*$p < .05$

A unsettling implication may be that the real need for male workers is in settings with traditional females, who appear to create the most unbalanced environment. However, do these traditional females resent the intrusion of the males into their realm? Would they view the modern, androgynous males as somehow defective or weak? Some researchers do not believe that there has been a convergence of men's

and women's roles. Coverman and Sheley (1986) hold that it is an illusionary belief that married males' participation in housework and child care has increased. Additionally, Gordon and Draper (1982) cited overwhelming evidence that males are discriminated against in the early childhood environment. No one has examined this discrimination as a function of sex role preference.

While traditional wives feel very positive about their modern husbands assistance in the household (Bowen & Orthner, 1983), this may not apply in the child caregiving arena. The difference may be that males have made a fulltime total commitment to daycare, a nontraditional occupation for them. This intrusion may be viewed negatively by traditional women, thus making male integration even more difficult where needed the most.

Predictors of Equipment Preference

A multiple regression analysis was used to test Hypothesis 4 in order to measure predictors of SEPS. This procedure could also be useful for generating hypotheses for future research in this uncharted area.

Several different models were considered for explaining the variation in SEPS as a function of sex, educational level, experience, and sex role preference score. Experience was used as a continuous variable and later as a discrete variable. The first order models explained 31.4% of the total variation using experience as a discrete variable. Among all models considered, sex was the only factor that was statistically significant (See Table 10). Second order models including the interactions between sex and the other three explanatory

variables showed no significant interactions even though about as much of the variance was explained (R-square = 30.4% with continuous experience, 35.8% with discrete experience).

Table 10

Multiple Regression of Sex Equipment Preference Scores on Sex, Education Level, Experience and SRP

Source of Variation	R-Square	Beta
Sex	.257*	.269
Education	.029	.026
Experience	.026	.037
SRP	.003	.005
Model (explained)	.314	
Error (unexplained)	.686	
Total	1.000	

*$p < .05$

The outcome of these analyses strongly supports the major contention that sex of the caregiver is important in daycare. As hypothesized the 27 males preferred more masculine supplies and equipment than did the 27 female participants. Although neither education nor experience significantly influenced the choices of the participants, Sex Role Preference did differentiate participants. Traditional women's scores were significantly different from the scores of modern women, traditional men, or modern men. Sex of subject was the only significant predictor of Sex Equipment Preference Score.

Additional Analyses

A MANOVA was also computed and confirmed what was revealed by univariate methods. The MANOVA of EPS and SRP by sex, experience, and educational level is statistically significant, but sex is the only significant factor. The cannonical discriminate variable and EPS have a 98% correlation, confirming that nearly all of the variation that is explained by sex is variation in EPS rather than SRP. The correlation between EPS and SRP accounts for nearly all of what little correlation there is between SRP and the cannonical discriminant variable. Thus, multivariate analysis confirms the univariate findings.

CHAPTER V

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

This study measured differences in daycare equipment preferences between men and women working in the field of early childhood education. Although, past studies had been unable to detect measurable differences in male and female classroom behaviors, it was believed that male caregivers do make a difference in the daycare setting. These former studies were limited to dichotomizing children's behaviors into male and female categories and then observing whether teachers rewarded or punished these behaviors. The current study argues that no sex differences were found, because no teacher can legitimately reward aggressive classroom behaviors. Rather, the unique contribution of male early childhood educators is in their different and varied programming which, in conjunction with female teachers, provides a much needed balance. The outcome from daycare programming may depend on the equipment available from which the children may choose.

The method of gathering data to test the notion of differential learning environments was to give male and female caregivers the opportunity to select equipment for an ideal learning environment. Fifty pictures of early childhood equipment and toys of varying costs and sex-types were placed in a daycare equipment booklet. On a 5-point scale from very feminine to very masculine, caregivers (27 men and 27 women) working in the field of early childhood education were asked to

choose 15 of the 50 equipment items for a Sex Equipment Preference Scores (SEPS). The dependent variable, SEPS, was analyzed using these independent variables: sex, education, experience, and sex-role preference of the respondent.

A one-way ANOVA showed that sex of respondent strongly influenced the choice of equipment. Men were more likely to choose from masculine categories; women more likely to choose from feminine categories. Two separate one-way ANOVAs showed that education and experience had no influence upon the SEPS. However, the Sex Role Preference Scores (SRPS) of the respondents was related to SEPS. Traditional women had significantly lower, more feminine, equipment preference scores than did either modern men, modern women, or traditional men.

If future studies show similar results, important implications for both teaching and researching early childhood education may be drawn. These will be discussed next.

Implications

This section will proceed from the following assumptions: (a) results can be duplicated, (b) results are applicable beyond the State of North Carolina, and (c) the hypothesized relationship does exist between this survey and actual classroom behaviors. If any of these conditions do not hold, external validity is seriously compromised and little if any practical implications exist.

Theoretical Implications

Implicitly, all male absence studies are based upon social learning theory. As an example of this a definitive review of the effects of divorce upon children (Heatherington, 1979) makes numerous

references to modeling. As with divorce, early childhood education is an area of male absence. The current study clearly supports the notion that additional male workers in child day care are both desirable and necessary, if only in order to assure a wider variety and range of materials and equipment. Caregivers cannot model what is not present.

Ultimately, the practical implications of this theoretical base rest upon the relationship between the present study and actual classroom behaviors. It is reasonable to assume that a strong relationship exists for two reasons. First, due to the tight budgets experienced by the majority of early childhood education programs, teachers use all available equipment and supplies. Therefore, whatever materials are available are used. Second, as discussed earlier, Watrin and Furfey (1978) wrote that free play is determined by the availability of equipment and materials. A wider range of equipment will provide teachers with additional opportunities to model a broad range of behaviors.

Research Implications

Instead of studying children's behaviors as belonging to either masculine or feminine realms, these behaviors should be viewed in terms of their situational appropriateness. Two important reasons exist for this suggestion. First, it is more realistic to view behaviors as either appropriate or inappropriate, therefore creating possibilities for teachers to expand their range of permissable activities. Certain behaviors will always be disallowed in specific situations and encouraged in others. For example, running is not tolerable in the classroom but is desirable and healthy on the playground. If

observation of a teacher shows that she/he discourages playground running, that specific teacher behavior can be addressed.

Second, categorizing behaviors by sex appropriateness leads to the concept of deviancy and potential teacher discouragement of certain behaviors based on the child's sex. If an educational goal is to encourage the widest base of learning, experience, and interest for children, sex based categories are detrimental since they are limiting and confining. Situational appropriateness is conducive to the broadest possible orientation. Additionally, situational appropriateness is compatible with the communication and guidance recomendations of Ginot (1965) and Gordon (1974), in that discussion centers around a specific action only.

The current study does not dichotomize children's behaviors into male and female realms. Rather, it suggests that the widest possible range of experiences be available to all children, regardless of their biological sex. The presentation of this wide range would be made possible by expanding the types of materials available through the balanced input of both male and female early childhood educators.

Previous research has held that a lack of male teachers detrimentally affects young boys' school performance (Robinson, 1981). These studies are all based upon correlations, no pure experimental conditions exist. Using the same tenuous correlations to draw conclusions, an unbalanced environment in which children's choices in equipment and materials are restricted based upon their biological sex is equally unhealthy for young girls. The current study recommends providing as balanced an environment as possible, to the benefit of

girls as well as boys.

Male caregivers may be needed in the classroom as much for the girl's development as for the boys. Clinical studies show a much higher incidence of depression or depressive symptoms in women (Eichenbaum & Orbach,1983). This has produced recent theories which imply that women are biologically prone to depression (Konner, 1982). However, sex based restrictions placed upon young girls offers an equally plausible explanation. Erikson (1963) holds that during the third stage of development, the Genital-Locomotor Stage, a child must independently move away from the parental figures. If the child is able to move into the world without parental guidance or restriction, the child develops a sense of initiative. If, on the other hand, the child is unable to move away independently without guidance or overrestriction, the child feels a sense of guilt. This guilt could become internalized as self directed anger which produces depression. Girls who are exposed only to daycare environments which discourage their independence and assertiveness may not meet the developmental requirements of the Genital-Locomotor stage.

A sexist society would be more likely to place restrictions upon the autonomous movements of a young girl than it would upon the autonomous movements of a young boy. These restrictions, not to be confused with realistic safety precautions, may produce the scenario described above which results in increased guilt and depression experienced by women. Erikson (1963) is clear in referring to parental figures as not just parents. Child care providers, who may be spending eight hours or more a day with the child, clearly are in this category.

This third stage postulated by Erikson falls within a time frame when children are in daycare. While correlations are at best shaky grounds from which to make causal statements, the findings and implications of this research are buttressed by the supporting theory. Young girls should be given the opportunity to function in an environment with a wide range of equipment to insure them the greatest possibility of assertive expression of their interests and drives.

Programming Implications

One major reason for insuring that all children are exposed to a balanced environment is to fulfill a primary purpose of early childhood education. The orientation necessary to promote positive educational attitudes in young children is a process philosophy rather than a product philosophy (Whitener & Kersey, 1980).

The heart of the differences in a product and a process approach concerns the purpose of early childhood education. Product oriented educators attempt to teach specific skills which the child is required to produce and be measured on. An example of this may be a limited curriculum designed only to teach letters to young children. Process programs emphasize the experiences that chilren have, do not evaluate specific results and attempt to expose the children to as broad an experience as possible (Whitener & Kersey, 1980).

Considering art, the product orientation uses mimeographed sheets similar to coloring books, asks children to draw specific pictures and evaluates the final product. The process approach to art experiences is to allow the children the opportunity to experiment with as wide a variety of materials as possible, treats art from a developmental

perpective, and does not demand the production of any specific images (Whitener & Kersey, 1980). Rather than asking, "What is that?", a teacher may comment only on the child's behaviors during the project, "You used all blue today" or "You took a long time painting today." The project is never evaluated as being either good or bad. The younger the child, the more appropriate the process orientation is considerd to be (NAEYC, 1986).

The process orientation requires that teachers be able to present the broadest, most balanced possible environment. To provide the child with a wide range of experiences, an environment emphasizing free choice from a wide range of materials must be available. The current study suggests that not all teachers are able to provide a balanced environment. It is possible that traditional females may be least able to do so.

If child care is unable to recruit male workers, then the Sex Role Preference Scores of female workers may become an important issue in the ability to provide young children with the widest possible range of experiences. The current study, based upon the responses of only the 16 females with traditional scores is clearly not adequate data to suggest preferential hiring practices favoring modern women over traditional women. It does however, generate hypotheses which should be considered and tested. For parents and administrators, SRPS of perspective employees and/or caregivers may be a very salient point. Modern parents may be disheartened by the restrictions that traditional caregivers may place upon their children. Similarly, if the SRPS of an administrator and employee are significantly different, the employee

may not be able to successfully carry out the programs goals.

Previous studies examining the difficulty that males have had working in day care have not considered the SRPS of the other workers. Impressionistic images based on experience in early childhood education suggest that more traditional female caregivers are usually less educated than modern female caregivers. While this trend is not surprising, it may suggest that modern daycare workers enter this low paying field as a choice, based on considerations other than financial reward, considerations such as a "helping" orientation. However, traditional female caregivers may enter the field based upon a lack of perceived choices. They may be resentful and less receptive to the educational and personal experiences that would alter their SRPS and enhance their working with males.

Recommendations for Further Research

A number of changes may be beneficial were this study to be duplicated. First, if a population of caregivers from different geographic regions could be studied, the external validity would be greatly enhanced. Possibly, a cooperative effort with colleagues in various regions could accomplish this. Second, using different equipment and materials would enable researchers to determine what effects are particular to specific items. Additionally, the order of items in the Daycare Equipment Preference Booklet should be randomly rotated to assure that no experimental effects are due to the order of items within the booklet.

The Education and Experience Response Sheet should be modified. The total number of college credits earned should be requested, not a

categorical status as was used. No respondent checked under some college, category number 3. Additionally, major subject should be requested and education majors could be separated from others for purpose of analysis.

Finally, another sex-role preference scale could be used in future studies. The scale used, Parents of Children in Day Care, is closely related to the profession being studied. Possibly, socialization to the profession confounded responses. A scale examining decision making or housework, for example, may prove more productive.

An important recommendation from this study is that the sex and the sex role preference of the teacher should be considered when studying classroom behaviors. Possibly because significant differences were not previously found, research had not always controlled for these important variables. As recently as 1985, Sadker and Sadker neither reported nor controlled for the sex of the teacher when measuring sexism in the classroom. Results may be seriously compromised without including this crucial variable.

An area of research that may prove fruitful is outdoor playground activities. Sex-based teacher differences may be more readily apparent in this setting. Generally, it would seem that active, gross motor play would be encouraged by all teachers. However, the types of play, the restrictions placed upon play and the differential expectations for young boys and young girls should be examined as a function of sex of the child, sex of the teacher, and teacher sex role preference.

This study suggests that the curriculum emphasis of teachers and caregivers be studied as a function of their biological sex and their

sex role preference. The specific situations and programming restrictions which teacher may be placing upon children's learning situations should be studied. As these become clearly delineated, programs to expand teacher horizons can be developed.

The most important implication of the present study may be the generation of a new series of research areas. Further study is indicated to examine other unique and important contributions of males in the early childhood setting. Experimental confirmation of male reports regarding differences in programming emphasis should be attempted. The sex-role preference of caregivers should be examined for its impact upon all aspects of the early childhood program. A reevaluation of teacher practices in terms of the situational appropriateness of the child's behaviors is indicated. If empirical data can support the notion of studying the situational appropriatness of children's behavior, this final recommendation could lead to a substantial reduction of sexism in the classroom.

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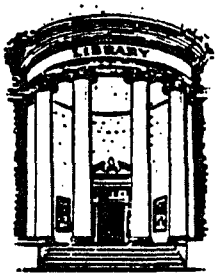
APPENDIX A

INITIAL LETTER



THE UNIVERSITY OF NORTH CAROLINA
AT GREENSBORO

School of Home Economics
Department of Child Development - Family Relations
(919) 379-5315; 5307

Ms. Willing Participant
1000 Spring Garden Street
Greensboro, NC 27403

Dear Ms. Participant:

We are doing a research project to survey the equipment and supply preferences of people who work with young children. You have been selected from a list of early childhood educators, and we would like to request your help for this project.

If you are willing to participate, we will send you a short booklet with photocopied pictures of equipment and supplies from which you would select the items which you would most prefer to use in a daycare center. When the project is complete we will send all interested participants a summary of our findings. We hope to be able to provide useful information about programming and purchasing for early childhood educators. This has been taking people no more than 20 minutes.

Your participation is completely voluntary. All participants and their responses remain anonymous. Please complete the enclosed, stamped card and return it to us by (one week from mailing). If you have any questions, please call me at (919)273-0909 (home) or (919)572-3691 (work). Thank you for your consideration.

Sincerely,

Thomas L. Gordon
Doctoral Candidate
Department of Child Development
and Family Relations

Rebecca M. Smith
Rebecca M. Smith, Ph.D.
Professor of Child Development and
Family Relations

TLG/as

(Enclosed Card)

Name_____

Street Address_____

City, State, Zip Code_____

Phone number_____

Yes, I am willing to participate_____

No, I am not willing to participate__

Yes, I do want a summary of the results_____

APPENDIX B

SURVEY MATERIALS

Ms. Willing Participant
1000 Spring Garden St.
Greensboro, N.C. 27403

Dear Ms. Participant:

Thank you for agreeing to participate in this research. Let me remind you that all participants remain anonymous. Participation is completely voluntary; you may stop at any time.

This research should provide important information about child caregivers' preferences in equipment and supplies. Please return the completed forms to us no later than (ten days from mailing). The directions are on the attached sheet. A self-addressed stamped envelope is enclosed.

Thank you very much for your help. I hope that we are able to provide information that will be useful to many early childhood programs. If you have any questions, feel free to call me at (919) 273-9898 (home) or (919) 572-3691 (work).

Sincerely,

Thomas Gordon
Doctoral Candidate
Department of Child Development
and Family Relations

Enclosures:

1. Daycare Equipment Preference Booklet
2. Daycare Equipment Preference Response Sheet
3. Education and Experience Data Sheet
4. Parents of Children in Daycare Scale
5. Return envelope

DIRECTIONS

Assume that you are the lead teacher in a daycare center. Your room has 18 four and five year old children, who will all be in one group. All necessary equipment and supplies are already in place. You could function effectively with the materials that you already have, but the center director tells you that additional items may be selected due to a gift from a community supporter. You are shown the 50 items in the Daycare Equipment Preference Booklet and told that you can pick any 15. Some are grouped together, but these groups still only count as one choice. Think of your choices as extras. You can do well without them, but they will make the year extra special. Don't be concerned with the cost, these materials are yours for free. This research is interested in knowing which items are your favorites.

1. Please examine the enclosed Daycare Equipment Preference Booklet of items photocopied from the 1983-84 Childcraft Catalog.

2. After you have looked through the entire booklet, please turn to the Daycare Equipment Response Sheet and put and "X" in the space provided for each of the 15 items that you would choose. Please do not choose more than 15.

People who have already participated in the pilot study report that it has been enjoyable, and that it only took about 20 minutes. It's a fantasy that many of us who work with children have had before.

3. After you have chosen the 15 items, please turn to The Education and Experience Data Sheet. (Remember all participants are anonymous).

4. Please complete the Parents of Children in Daycare Scale.

5. Both forms can be mailed back to us in the self-addressed, stamped envelope. The booklet is yours to keep. Please return all forms by (ten days from mailing). Thank you for your participation.

DAYCARE EQUIPMENT PREFERENCE BOOKLET

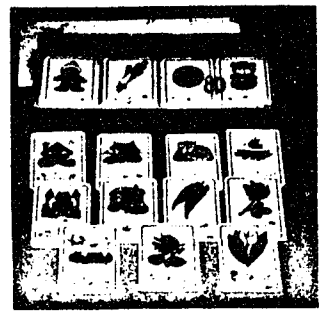
< Ebonella Doll

She looks and acts like a believable little child — encourages acting out parent and sibling roles. Children love to bottle-feed her, comb her hair, change her when she wets. Complete with outfit, comb, brush and bottle; 13" long.

Softina

So realistic she evokes care-giving responses from children. Soft foam body is immersible, drinks and wets. Comes outfitted with bath suit, towel and bottle. Tub not included; 18" high.

1

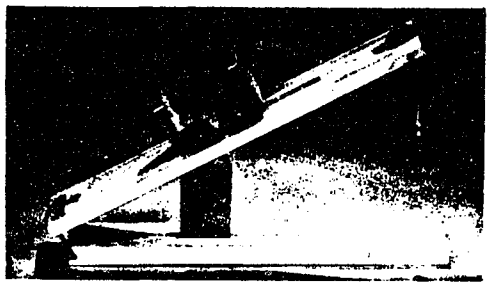


Concept Quartets Game

Children learn to think in terms of relevant common characteristics among familiar objects as they play this game (2-4 players). Thick, white unbreakable tiles with the permanent graphic brilliance produced only in Holland. The 32 tiles depict 8 "sets" of 4 objects each. Featured item is in color; others of the set are black line only. Memory, vocabulary and concept formation lead to success. Dovetailed hardwood case.

2

3

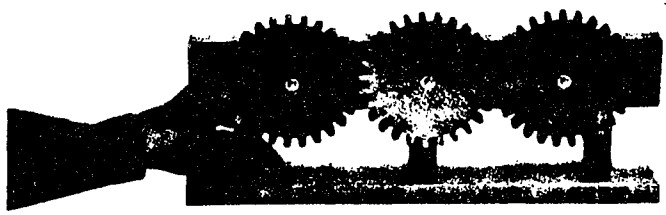


Inclined Plane

Simple experiments with this inclined plane acquaint children with principles of physics. The length of the plane (16") and the force exerted to move the load (1 lb. weight) remain constant. Children compare outcomes after introducing variables such as change in the incline or additional weights to the car (load). Hardwood.

Pulley

By testing the pulling force of various rope and pulley combinations, children are introduced to basic science concepts with this simple machine. Pulley consists of 1-lb. weight, 31" string, and light wood cylinder moving around 3 free-turning grooved wheels. Hardwood, 16" high.



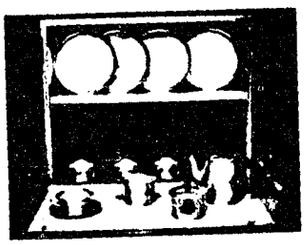
Gear Train

While turning the handle, the child sees the relationship among 3 activated interlocking gears. All-wood construction, 7" high, 16" long.

PAGE A

Childcraft Aluminum Cooking Set
Child-size cookware for real or pretend use. Includes 4-cup teapot, covered pot, saucepan, ladle and frypan. Stay-cool plastic handles, rounded edges, riveted construction.

4



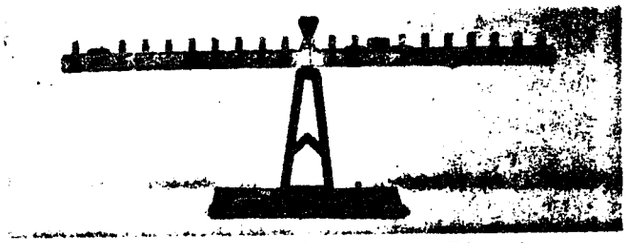
Childcraft Aluminum Luncheon Set
Child-size service for 4 consists of 17 pieces of heavy-duty spun (not stamped) aluminum including coffeepot, 4 cups and saucers, 4 plates, covered sugar bowl and creamer.

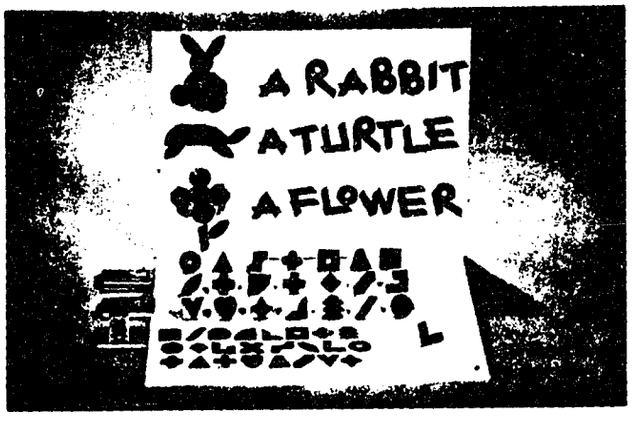
Dressy Bessy and Dapper Dan
Ready to help children learn important dressing skills. Zip the zipper, button one strap, snap the other and lace and tie the shoes; clothing attached. 14" high.

5

Math Balance Scale
When the slotted metal weights are placed on this durable plastic balance scale, children visually explore the relationships of number and number facts. 10½" high, 25" overall. 24 weights store in base compartments. By Asco.

6

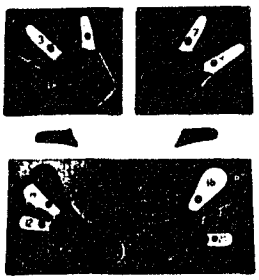




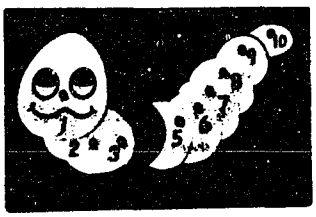
Stamp Pad Art Kit
Twenty-four die-cut designs on clear plastic cubes create an endless variety of designs. Imaginative, dimensioned to combine interesting repeat patterns or free form. Colors can be "mixed" by overprinting right on the paper. Includes 5 pads: Black, Blue, Red, Green, Purple.

7

B



Fingers 'n Toes Counting Puzzles
These delightful puzzles reinforce counting sequence and numeral equivalents. Inset board displays dot patterns to guide in the placementof numbered pieces; self-correcting. *Wood construction. Hand puzzle measures* 7¼" x 8"; foot puzzle: 7¾" x 16".



Counting Bug
A knobbed inset puzzle, the body pieces are numbered from 1 to 10. Inset board displays corresponding sets of dots to guide placement; self-correcting. Durable hardwood construction; 11½" x 17½".

8

Childcraft Big Barn
Designed to be a focal point of meaningful farm play, this barn's gambrel roof lifts to permit easy access to the hayloft. All openings are scaled to the Unit Block module so that blocks may define stalls, pens and cribs. Includes 3 sections of farm fence; solid maple walls; birch plywood floor and roof. Natural finish; 26" long, 18" wide, 16¼" *high. Animals not included*

9

10

Wagon
These popular wagons, with pivoting front steering axle and shaft, promote gross-motor development and judgment of spatial relationships when pulling forward or backing up. Rough wear can't hurt these sturdy haulers, heavy-gauge steel to take abuse. Congo lifetime bearings and super-balloon molded tires on double disc wheels.

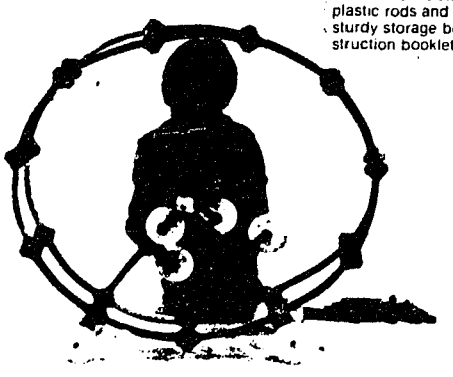
C

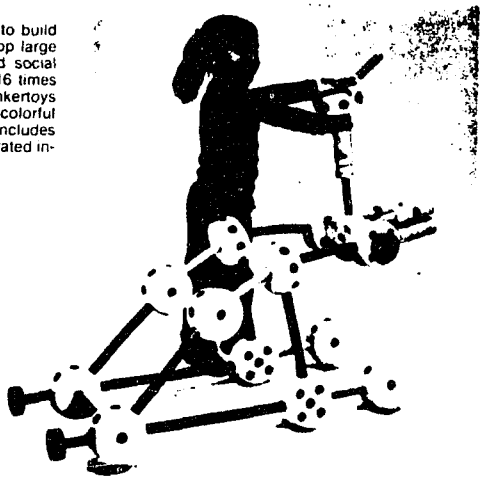
Male Nurturing Puzzles™
Developed for Childcraft by Women's Action Alliance, these puzzles depict men in nurturing roles. The multi-ethnic characters represented help to instill in children the belief that giving care to children is indeed the business of both sexes. Constructed of hardwood, each puzzle measures 9" X 12".

11

12

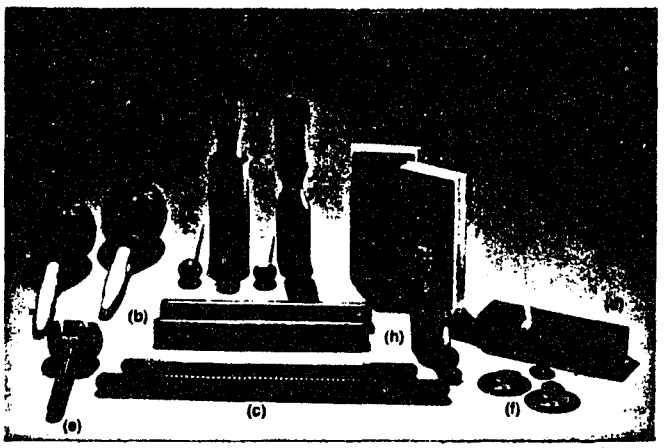
Giant Tinkertoy®
This set invites children to build big structures and develop large muscle coordination and social skills at the same time. 16 times larger than standard Tinkertoys this set consists of 53 colorful plastic rods and spools. Includes sturdy storage box, illustrated instruction booklet.

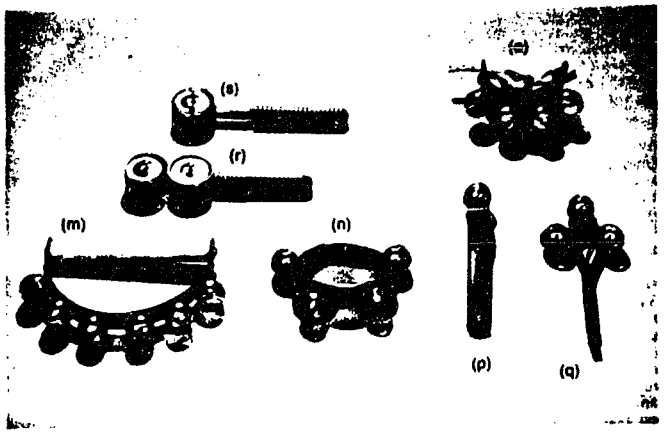




Sprocketeer
With this set of 134 plastic pieces, children build any number of inventive, exciting projects. Flexible rods, in 4 different lengths, bend to form curved constructions. Booklet suggests sample models. Durable plastic storage container. By Asco.

D





Jingle Bells (p, q)
Mounted nickel-plated bells differ in tone and volume. On plastic handles.

Jingle Clog (r)
Two sets of jingles on wooden handle. Gives tambourine effect.

Hohner Tambourine Stick (s)
Produces tambourine-like jingle; nickel-plated.

Heavy-Duty Punching Bag
Professional-like canvas punching bag gives active youngsters an opportunity to develop physical fitness. Supported by straps of heavy-duty webbing. Provides a desirable outlet for aggressive impulses; 24" high, 11¼" diameter

14

Maracas (a)
This pair of professional-like wood maracas will emit the authentic "tch-tch" sound.
2R 128

Hohner Claves (b)
Produce deep-toned clicks; 9" polished hardwood, 1" diameter.
2R 479

Rhythm Sticks (c)
Smooth 13" stick, ridged 14" stick. Produce different sounds when struck or rubbed.
2R 477

Hohner Wood Block (d)
Fine percussion instrument. Resonant wood.
2R 492

Castanets on Stick (e)
Makes tapping sounds when shaken. All wood construction; 6" handle.
2R 125

Hohner Finger Cymbals (f)
Tiny brass cymbals attach to thumb and forefinger with elastic straps.
2R 154 — Set of 4

Hohner Sand Blocks (g)
These blocks swish when rubbed together; 3" x 5".
2R 483

Hohner Soprano Sounder (h)
Many rhythms are produced by striking this slotted hardwood block.
2R 480

Hohner Crow Sounder (i)
Larger than the Soprano Sounder. Has a deeper hollow tone. Mahogany hardwood.
2R 147

2-Tone Sounder (j)
High note on one side, low note on the other; 8¾" lacquered hardwood.
2R 473

13

Hohner Handle Bells (m)
Six large bells mounted on leather and fastened to a 5½" wood handle.
2R 474

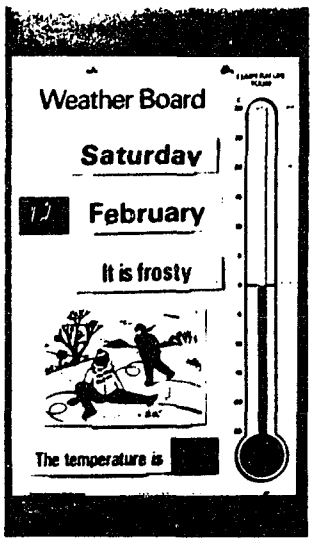
Wrist Bells (n)
Four large bells in 1" wide nylon webbing, slips on wrist for hand-clapping rhythm.
2R 484

Hohner Ankle Bells (o)
These bells ring when the child shakes a leg; 6 jingles on a leather strap.
2R 475

E

< Childcraft Doll Cradle
A cradle so solidly built that it can rock a doll or a child-parent in perfect safety. Smoothly-finished, clear-lacquered hardwood, 31" long, 12" wide.

15

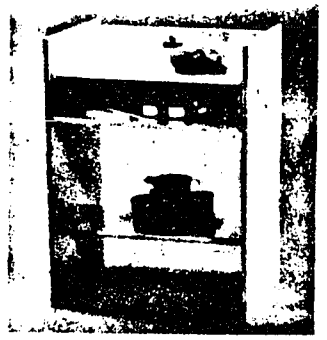


Primary Grade Weather Center
Turn your children into weather observers, reporters, analysts. Sturdy 15" x 23" weather-board includes slots for easily inserted silk-screened information "panels." Attach month, day-of-week and number panels to display date. Pictures show kinds of weather. Demonstration thermometer indicates temperature. A wonderful way to begin each day, provide basis for filling in individual student weather logs.

16

17

Childcraft Aluminum Baking Set
This new set features the same heavy duty spun construction as our cooking and luncheon sets. 7 pieces, including 6½ in. covered cake pan

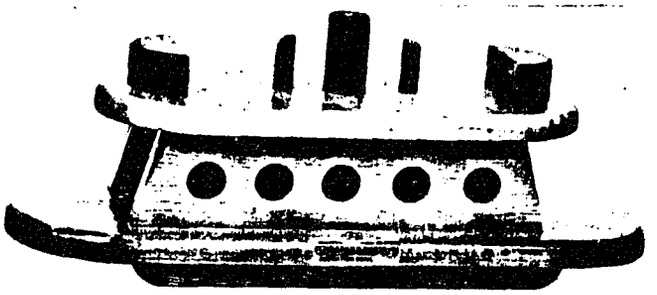


Childcraft Kitchen Master™ Work Station

F

Childcraft Dump Truck
Truck body raises to dumping position as tailgate swings open. Sturdy kiln-dried hardwood construction, 3" solid-rubber wheels and steel axles with nonremovable hubcaps. Clear lacquer finish, 17" long, 7½" wide, 8½" high.

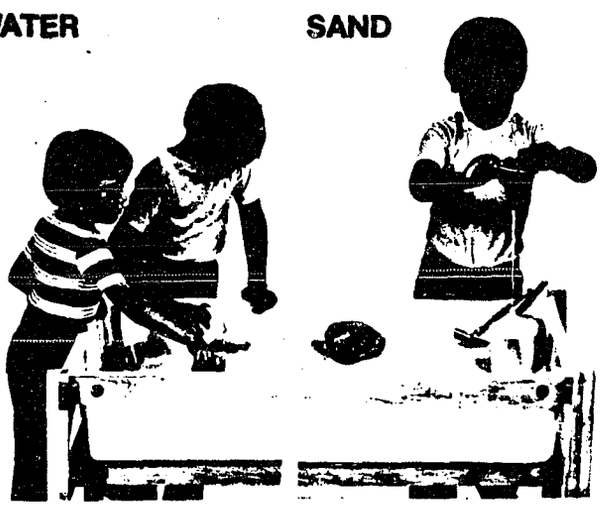
18



Childcraft Ferry Boat
Big enough to carry small cars and trucks. Broad loading deck, covered bridge house with large portholes on both sides. Fore and aft pilot houses, 3 smokestacks. Sturdy hardwood construction; 18" long, 7" wide, 6½" high.

Childcraft Sand and Water Play Table >
Since sand and water play is so important for a young child's concept development, Childcraft has engineered a triple-purpose table tough enough to withstand extensive classroom use. Picture illustrates both sand and water applications, and with the 15-ply, ¾" thick birchwood cover, you also gain another sturdy classroom table. Durable ABS plastic trough. Heavy-duty plastic spigot permits quick, easy water drainage. Bolted legs and frame of natural-finish hardwood; casters on two legs provide mobility.

Plastic Cups and Fish Molds
The fluted sides on these imaginative molds heighten the intrigue of sand play. Containers may be washed and used to mold jello in the cooking corner. Nonrusting, plastic composition.



19↑

20

Basic Set (from 3 years)
Contains 402 pieces. Standard bricks plus 12 wheels, 6 windows, 6 doors, 6 figures, 12 building plates, 6 trees, 12 fences, 18 bricks with mouth or eye.

G

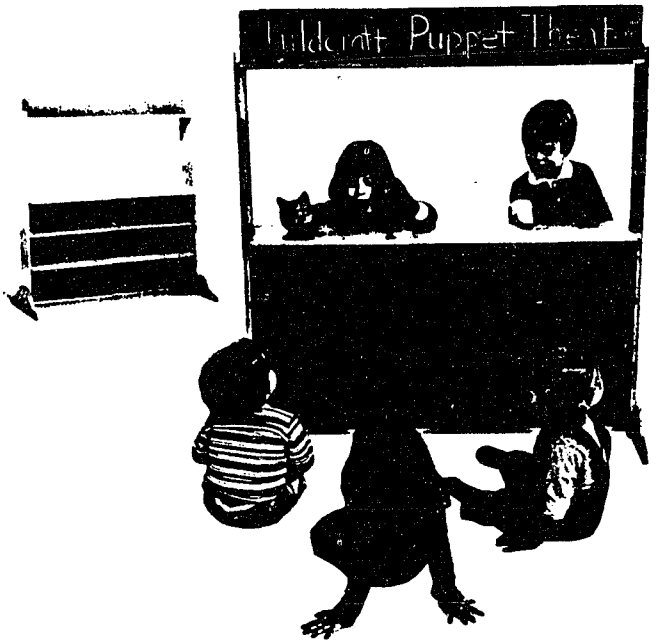
21

Rubber Kindergarten Balls
In durable rubber, these attractive balls invite throwing, catching and kicking activities

Dura-Bright Balls
Probably the best of its kind — smooth rubbery surface for easy grasp, yet firm and heavy enough to bounce well. AND EVEN IF IT'S PUNCTURED, IT GOES ON BOUNCING. Set of 3 in assorted bright colors, each 6" in diameter. By Asco

Wacky Ball & Bat
Soft foam rubber ball and bat are safe for indoor use as well as outdoor fun. Bat is 19" long

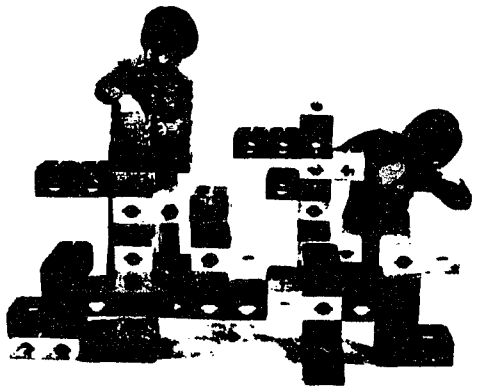
Lunar Balls
Motor coordination develops through tossing, squeezing, rolling and hugging these wonderfully tactile, nontoxic foam balls. Bright colors, gently bounces, squashy fun



22

Childcraft Play Store and Puppet Stage ^
This dual-purpose design converts from a puppet stage to a play store with a flick of the child's imagination. Three display shelves in rear. The overhead panel serves as a sign for the store's name, for Daily Specials, or as the proscenium for the Puppet Theatre; chalk lettering may be erased. Constructed of sturdy ¾" birch plywood; 51" high, 45" wide, 9" deep

23



Megabric
This set of 42 bricks includes two sizes: thirty of 9" X 4¼" X 3¼" and twelve of 4½" X 4½" X 3½". The locking devices included in the set allow horizontal as well as vertical constructions. Nylon-reinforced plastic. By Asco

I

Table Block Farm ^

Bring color and variety to table block play with this charming set of 4 workers, 20 farm animals, 10 sections of fence, and 5 bales of hay. Made of molded rubber, each unit is realistically colored and stands on its own feet or platform. Cow is 3¼" long, 1¼" high, other animals in proportion.

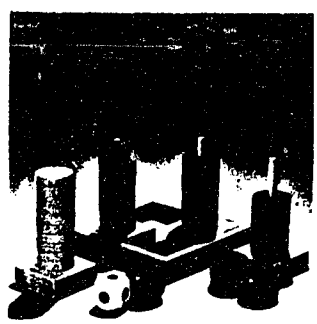
24

< **Childcraft Farm Fence**

Primarily designed for use with Childcraft Farm Animals, these 6 sections are scaled to the Unit Blocks. In an upright position, they can be used with the Zoo Fence. Natural-finish hardwood; 5½" long, 2¾" high.

2B 349

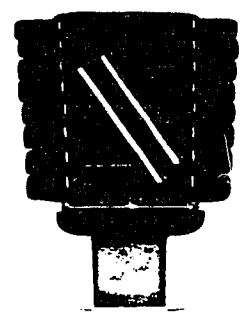
25



Stack & Learn Game ^

This intriguing manipulative game helps youngsters to sharpen skills in color discrimination, sorting, numeration, addition & subtraction. Up to 4 children take turns in rolling the number and color dice in a race to complete their stacks of brightly colored discs. Teacher's manual contains rules for 5 games of varied difficulty. Consists of 4 stacking bases and posts, 4 sets of 10 colored discs, large dice for color and number, all in a compact wood storage rack.

26



C Major Diatonic-8 Notes

Range is from low to middle C. The standard for early music training and sing-along. Two rubber-cored, yarn-wound mallets and teacher's notes.

J

Doll Clothes
This set of doll clothes consists of two piece overall set pajamas and terry robe. All pieces are machine washable

Doll Clothes
Constructed of washable fabrics, this set of doll clothes includes pajamas, knitted jumpsuit with matching cap and smock with matching tights.

Doll Clothes
Crafted of quality washable fabrics, this set of doll clothes includes playsuit, smocked dress and jacket with matching hat.

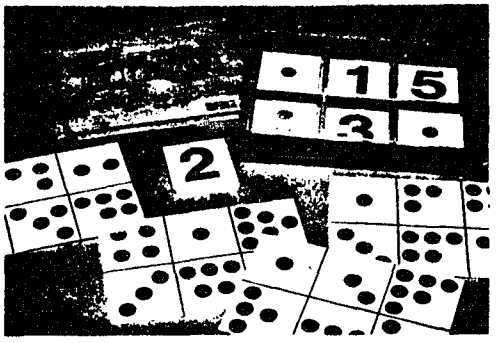
27

28

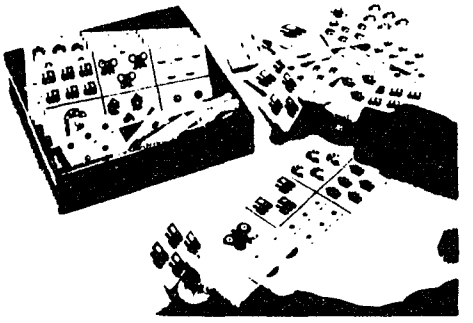
Play Phone
This child-powered telephone system encourages verbalization and socialization while adding a realistic dimension to dramatic play. Conversations are carried, with remarkable clarity, a distance of 20 feet between the two plastic units.

Telephone Booth
They will feel like grownups in a phone booth their own size. It is marked appropriately, and has a simulated pay phone with a "real" cord and receiver. Good for practice in oral communication. 19" x 19" x 50" tall.

K



Counting Bingo (Deluxe)
From Holland, another of our spectacular imports that last indefinitely and please every day. The contents of the (dovetailed hardwood) box have a single, simple purpose -- to provide a playful way for children to learn to count "objects" and to match number to numeral. Each of four players gets a "spots board." In turn, players draw tiles from a face-down stack. If number of spots matches a board section (regardless of pattern or color!), the space is covered. First full card wins. Boards and tiles are screened in top quality plastic material ⅛" thick.



Number Picture Lotto
This basic pre-reading matching game will never lose its educational value, or its beauty. As children match tiles to their gameboard, they practice counting, one-to-one correspondence. Consists of 6 boards, 8" x 3¾", 36 matching tiles, all polished hardwood. Box, also of highest quality hardwood, stores pieces easily for next year, and for years to come.

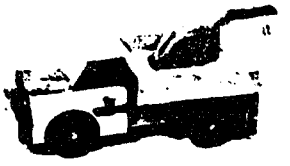
29

Baby Bottoms Doll >
This adorable doll, dressed in a day suit, has rooted hair, cloth body, vinyl arms and legs and moving eyes. She's made for cuddling. Cries "ma-ma", 20" long.

30

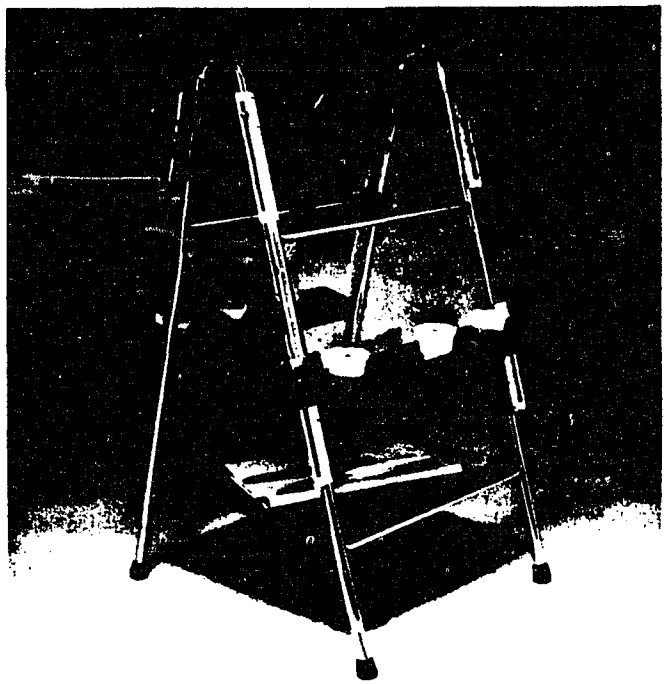
Raggedy Ann/Andy Dolls
The dolls with the red hair and shoebutton eyes that children have loved and cuddled for years. Removable clothing. 12" long.

31



Childcraft Wrecker
Hook at end of chain lowers to attach to axles of disabled cars, a turn of the crank hoists them. Kiln-dried hardwood contruction with clear-lacquer finish. 3" solid-rubber wheels mounted on steel axles with nonremovable hubcaps, 13" long, 8" wide, 7" high.

L

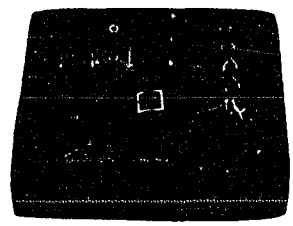


See-View Easel™

We've added a new and exciting dimension to our double easels. As with our other easels, paper can be attached to this easel for painting. However, the clear working surfaces in transparent plexiglass, can be used to paint directly on the boards with water soluble markers or crayons. Vinyl shapes adhere and remove easily to create collages. Pictures, numerals, letters, figures and shapes can be traced by mounting them on the rear side of the board.

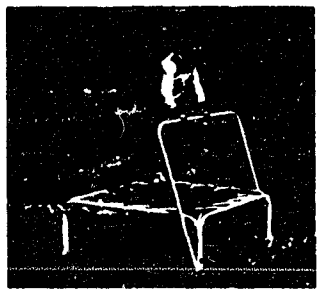
32

33



Dexterity Cushion

Perfect for encouraging individual concentration or for learning to share with a friend while developing fine-motor skills. Foam-filled unit has a buckle, a zipper, a row of snaps, fasteners, tying thongs, and a set of grommets for lacing. Lightweight and portable. Sturdy vinyl-coated canvas construction. 20" x 20" x 4"

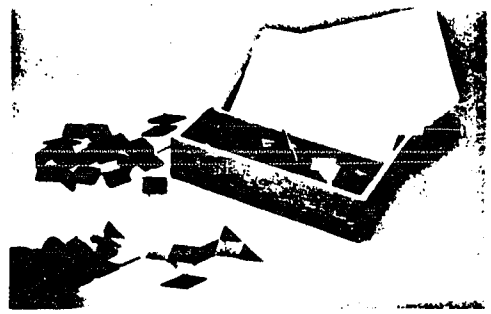


Handle Bouncer

Safety handle provides security for the beginner while helping to develop motor coordination. Durable coated nylon bed is fastened to frame with braid-covered tension cord. Frame is 1" O.D. 16-gauge tubing finished with baked enamel. Stands approximately 13" off the ground, 34" square jumping surface

35

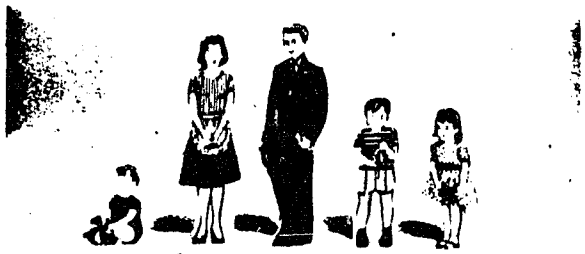
34



Inlay Mosaic

Size, color, precision craftsmanship and durability — the best mosaic system we have ever found! Children gain tactile experience, and create colorful pictures. 120 smooth hardwood tiles (in 3 shapes 4 colors) 12 durable plastic boards with recessed designs. Natural finish hardwood box

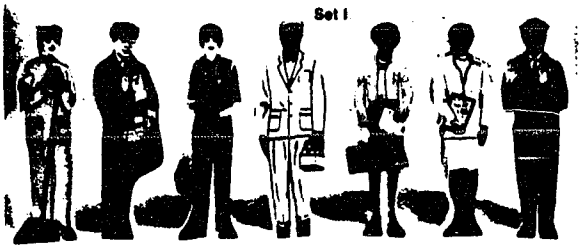
M



Childcraft Large People

Familiarizing children with family roles these two families of 5 are extra-large for ease of handling Cut from 1" plywood and screened on both sides Adult figures are 8" tall, child figures are proportional

Set I



Set II

Childcraft Large Block Play Workers

In block play activities, children can learn about the roles and functions of various occupations Large enough for social and dramatic play Our largest block play workers made to last indefinitely Seven workers in each set

38

Childcraft Stove

Features four simulated burners, large oven with window and 5 plastic on/off knobs Storage cabinet below for pots and pans Clear plywood construction with melamine top Warp-proof doors have magnetic catches, 17⅛" wide, 13½" deep, 28" high.

36

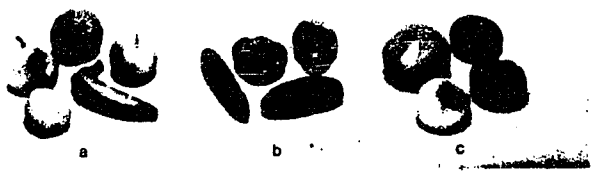
Rubber Fruits and Vegetables

Special Fruit/Vegetable array Made with the same super-realism and soft rubber construction as Food for Fantasy (this page) A natural for kitchen and store play

Food for Fantasy

Very realistic! For dramatic play — or to develop an early awareness of nutrition — these soft rubber fruits and vegetables are faithfully reproduced in size, color and shape.

37



N

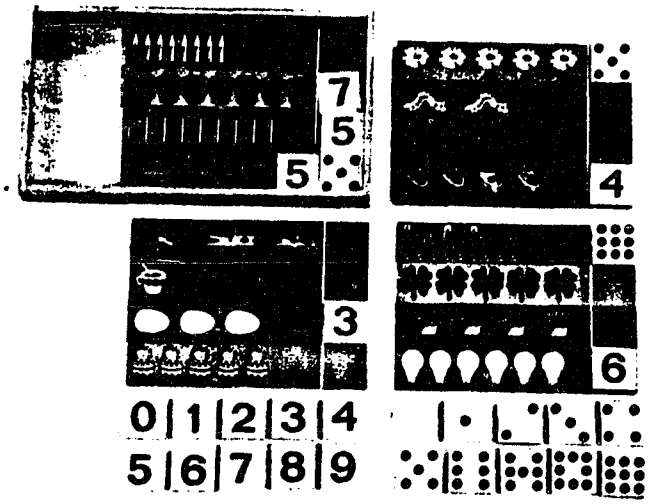
39

The Two Friends (3 ft. body puzzles)
Because the boy and girl are represented as 3' *photographs*, they seem very *real*. Divisions conform to body parts (20 pieces each). Ideal for developing body awareness and learning to name parts. By Fernand Nathan of France

Louie (body parts puzzle)
From the famous Kurt Naef in Switzerland, the most beautiful puzzle of its kind. In stained hardwood, Louie is 15½" tall. Separations conform to joints. Face (sad on the back) is one piece.

Prehistoric Animals
Always fascinating for young children, these life-like dinosaurs enable them to re-enact the battles and dramas of prehistory. In addition to their creative play value, sets stimulate interest in science and social studies. Realistically colored vinyl. Approximately 11" long.

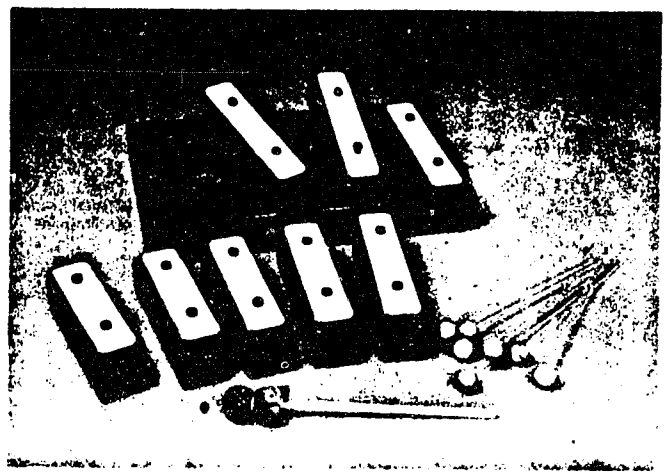
40



41

Montessori Number Match Kit
Children count the objects, recognize groupings, match number of dots on each square to objects pictured and select the corresponding numeral. Objects are colorful, easily identified. Four finely crafted 7" x 10½" wood boards, 32 blocks.

0

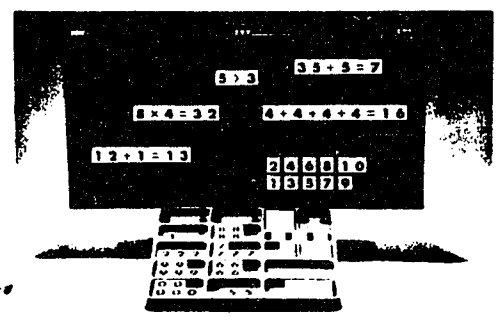


42

Resonator Bells

Made of the highest quality tempered steel, these bells maintain perfect tone stability. Chip-resistant finish, rounded corners for safety. Each bell is mounted on a hollow wood resonator box, separately tuned. Full diatonic scale (1 octave). Hard rubber mallet included for each (8).

43



Lego® Number/Symbol Blocks

Now children can develop mastery of basic arithmetic skills with an innovative new form of an old manipulative standard — . . . Lego Number and Operational Symbol Blocks. Set consists of 100 sturdy plastic number and operational symbol blocks, Lego wallboard, extensive Teacher's Guide. Encourages wide range of practice exercises in number naming, sequencing, games, addition, subtraction, multiplication and division facts, constructing number sentences using all 4 basic operations, and more. Tactile involvement with movable blocks adds important motivation to arithmetic drills and games.

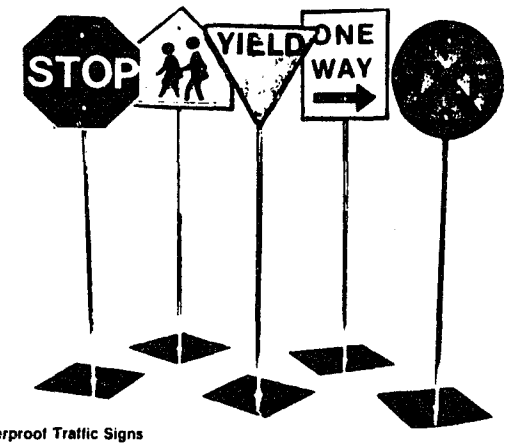
Doll's Highchair

Big enough for large dolls, this chair is constructed of durable maple. Overall height 26¼", 16" seat height.

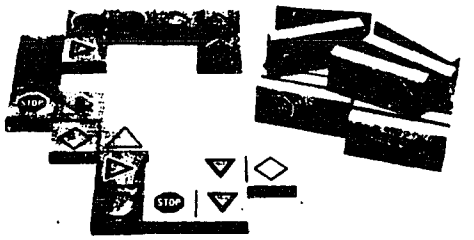
44

P

45



Weatherproof Traffic Signs
These big 3-foot signs are ideal for outdoor use, because the zinc-coated steel bases and posts do not rust or chip. Sign faces are in silk-screened hardboard, marine sealed. Great for developing safety awareness in the course of active and dramatic play. Set of 5. By Angeles



Safety Signs Dominoes (Jumbo)
Matching is worthwhile in itself, but in this case there is an additional payoff as children become familiar with size, shape and color of important safety signs. Set has 28 dominoes in hardwood, each 3¼" x 1 ⅝" x ⅜". Guide.

Jumbo Animal Dominoes
Big, hardwood dominoes (3¼" x 1 ⅝" x ⅜") depict farm animals and pets in colorful silhouettes. Ideal for matching, naming. Twenty-eight pieces

47

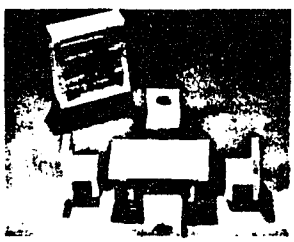
46

The Class Menagerie
A delightful variety in soft, flexible cloth. Perfect for expressive language activity. Each about 10" high. Beautifully made by adult handicapped

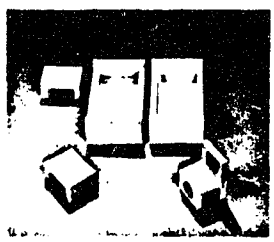
2D 478 — Wolf	2D 481 — Donkey
2D 477 — Mouse	2D 482 — Pig
2D 476 — Frog	2D 541 — Giraffe
2D 475 — Rabbit	2D 542 — Hippo
2D 479 — Shark	2D 543 — Dolphin
2D 480 — Elephant	2D 544 — Alligator

Puppet Stand
This all-wood stand accommodates 10 hand puppets for convenient, wrinkle-free storage and easy accessibility for children. 20" long, 6" wide, 10" high.

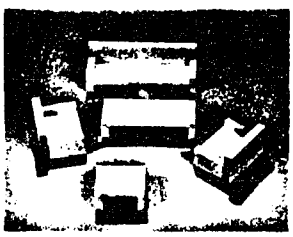
Q



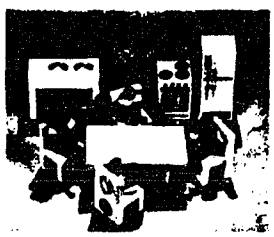
2D 484 Dining Room



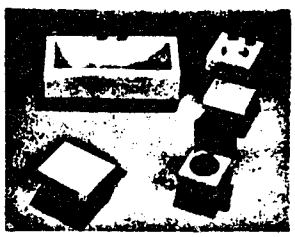
2D 485 — Bedroom



2D 486 Living Room



2D 487 — Kitchen



2D 488 Bathroom

2D 489 — Children's Room

49

Modular Hardwood Doll Furniture

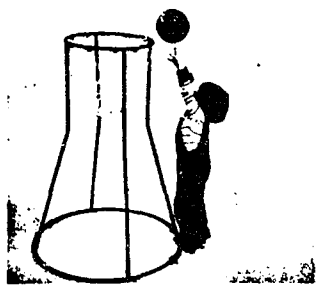
With strong, basic lines, our collection of contemporary, modular furniture fills a doll-house with flexible furnishings — a set for each room. Durable construction; natural finish. Sofa is 6¼" long, 2" high, 2⅜" deep; other pieces proportional.

Standard 2-Wheel Scooter

For children who have advanced beyond the need for the third wheel on our 2A 237 this traditional scooter is the choice. Materials and construction are otherwise the same. A fine combination of style and institutional durability.

48

50



Rimball™ Portable Hoop

A year-round "basketball" activity for young children. Indoors or out, children will enjoy building skill (toss, catch, bounce, hand-eye coordination) as they play Rimball. Unit is fully portable, made of welded steel with enamel and floor protectors. It stands secure on a base 3' in diameter, with 18" rim 4' from floor. Made for long hard service. Heavy-duty cord net included. Heavy sponge ball optional.

R

RESPONSE SHEET

Directions: 1. Please select only 15 items.
2. Place an "X" in the space provided.
3. The numbers of the items below correspond to the numbers of the pictures in the booklet.

ITEM		BOOKLET PAGE
1*	1. Dolls	A
3	2. Concepts Quartet	A
5	3. Science Equipment	A
1	4. Kitchen Ware	B
2	5. Skill Dolls	B
5	6. Math Balance Scale	B
2	7. Stamp Pad Art Kit	B
5	8. Puzzles	C
2	9. Big Barn	C
4	10. Wagon	C
3	11. Nurturing Puzzles	D
4	12. Large Blocks	D
2	13. Musical Instruments	E
5	14. Punching Bag	E
1	15. Doll Cradle	F
3	16. Weather Chart	F
1	17. Utensils	F
5	18. Vehicles	G
4	19. Sand Toys	G
4	20. Legos	G
5	21. Balls	H
3	22. Puppet Stage	H
4	23. Megabric	H
2	24. Farm	I
4	25. Stack & Learn Game	I
2	26. Diatonic 8-Note	I

1	27. Doll Clothes	J.
2	28. Telephone	J.
3	29. Games	K
1	30. Dolls	K
5	31. Wrecker	K
2	32. Easel	L
3	33. Dexterity Cushion	L
3	34. Inlay Mosaic	L
5	35. Handle Bouncer	L
1	36. Foods	M
2	37. Large People	M
1	38. Stove	M
3	39. Puzzles	N
5	40. Prehistoric Animals	N
4	41. Number Match Kit	N
2	42. Resonator Bells	O
4	43. Lego Number Blocks	O
1	44. Doll's Highchair	O
4	45. Traffic Signs	P
3	46. Puppets	P
3	47. Dominoes	P
5	48. 2-Wheel Scooter	Q
1	49. Doll Furniture	Q
5	50. Portable Hoop	Q

*Respondents did not have coding on this sheet.

EDUCATION AND EXPERIENCE DATA SHEET

Please supply us with the following information

1.Length of time that you have worked with children

_____ years _____ months

2. Highest year of school that you have completed.

_____ some high school
_____ high school graduate
_____ some college
_____ 2 year degree
_____ 4 year degree
_____ some graduate (number of credits)
_____ graduate degree (specify)

3. Estimate the number of hours of in-service training and workshops that you have participated in.

_____1-10 _____30-40
_____10-20 _____40-50
_____20-30 _____50 or more

4. Do you have the CDA certificate?

_____yes
_____no

5. Description of your present job (check one):

_____direct daily contact with children
_____supervisory
_____administrative
_____professor or instructor
_____other (please explain)

6. Your sex

_____male
_____female

7. Check here if you would like to have a summary of results mailed to you._____

8. Comments:

*Respondents did not have coding on this sheet.

PARENTS OF CHILDREN IN DAY CARE SCALE

Directions: Please place an "X" in the column that expresses your general belief.

	strongly agree	agree	disagree	strongly disagree
1. If a mother of young children works, it should only be while the family needs the money.	1*	2	3	4
2. A working mother can establish as warm and secure a relationship with her children as a mother who does not work.	4	3	2	1
3. A married woman's most important task is taking care of her husband and children.	1	2	3	4
4. A married man should be willing to have a smaller family, so that his wife can work if she wants to.	4	3	2	1
5. Pre-schoolers suffer if mother works.	1	2	3	4
6. There should be more daycare centers so more young mothers can work.	4	3	2	1
7. A wife should give up her job whenever it inconveniences her husband and children.	1	2	3	4
8. A married man's chief responsibility should be his job.	1	2	3	4
9. If the wife works, the husband should share equally in household chores.	4	3	2	1
10. If the wife has the same job as the husband she should not expect to get the same pay.	1	2	3	4
11. If being a wife and mother isn't satisfying enough, she should take a job.	4	3	2	1
12. If a child gets sick and the wife works, the husband should be just as willing as the wife to stay home from work and care for the child.	4	3	2	1
13. If the wife works, the husband should share equally in the responsibilites of child care.	4	3	2	1
14. A parent should get more satisfaction when a son gets ahead in his occupation than when a daughter gets ahead in hers.	1	2	3	4

*Respondents did not have coding on this sheet.

APPENDIX C

DAYCARE EQUIPMENT PREFERENCE CODING SHEET

DAYCARE EQUIPMENT PREFERENCE CODING SHEET

I. PREFERENCE CATEGORY NUMBER ONE: VERY FEMININE

Catalog Page Number	Item Description	Cost
033	Stove	$ 98.00
046	Doll Furniture	84.00
033 & 035	Utensils:Baking Set	
	Work Station	76.45
044	Doll Clothes	57.00
033	Kitchen Ware:Kitchen Utensils	
	Cook Set	
	Luncheon Set	65.95
042	Doll Cradle	49.95
035	Foods:Fruits & Vegetables	
	Food for Fantasy	49.60
042 & 042	Dolls: Baby Bottoms	
	Raggady Ann & Andy	43.75
042 & 043	Dolls: Ebonella	
	Softina	34.90
037	Doll's Highchair	25.95
	Total Price	$585.55
	Mean Price	58.55

II PREFERENCE CATEGORY NUMBER TWO: FEMININE

115	Easel	99.95
127	Diatonic 8-Note	89.95
070	Big Barn	74.95
126	Resonator Bells	72.50
125	Musical Instruments	54.15
073	Large People: Workers I & II	
	White & Black	60.00
039	Phones:Play Phone	
	Phone Booth	39.90
072	Farm: Block Farm	
	Farm Fence	39.45
043	Skill Dolls: Dressy Bessy	
	Dapper Dan	31.00
121	Stamp Pad Art Kit	23.95
	Total Price	$585.80
	Mean Price	58.58

III. PREFERENCE CATEGORY NUMBER THREE: NEUTRAL

Catalog Page Number	Item Description	Cost
099	Dexterity Cushion	89.95
047	Puppet Stage	89.95
111	Games: Counting Bingo	
	Picture Lotto	77.00
048	Puppets: Class Menagerie	
	Puppet Stand	67.95
094	Male Nurturing Puzzles	52.50
091	Puzzles: Two Friends	
	Louie	51.90
105	Inlay Mosaic	49.95
107	Dominoes: Safety Signs	
	Animal	44.00
169	Weather Chart	38.95
161	Concept Quartet	26.95
	Total Price	$589.10
	Mean Price	58.91

IV. PREFERENCE CATEGORY NUMBER FOUR: MASCULINE

080 & 081	Large Blocks: Sprocketeer	
	Tinkertoy	91.90
027	Traffic Signs	84.50
050	Sand Toys: Mobile Sandbox	
	Plastic Molds	75.90
077	Megabric	62.50
157	Number Match Kit	59.95
075	Legos	54.95
025	Wagon	48.50
155	Puzzles: Finger Counting	
	Bug	48.00
163	Lego Number Blocks	35.98
157	Stack and Learn	25.95
	Total Price	$588.31
	Mean Price	58.81

V. PREFERENCE CATEGORY NUMBER FIVE: VERY MASCULINE

Catalog Page Number	Item Description	Cost
021	Bouncer	$ 99.00
030	Portable Hoop and Ball	88.45
067	Vehicles: Dump Truck	
	Ferry Boat	76.90
029	Punching Bag	64.00
168	Science Equipment: Pulley	
	Plane	
	Gears	59.50
066	Wrecker	46.95
028 & 030	Balls: Dura Bright	
	Lunar	
	Kindergarten	
	Ball & Bat	43.20
167	Prehistoric Animals	42.95
025	2-Wheel Scooter	36.50
160	Math Balance Scale	21.95
	Total Price	$579.40
	Mean Price	57.94

APPENDIX D

TABLES OF FREQUENCIES OF CHOICE OF DAYCARE EQUIPMENT

Table D-1

Frequency of Choice of Daycare Equipment by Sex of Caregiver

Item Number	Item Name	Freq.	Male	Female
1	Dolls	21	9	12
2	Concepts Quartet	10	6	4
3	Science Equipment	22	14	8
4	Kitchen Ware	17	7	10
5	Skill Dolls	16	5	11
6	Math Balance Scale	17	10	7
7	Stamp Pad Art Kit	11	6	5
8	Puzzles	20	11	9
9	Big Barn	19	6	13
10	Wagon	18	14	4
11	Nurturing Puzzles	32	13	19
12	Large Blocks	22	13	9
13	Musical Instruments	35	15	20
14	Punching Bag	13	8	5
15	Doll Cradle	5	1	4
16	Weather Chart	16	5	11
17	Utensils	7	3	4
18	Vehicles	5	3	2
19	Sand Toys	35	22	13
20	Legos	21	13	8
21	Balls	19	8	11
22	Puppet Stage	26	12	14
23	Megabric	22	14	8
24	Farm	28	14	14
25	Stack & Learn Game	9	6	3
26	Diatonic 8-Note	3	0	3
27	Doll Clothes	7	2	5
28	Telephone	24	11	13
29	Games	17	7	10
30	Dolls	7	1	6
31	Wrecker	4	3	1
32	Easel	34	18	16
33	Dexterity Cushion	12	5	7
34	Inlay Mosaic	6	4	2
35	Handle Bouncer	12	9	3
36	Foods	16	7	9
37	Large People	22	6	16
38	Stove	13	6	7

39	Puzzles	11	7	4
40	Prehistoric Animals	12	8	4
41	Number Match Kit	24	15	9
42	Resonator Bells	12	5	7
43	Lego Number Blocks	9	4	5
44	Doll's Highchair	4	2	2
45	Traffic Signs	24	12	12
46	Puppets	23	12	11
47	Dominoes	10	4	6
48	2-Wheel Scooter	10	5	5
49	Doll Furniture	10	4	6
50	Portable Hoop	18	10	8

Table D-2

Frequency of Choice of Daycare Equipment for Sex Preference Category by Sex of Caregiver

Sex Pref. Category	Item Number	Item Name	Freq.	Male	Female
Very Feminine					
1	1	Dolls	21	9	12
1	4	Kitchen Ware	17	7	10
1	15	Doll Cradle	5	1	4
1	17	Utensils	7	3	4
1	27	Doll Clothes	7	2	5
1	30	Dolls	7	1	6
1	36	Foods	16	7	9
1	38	Stove	13	6	7
1	44	Doll's Highchair	4	2	2
1	49	Doll Furniture	10	4	6
Feminine					
2	5	Skill Dolls	16	5	11
2	7	Stamp Pad Art Kit	11	6	5
2	9	Big Barn	19	6	13
2	13	Musical Instruments	35	15	20
2	24	Farm	28	14	14
2	26	Diatonic 8-Note	3	0	3
2	28	Telephone	24	11	13
2	32	Easel	34	18	16
2	37	Large People	22	6	16
2	42	Resonator Bells	12	5	
Neutral					
3	2	Concepts Quartet	10	6	4
3	11	Nurturing Puzzles	32	13	19
3	16	Weather Chart	16	5	11
3	22	Puppet Stage	26	12	14
3	29	Games	17	7	11
3	33	Dexterity Cushion	12	5	7
3	34	Inlay Mosaic	6	4	2
3	39	Puzzles	11	7	4
3	46	Puppets	23	12	11
3	47	Dominoes	10	5	5

Masculine

4	8	Puzzles	20	11	9
4	10	Wagon	18	14	4
4	12	Large Blocks	22	13	9
4	19	Sand Toys	35	22	13
4	20	Legos	21	13	8
4	23	Megabric	22	14	8
4	25	Stack & Learn Game	9	6	3
4	41	Number Match Kit	24	15	9
4	43	Lego Number Blocks	9	4	5
4	45	Traffic Signs	24	12	12

Very Masculine

5	3	Science Equipment	22	14	8
5	6	Math Balance Scale	17	10	7
5	14	Punching Bag	13	8	5
5	18	Vehicles	5	3	2
5	21	Balls	19	8	11
5	31	Wrecker	4	3	1
5	35	Handle Bouncer	12	9	3
5	40	Prehistoric Animals	12	8	4
5	48	2-Wheel Scooter	10	5	5
5	50	Portable Hoop	18	10	8

Table D-3

Frequency of Choice of Daycare Equipment for Sex Preference Category by Sex and Educational Level of Caregiver

Sex Pref. Category	Item Number	Item Name	Educational Level					
			Low		Med		High	
			M	F	M	F	M	F
Very Feminine								
1	1	Dolls	3	5	4	4	2	3
1	4	Kitchen Ware	4	4	1	4	2	2
1	15	Doll Cradle	0	0	1	4	2	2
1	17	Utensils	1	0	0	3	2	1
1	27	Doll Clothes	1	2	0	3	2	1
1	30	Dolls	1	2	0	1	0	3
1	36	Foods	3	4	2	2	2	3
1	38	Stove	3	3	1	1	2	3
1	44	Doll's Highchair	1	1	1	1	0	0
1	49	Doll Furniture	1	2	1	2	2	2
Feminine								
2	5	Skill Dolls	1	3	2	4	2	4
2	7	Stamp Pad Art Kit	2	1	1	2	3	2
2	9	Big Barn	2	5	2	5	2	3
2	13	Musical Instruments	6	7	6	8	3	5
2	24	Farm	4	5	6	6	4	3
2	26	Diatonic 8-Note	0	1	0	0	0	2
2	28	Telephone	2	4	5	5	4	4
2	32	Easel	5	5	5	5	8	6
2	37	Large People	2	4	1	6	3	6
2	42	Resonator Bells	2	2	1	2	2	3
Neutral								
3	2	Concepts Quartet	1	1	2	2	3	1
3	11	Nurturing Puzzles	4	4	4	6	5	9
3	16	Weather Chart	0	4	3	4	5	3
3	22	Puppet Stage	4	6	3	3	5	5
3	29	Games	4	4	1	4	2	3
3	33	Dexterity Cushion	2	3	1	2	3	2
3	34	Inlay Mosaic	2	1	1	0	1	1
3	39	Puzzles	4	0	1	4	2	0
3	46	Puppets	5	6	3	4	4	1

3	47	Dominoes	2	1	2	3	1	1
Masculine								
4	8	Puzzles	4	2	3	3	4	4
4	10	Wagon	5	3	5	0	4	1
4	12	Large Blocks	5	2	3	5	5	2
4	19	Sand Toys	7	3	10	6	5	4
4	20	Legos	2	3	6	2	5	3
4	23	Megabric	3	3	3	2	6	3
4	25	Stack & Learn Game	3	1	1	1	2	1
4	41	Number Match Kit	3	2	7	6	5	1
4	43	Lego Number Blocks	3	0	0	3	1	2
4	45	Traffic Signs	4	3	5	3	3	6
Very Masculine								
5	3	Science Equipment	4	2	5	3	5	3
5	6	Math Balance Scale	3	3	4	2	3	2
5	14	Punching Bag	2	2	4	2	2	1
5	18	Vehicles	0	1	2	1	1	0
5	21	Balls	1	5	4	3	3	4
5	31	Wrecker	1	0	0	1	2	0
5	35	Handle Bouncer	4	2	3	0	2	1
5	40	Prehistoric Animals	3	1	4	3	1	0
5	48	2-Wheel Scooter	2	2	3	2	0	1
5	50	Portable Hoop	4	3	3	3	3	2

Table D-4

Frequency of Choice of Daycare Equipment for Sex Preference Category by Sex and Experience Level of Caregiver

Sex Pref. Category	Item Number	Item Name	Experience Level					
			Low		Med		High	
			M	F	M	F	M	F
Very Feminine								
1	1	Dolls	4	4	2	4	3	5
1	4	Kitchen Ware	4	3	2	3	1	4
1	15	Doll Cradle	1	3	1	3	1	0
1	17	Utensils	1	2	0	1	2	1
1	27	Doll Clothes	0	1	2	2	1	3
1	30	Dolls	0	3	1	1	0	2
1	36	Foods	4	3	2	4	1	2
1	38	Stove	2	3	2	2	2	2
1	44	Doll's Highchair	0	1	2	0	0	1
1	49	Doll Furniture	1	2	0	3	3	1
Feminine								
2	5	Skill Dolls	3	2	0	6	2	3
2	7	Stamp Pad Art Kit	1	2	3	3	2	0
2	9	Big Barn	1	7	3	6	2	1
2	13	Musical Instruments	4	9	7	7	4	4
2	24	Farm	3	4	7	5	4	5
2	26	Diatonic 8-Note	0	0	0	1	0	1
2	28	Telephone	3	4	3	6	5	3
2	32	Easel	3	4	6	6	9	6
2	37	Large People	3	5	0	7	2	3
2	42	Resonator Bells	2	3	1	1	2	3
Neutral								
3	2	Concepts Quartet	2	0	2	2	2	2
3	11	Nurturing Puzzles	3	3	3	6	7	10
3	16	Weather Chart	3	5	3	3	2	3
3	22	Puppet Stage	2	5	4	5	6	4
3	29	Games	2	3	3	5	2	3
3	33	Dexterity Cushion	3	3	0	2	3	2
3	34	Inlay Mosaic	2	0	2	0	0	2
3	39	Puzzles	2	1	2	1	3	2
3	46	Puppets	2	5	4	3	6	3

3	47	Dominoes	1	2	2	2	6	3
Masculine								
4	8	Puzzles	3	1	4	3	4	5
4	10	Wagon	6	2	4	1	4	1
4	12	Large Blocks	3	4	3	2	7	3
4	19	Sand Toys	9	2	7	6	6	5
4	20	Legos	3	3	6	2	4	3
4	23	Megabric	3	2	4	3	5	3
4	25	Stack & Learn Game	1	0	3	2	2	1
4	41	Number Match Kit	4	3	5	4	6	2
4	43	Lego Number Blocks	3	2	0	2	1	2
4	45	Traffic Signs	4	3	6	4	2	5
Very Masculine								
5	3	Science Equipment	3	3	6	2	5	3
5	6	Math Balance Scale	2	2	4	3	4	2
5	14	Punching Bag	2	2	4	3	4	2
5	18	Vehicles	0	1	2	1	1	0
5	21	Balls	2	3	3	4	3	5
5	31	Wrecker	1	0	1	1	1	0
5	35	Handle Bouncer	3	1	3	1	3	1
5	40	Prehistoric Animals	3	0	3	3	2	1
5	48	2-Wheel Scooter	3	2	1	2	1	1
5	50	Portable Hoop	3	3	4	2	3	3

Table D-5

Frequency of Choice of Daycare Equipment for Sex by Sex and Sex Role Preference Category of Caregiver

Sex Pref. Category	Item Number	Item Name	Sex Role Preference			
			Male		Female	
			Trad.	Mod.	Trad.	Mod.
Very Feminine						
1	1	Dolls	3	6	7	5
1	4	Kitchen Ware	4	3	5	5
1	15	Doll Cradle	1	0	3	1
1	17	Utensils	1	2	2	2
1	27	Doll Clothes	0	2	1	4
1	30	Dolls	1	0	1	4
1	36	Foods	4	3	6	3
1	38	Stove	4	2	2	5
1	44	Doll's Highchair	1	1	2	0
1	49	Doll Furniture	3	1	3	3
Feminine						
2	5	Skill Dolls	2	3	7	4
2	7	Stamp Pad Art Kit	2	4	3	2
2	9	Big Barn	4	2	9	4
2	13	Musical Instruments	6	9	12	8
2	24	Farm	7	7	6	8
2	26	Diatonic 8-Note	0	0	1	2
2	28	Telephone	6	5	5	8
2	32	Easel	9	9	9	7
2	37	Large People	3	3	9	7
2	42	Resonator Bells	2	3	4	3
Neutral						
3	2	Concepts Quartet	2	4	1	3
3	11	Nurturing Puzzles	7	6	11	8
3	16	Weather Chart	3	2	7	4
3	22	Puppet Stage	4	8	6	8
3	29	Games	2	5	5	6
3	33	Dexterity Cushion	3	2	4	3
3	34	Inlay Mosaic	1	3	2	0
3	39	Puzzles	4	3	3	1
3	46	Puppets	6	6	5	6

3	47	Dominoes	2	3	2	3
Masculine						
4	8	Puzzles	6	5	3	6
4	10	Wagon	7	7	1	3
4	12	Large Blocks	5	8	4	5
4	19	Sand Toys	9	13	8	5
4	20	Legos	6	7	3	5
4	23	Megabric	8	6	4	4
4	25	Stack & Learn Game	4	2	1	2
4	41	Number Match Kit	9	6	4	5
4	43	Lego Number Blocks	2	2	3	2
4	45	Traffic Signs	8	6	7	7
Very Masculine						
5	3	Science Equipment	6	9	3	5
5	6	Math Balance Scale	6	4	3	4
5	14	Punching Bag	4	4	3	4
5	18	Vehicles	1	2	0	2
5	21	Balls	5	3	6	5
5	31	Wrecker	0	3	0	1
5	35	Handle Bouncer	4	5	0	3
5	40	Prehistoric Animals	4	4	1	3
5	48	2-Wheel Scooter	3	2	2	3
5	50	Portable Hoop	5	5	3	5