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DIFFERENTIAL EFFECTS OF FATHER ABSENCE

ON SEX-ROLE IDENTITY AS A FUNCTION

OF SEX, AGE AT TIME OF DIVORCE,

AND STEP-PARENT AVAILABILITY

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ABSTRACT

Father absence has been linked to disruptions in sex-role development for both male and female children, though indications are that other factors such as the mother-child relationship may serve a role in mitigating these effects. Younger age at time of separation and the unavailability of substitute role models have also been associated with sex-role difficulties. Separate dimensions of sex-role development including orientation, preference, and behavior have been delineated and may be affected by father absence to varying degrees. This study hypothesized that younger age at time of parental divorce and the absence of a stepfather would be associated with greater disruptions in subsequent sex-role development for both sexes measured at pre-adolescence. It was also hypothesized that children from divorced homes would be more disrupted than controls from intact homes. Results indicated no significant differences within experimental groups or in comparison of experimental and control subjects. Current trends in divorcing families as well as the select nature of the group studied are discussed in light of these results.

DIFFERENTIAL EFFECTS OF FATHER ABSENCE ON SEX-ROLE
IDENTITY AS A FUNCTION OF SEX, AGE AT TIME
OF DIVORCE, AND STEP-PARENT AVAILABILITY

Most major developmental theories emphasize the importance of the father in the process of sex-role typing for both males and females (Bandura & Walters, 1963; Fenichel, 1954; Mussen & Rutherford, 1963). Since more than 13 million children now live in single-parent households, 90% of which are headed by the mother (U.S. Census, 1972), the effect of father absence on a child's development has become a significant issue.

Though there is evidence to suggest that father-absent boys are more likely to show disruptions in the masculine identification process than father-present boys, there is some question concerning the direct relationship between such father absence and inadequate sex-role functioning. Father-absent boys at various ages have been found to be more feminine (Santrock, 1970), less aggressive in play (Sears, Pintler, & Sears, 1946), less able to accept authority (Douván & Adelson, 1966), and to show disruptions on sex-role measures (Biller & Borstelmann, 1967). However

Biller and Bahm (1971) found that maternal encouragement of masculine behavior played a role in mitigating the effects of father absence on the masculinity of pre-adolescent boys. Likewise, McCord, McCord, and Thurber (1962) found that behavior problems with father-absent boys were significant only if the mother was deviant or rejecting. Moreover, it seems to make a difference which aspect (orientation, preference, or behavior) of sex-role development is examined. D'Andrade (1973), Barclay and Cusumano (1967), and Biller (1969) found father-absent males were not disrupted on role preference instruments but were lower on measures related to basic masculine orientation. However Altus (1958) found sex-role preference did differentiate father-absent from father-present college males.

Few studies have been conducted to examine the effect of father absence on daughters. Lynn and Sawrey (1959) found indications of greater dependency in girls with limited access to their fathers. However Santrock (1970) and Hoffman (1973) found no differences on femininity measures in father-absent girls and father-present controls. Hetherington (1972) hypothesized that the effects of father absence on girls may not appear until adolescence

when she found such girls were more dependent and more solicitous of male attention than controls or girls who lost a father through death. However she reported little apparent disturbance in sex-typed behaviors or preference for the female role in her adolescent father-absent females.

The age at which father absence occurs has generally been found to be a significant variable, with the first five years generally cited as crucial for sex-role development. Disruptions have been found to occur more frequently if there was earlier (pre-6 years) rather than later father absence for girls measured at adolescence (Hetherington, 1972), pre-adolescent boys (Hetherington, 1966), black males (D'Andrade, 1973), and college males (Leichty, 1960). Few research studies have examined the effect step-parent availability may have in offsetting sex-role disruptions caused by parental absence. Rubin (1974) suggested that one reason he found no difference in sex-role measures between father-absent and father-present boys was the high percentage of subjects living in homes with a step-father or parent surrogate. Related studies indicate that masculinity is associated with the amount of contact boys have with adult males (Biller, 1968; Steimel, 1960).

This study was designed to explore the effects of age at divorce and step-father availability on the sex-role development of both boys and girls at pre-adolescence and to compare such children as a group to father-present controls. It was hypothesized that younger age at time of parental divorce and the absence of a step-father would be associated with greater disruptions in sex-role development for both sexes and that this would hold for the separate dimensions of sex-role orientation (both sexes), preference (males), and behavior (males). Likewise, it was hypothesized that father-absent children would show more sex-role disruptions across measures than children from intact homes.

METHOD

Subjects

Experimental subjects were 48 white middle-class children from father-absent divorced families, 8-12 years old. They were assigned to 8 treatment groups, according to their sex, age at time of parental divorce (pre-6 years and post-7 years old) and the presence for at least one year of a step-father in the home. To allow for recency effects, only children whose parents had been divorced at least one year were included in the sample.

Subjects were recruited by appeal to parents at various community settings such as singles church groups, civic organizations, and Parents Without Partners. Children were screened using the Peabody Picture Vocabulary Test and were of at least average intelligence (IQ score > 90).

Control subjects were 24 children, 12 male and 12 female, with similar racial, intellectual, age, and economic characteristics, who were members of intact families.

Instruments

Sex-role orientation was measured using the IT Scale for Children (Brown, 1956). This instrument measures male-female identification by means of 36 picture cards depicting various objects, figures, and activities associated with masculine and feminine roles. Following a procedure used by Biller (1969) the IT figure used as a projective stimulus was made more sexually neutral in appearance by presenting only the face. Scores ranged from 84 (totally sex-appropriate) to 0 (no sex-appropriate score).

A game preference task was used to assess the sex-role preference dimension. Pictures of four masculine games (basketball, football, baseball, and archery) and four feminine games (hopscotch, jacks, dance, and jump rope)

with age and sex appropriate children engaging in the activities were presented to the child in forced-choice pairings with the question of "Which would you rather do?" Rosenberg and Sutton-Smith (1964) have reported these games to be highly sex-typed. The 16 comparisons yielded one point for each sex-appropriate choice.

A behavior rating scale for sex-role behavior, based on Biller's research (1969), was developed by the author and completed by each mother. Estimates on items of assertiveness, aggressiveness, competitiveness, independence, passivity, dependency, timidity, activity directed toward physical prowess and mastery of the environment were included. The behavioral scale for boys included 16 items, 9 indicative of high masculinity and 7 of low masculinity. The female scale included some different items, but with 9 scorings of high femininity and 7 of low femininity. Scorings ranged from "very frequently" to "never" on a Likert-type scale, with the higher score indicating more sex-appropriate behavior.

Because of different mean and standard deviation scores for males and females on these instruments as well as the use of separate behavior scales, direct comparisons across sexes were not appropriate.

Procedure

Parents of possible subjects were asked to volunteer their children for participation in a study seeking to evaluate possible effects of divorce on children, particularly whether the child's age and the availability of male role models were important variables in the child's adjustment. They were informed that the testing would involve a half hour and would take place in their homes.

The order of testing was the Peabody screening instrument, IT Scale for Children, and the game preference task. During the testing time each mother completed the behavior rating scale and a biographical questionnaire including information on the date of divorce, the child's birthdate, the presence of a step-father at any time in the home, and maternal work history. In addition, data on level of income, religious affiliation, and indices of the amount of time the child had contact with his biological father and/or other older males was gathered. Comparison group mothers received similar questionnaires concerning religious and economic status, maternal work history, and the child's contact with older males other than his father. All testing was done by the author to control for sex of experimenter effects.

RESULTS

The means and standard deviations of experimental and control groups are shown in Table 1 by sex-role orientation, preference, and behavior scores.

Insert Table 1 about here

These data were analyzed using separate 2 X 2 multiple analyses of variance for males and females with age of child at divorce and availability of a step-father as independent variables. Dependent measures for the MANOVA were sex-role orientation, preference, and behavior scores. Hypotheses concerning individual dependent variables were tested from separate ANOVA results. The .05 level of significance was used for all analyses performed in this investigation.

No significant main effects or Age X Step-parent interactions were found in either sex using the MANOVA design, indicating that all experimental groups were comparable on sex-role development measures. Summaries of the MANOVA results are shown in Table 2 (Males) and Table 3 (Females).

In separate analyses of variance, no significant

differences among experimental groups were found for main effects or interactions on the separate sex-role measures, and this held for both males and females. Results of these analyses are also summarized in Tables 2 and 3.

Insert Tables 2 and 3 about here

Following these analyses, a random sampling of male and female experimental subjects was compared to control subjects using a t-test for differences between two independent means on the three separate dependent measures. Differences between male groups were not significant for sex-role orientation, preference, or behavior (t = .0594, .8223, .3603, respectively, $p > .05$). Comparable scores for female subjects indicated non-significant differences between experimental and control groups (t = .3317, .3434, .1873, $p > .05$).

Mean IQ scores were 116 for experimental males, 111 for experimental females, and 111 and 110 for male and female controls, respectively. Work history data indicated mothers had worked an average of 3 1/4 years and 5 1/2 years for male and female father-absent subjects but

only 2 years and 3 1/3 years for male and female controls. Male experimental subjects spent a mean of 10.64 hours per week with males 16 years or older (not father or step-father), compared with 11.83 hours for experimental females, 8.62 hours for male controls, and 17.54 hours for female controls.

DISCUSSION

The results indicate that no significant differences on sex-role measures were found in father-absent girls or boys as a result of either younger age at time of separation or the availability of a step-father. Further, children from divorced homes did not differ significantly on sex-role measures from children from intact homes.

These findings support the contention that children of divorce cannot be viewed as a homogeneous group. While previous research has sometimes associated sex-role disruptions with father absence due to divorce, the sample populations have often included lower socioeconomic groups, clinic samples, or younger children than in the present study. It could be argued that the group tapped in this research represented children of affluent and educated parents, most of whom were then participating in a voluntary organization oriented toward aiding divorce adjustment. Moreover they were volunteers

and therefore more likely to be comfortable with their divorced or remarried status.

The older age of this sample in comparison to some previous studies may have affected results in favor of less sex-role disruptions, in that extrafamilial influences such as media and peer relationships become stronger during pre-adolescence and may mitigate the effects of an absent father model. Likewise, the relatively high intellectual scores may indicate a better capacity to pick up environmental cues concerning sex-appropriate activities or behaviors.

Another implication of these data is that divorcing women may assume both stereotyped masculine (work, home and auto maintenance, financial duties) and feminine (housekeeping, child management) behaviors, so that they may serve as an appropriate model for both male and female children. To the extent that they are comfortable in these varied roles, they may encourage their children of both sexes toward a more androgynous level of functioning (Bem, 1974). It is also possible that changing sex-role mores at this time in our culture may be encouraging all children to adopt more androgynous modes of functioning. These hypotheses should be explored in future research

studies on children's sex-role development.

In addition, further research needs to be done to determine the relative effect of maternal adjustment, child's age at testing, availability of substitute role models, and intellectual level on a child's learning of appropriate sex roles. More sophisticated measures, perhaps non-paper and pencil tasks, may need to be found to tap these dimensions in older children.

Finally, the quality of the parent-child interaction continues to be an important, but difficult to measure, variable. It is possible that one loving and stable parent may be more effective as a role model for both boys and girls than a non-divorced mother and father with poor parenting skills. This study did not measure either the absolute or quality time that experimental and control subjects spent with their natural fathers and this would be an important variable to either control for or match in future research. It is conceivable for example that children from intact homes could experience paternal absence due to their father's out-of-town work at least as frequently as children from divorced families who see their non-custodial parent several times a week due to close proximity and involvement. Indeed several children

in this particular sample had continued close contact with their non-custodial fathers, one even seeing this parent on a daily basis. It is also possible that less absolute but more quality time could occur in divorced families, where children, when they did see their father, were given more individual attention than would be possible in a two-parent situation. This quality time could contribute to substantial modeling effects even though the absolute time spent in interaction was lowered.

While certain children may experience disruptions in sex-role development as a result of father absence, this should not be taken as a stereotyped assumption about all children from divorced homes in America today. It is increasingly evident that many children from divorced families continue to have sustained contact with their own natural fathers as well as experiences with substitute role models such as media figures, male teachers and relatives, and step-fathers. These contacts may do much to mitigate the effect of father absence on the sex-role development of both male and female children.

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TABLE 1

Means & Standard Deviations of Scores by Group

<u>Scale</u>	Pre-6		<u>Males</u> Post-7		Ctl.	Pre-6		<u>Females</u> Post-7		Ctl.
	step	no	step	no		step	no	step	no	
<u>Orient.</u>										
M	69.33	63.33	66.50	73.33	73.00	18.16	29.00	38.66	22.50	25.75
SD	34.00	23.00	12.09	10.72	13.65	26.29	31.30	22.69	33.71	20.17
<u>Pref.</u>										
M	14.66	15.00	16.00	14.00	15.42	9.33	9.66	6.66	9.83	7.08
SD	2.06	1.55	0.00	1.89	1.38	5.54	7.28	6.71	4.02	5.24
<u>Beh.</u>										
M	46.83	44.66	42.66	45.83	42.03	33.33	33.00	32.33	30.83	33.58
SD	3.54	2.42	5.95	4.87	9.80	6.50	3.03	2.80	9.86	5.94

TABLE 2

Results of Multivariate Analysis of Variance - Males

Source	Multivariate <u>F</u>	Univariate <u>F</u>		
		Orient.	Pref.	Beh.
Age (A)	.2832	.0021	1.6233	.0772
Step (B)	.6030	.1583	.0649	.6952
A X B	2.5644	.5076	3.1818	2.1974

TABLE 3

Results of Multivariate Analysis of Variance - Females

Source	Multivariate <u>F</u>	Univariate <u>F</u>		
		Orient.	Pref.	Beh.
Age (A)	.2585	.0513	.5070	.1286
Step (B)	.2853	.3538	.2586	.3839
A X B	.4271	1.3162	.3322	.0521

APPENDIX A

PROSPECTUS

INTRODUCTION

Divorce has in recent years assumed the proportions of a national epidemic. According to the latest available United States Census Bureau figures, the divorce rate in America has now reached 3.7 per 1,000 total population, or a yearly total of 768,000 divorces as of 1971. This represents a steady climb since the turn of the century, when in 1890 the rate was a mere 0.5. During 1971, 2,196,000 marriages were reported, yielding a ratio of divorces to marriages of about 1/2.86 (Bureau of the Census, 1972). Thus it can be predicted that at least 1 in 3 marriages in this country will eventually end in divorce. It should also be noted that since the figures for the 1971 divorces represent the combined totals for failed marriages over a wide range of previous years, any one of which had fewer total marriages than 1971, the current possibility of a divorce probably exceeds even this 1 in 3 figure (Gardner, 1974).

Census Bureau data (1972) also provide some information concerning length of marriages and the number of children involved in the divorce phenomenon. In 1969 the median duration of a marriage was 6.9 years and an average of 1.31 children were involved per divorce decree. This means that over 1 million children each year are subjected to and

affected by the divorce process. Since it is commonly acknowledged that divorce entails a serious disruption and change in family patterns and that children are significantly affected by their relationships with their parents (Despert, 1953; Gardner, 1974; Johnson & Medinnus, 1965), it would seem natural that a widespread phenomenon such as divorce would have noticeable effects on these children, both in their individual personality patterns and in their interpersonal relationships with their parents and significant others. The purpose of the present study is to investigate the effects of father absence due to divorce on the sexual role development of latency-age males and females and to assess whether the age of the child at the time of the divorce and the availability of a step-parent are significant variables affecting sex-role orientation, preference, and adoption.

The process of divorce. The divorce process has been examined closely in recent years, mainly by psychologists and marriage counselors working with divorcing persons in their attempts to adjust to the new life situations with which they are confronted. Divorce necessitates various types of separations and can be viewed from several different levels (Bohannon, 1968). There is the legal divorce, involving lawyers and the placement of blame or guilt on one party,

the exception being the new legislation in some states permitting no-fault divorce (Bernard, 1968; Kessler, 1975). There is the emotional divorce, by which two people who have come to depend on each other's support and love choose to terminate this intimate relationship. Financial divorce entails a realignment of finances as well as alimony, child support payments, and community property settlements. A fourth aspect is the co-parental divorce in which the children must be "divided up" by means of child custody decisions and visitation rights. The community divorce consists of the person finding new ways to relate to dating partners, friends, and relatives. Finally, the most difficult divorce can be the psychic one, in which each person undergoes a series of psychological changes involving many emotional feeling states in order to achieve autonomy and independence from the previous partner. All of these levels of divorce may occur simultaneously or over an extended period of time. Divorce therefore is more accurately seen as a process than as a single event in a person's life (Bohannon, 1968).

Clinical and case study research has indicated that children involved in a divorce undergo a period of adjustment similar to that seen in adults. Landis (1960) has outlined certain potentially traumatic situations with which these children must deal. First, they must adjust to the basic

fact of the divorce. There is also a strong possibility that at some time one or both parents will use the child as a weapon against the other, with resulting psychological damage to the child. A child of divorce must redefine his relationship with each parent and may also need to make readjustments with his peer group concerning his new status. It may be upsetting to the child to recognize the implications of his parents' failure in marriage in terms of his own future ability and desire for commitment. In addition, he may eventually have to adjust to a step-parent if either parent remarries.

Despert (1953), Gardner (1974), Kilman (1968), and others have written about some of the more common reactions seen in children of divorcing parents. Often the child becomes overly hostile to the parent who is leaving and this can generalize to an over-all negative attitude toward all significant others. Sometimes the child believes he is responsible for his parents' separation and feels guilty about a situation that he is in reality powerless to change. Certainly, most children are fearful and anxious during this process which disrupts the secure family environment on which they have learned to depend for their nurturant, support, and safety needs.

Sometimes there are other, more disturbing reactions

(Gardner, 1974; McDermott, 1970). Children may develop psychosomatic illnesses, begin aggressively acting out in school, or blame the remaining parent in abusive and hateful statements. His school grades may drop, he may become overly-dependent on the remaining parent, or he may idealize the absent parent to an unrealistic degree. Occasionally he will flatly deny the reality of the situation and suppress the anger and hurt he is experiencing, putting on a front of detachment and unconcern. With support and understanding from the remaining parent, it is possible for children to readjust after a divorce by forming new alliances with peers and substitute role models as well as developing new resources within themselves for dealing with their varied feelings concerning the break-up. Divorce may even "bring relief from tension and the beginning of emotional recovery" (Landis, 1960) in circumstances where extreme hostility and conflict have been present in the home. The ability to readjust in a positive way seems to be dependent to a large degree on such factors as the age and maturity of the child, his previous relationship to both parents, the remaining parent's ability to deal honestly and directly with the child's feelings, and other supports available to the child in his environment (Landis, 1960).

Research on divorce and children. In studies directly concerned with the divorce phenomenon, it has often been difficult to separate the effects of prolonged marital turmoil prior to the divorce and the effects of the separation itself. However, some trends do emerge in reviewing relevant empirical studies of children of divorce as well as research in the related field of parental deprivation.

Much research has been done to assess if psychiatric patients present higher incidences of parental death or divorce in an attempt to establish a causal link between these traumatic events and subsequent mental disturbance. Barry (1949) found that 7% of 2,000 neurotic and psychotic patients studied had lost a parent by death before 8 years of age, slightly higher than in the normal population. Denneby (1966) reported that in 3 subgroups of patients (schizophrenics, depressives, and alcohol and drug addicts), the incidence of childhood bereavement was approximately the same, regardless of diagnosis. However, in a similar study Bratfos (1967) found that although the incidence of parental deprivation was not higher for psychoses or neuroses than in the general population, it was significantly increased for the groups designated as alcohol/drug abusers and psychopaths. These differences moreover were not the

result of parental death which was equally frequent across groups, but of the significantly higher percentage of divorce or broken homes in the psychopathic and abuse groups. Likewise Ekblad (1948) in his study of naval conscripts in Sweden found that illegitimacy or divorce but not parental death was a significant factor in differentiating those with severe adjustment problems in the services. Oltman, McGarry, and Friedman (1952) reported that over 50% of neurotic and psychopathic patients had lost one or both parents before 19 years of age, with the percentage for the psychotic patients the same as for the mentally healthy group (30%). Therefore the research tends to support the idea that parental divorce may have a detrimental effect on subsequent behavior and is more often seen in persons with conduct disorders than in psychotic patients.

Other researchers have compared suicide incidence and delinquency to childhood parental loss or separation. Greer (1964) found that the incidence of parental loss before 15 years of age was significantly higher in suicidal than in non-suicidal neurotics and that the greatest percentage of suicidal neurotic patients suffered loss in the first 4 years of life. However, Crook and Raskin (1975) warned that such reported associations of parental loss with attempted suicide may be an artifact of the primary

association between parental loss and severe depression. They found that suicide attempters did not differ from depressed nonsuicidal patients or controls on incidence of parental loss through death but that they had significant differences on loss resulting from factors associated with marital discord and pathologic patterns of family interaction, such as separation, desertion, or divorce. They concluded that a childhood characterized by parental discord and intentional separation of the parent from the child is positively associated with attempted suicide in adult life, while loss through natural means appears unrelated.

Reporting on delinquency, Jonsson (1967) found that although only 7% of boys confined to a reformatory in his sample had lost one or both parents by death, as many as 57% lacked one or both parents due to illegitimacy or divorce. Normal controls were 5% and 18% respectively. In a report by Banister and Ravden (1944), children from broken homes formed 81% of delinquent children, 42% of aggressive children, but only 22% of nervous children from a sample school district. Glueck and Glueck's extensive study of juvenile delinquency (1950) revealed a relationship between such anti-social behavior and divorce in the family, although this was subsequently challenged by Monahan (1957b)

who found no evidence of such a direct causal link, though a high proportion of delinquent children in his study did come from some type of broken home. He contended that the quality of the family interaction and the moral attitudes taught in the home were at least as important as its intactness. These studies support the psychiatric findings of the prevalence of parental separation or family disruption in the psychopathic, or conduct disorder, personality.

Because the divorce rate is highest during the first years of marriage (Plateris, 1967), the children affected tend to be younger and therefore more vulnerable due to their limited coping skills. Bowlby's (1951) extensive review of the literature in the area of parental deprivation indicates that such separation at an early age is particularly conducive to the development of psychopathology. In their follow-up study of children with tuberculosis separated from their mothers before the fourth year, Bowlby, Ainsworth, Boston, and Rosenbluth (1956) found that the TB patients were significantly less well-adjusted and were inclined either toward withdrawal and apathy or toward roughness with temper outbursts. Few, however, appeared delinquent and they reportedly made friends easily. Goldfarb (1945), reporting on institutionalized children, found a tendency

to develop psychopathic or affectionless characters as a result of early maternal deprivation. This was also noted by Freud and Burlingham (1943) in their study of fatherless children in the wartime Hampstead Nurseries. In addition, these children appeared to develop intense, persistent attachments to a fantasized, idealized father which were judged as compensatory efforts to create in fantasy what they were denied in reality. Koppitz (1957) found that children separated from their mother before 6 years showed significantly lower affection toward both parents and siblings than controls and had a stronger feeling of being unloved. This study pointed to a significantly different effect for separation from the father, as these children reacted with more hostility, had lower affection and higher aggression toward the father, and showed high feelings of inadequacy and high affectional need for peers.

One of the best-known series of studies on the effects of maternal deprivation as it relates to later development is Harlow and Harlow's research on infant monkeys (1966). The group who were deprived of contact with either terry-cloth or wire-mesh artificial mothers later developed anti-social behaviors, were extremely anxious and fearful around their own species, and were unable to successfully mate and

become mothers. Spitz's (1946) investigation of extreme privation in foundling home infants revealed that many babies failed to thrive and eventually died due to isolation from human and visual stimulation. Thus parental (particularly maternal) deprivation not only seems to affect the infant's later ability to form satisfying interpersonal relationships but may even be fatal in extreme situations.

What holds in maternal deprivation studies concerning the significance of the age of the child at the time of the separation is also often mentioned in the literature of divorce as a determinant of how the child will react (Despert, 1953; Kilman, 1968; Landis, 1960). Kelly, North, and Zingle (1965) found that the school year of the child at the time of the break-up and the sex of the remaining parent were the main factors in assessing the child's reactions. They found no over-all differences in teacher ratings for behavior problems or reading achievement for children of divorce when compared to children from intact homes. However, homes in which the father was absent were linked with inferior achievement and children in Grades 1-3 were most seriously affected in terms of acting-out behavior. Broken home children also were found to attend school less regularly, a finding frequently reported in divorce studies (Burchinal, 1964; Despert, 1953). McDermott (1968) studied

3-5 year old nursery children during the immediate period of parental divorce and found dramatic, observable changes in behavior, including impaired ability to master anxiety and depression through play. He reported that during the divorce process the students went through a shock period with acute depressive reactions, which were usually followed by a restoration of previous skills and resolution and mastery of the anxiety through play and verbal interaction. He also observed significant sex differences in that the boys showed behavioral changes characterized by abrupt release of aggressive and destructive feelings and appeared more vulnerable to gross disruptions of identifications already in progress. The girls on the other hand tended to identify with selected pathological features of the same sex parent. Since it is generally the mother who is the remaining parent (Johnson & Medinnus, 1965), this may have implications for the differing reactions of the children based on their own and the remaining parent's sex.

The tendency toward acting-out aggressive behavior was also found in a study by Felner, Stolberg, and Cowen (1975) of referral patterns for young children related to two potential crisis-producing experiences: parental separation and divorce, and parental death. Both groups

received a significantly higher overall maladjustment score than respective control groups but also differed significantly from each other. The parental death group were more anxious, depressed, and withdrawn while the separation/divorce children showed more aggression and had a higher incidence of acting-out problems. The divorced children were rated by their teachers as higher on items such as restlessness, obstinate behavior, impulsiveness, and disruptions in class. Wardle (1961) found that children from broken homes were significantly more likely to manifest behavioral or conduct disorders than those from intact homes. Neurotic disorders on the other hand were more frequent when the home was intact than when the parents were divorced. Further, Wardle studied the family backgrounds of the children's parents and found a significantly higher percentage had themselves come from broken homes, supporting his hypothesis that children experiencing a break in parenting continuity in their own childhood become less consistent, more anxious, and more inept in their later efforts at marriage and child-rearing. Atkinson and Ogston (1974), studying the behavior of male children from divorced families between the ages of 8-16 years, found significant differences in moral values, as reflected in reasons for and

severity of punishment and responsibilities in and away from the home. However teachers reported no differences in academic and extracurricular participation and performance. In general, they concluded the behavior of children with and without fathers is not markedly different except that parental disciplining may vary as a function of the father's absence.

It has been suggested that some of the reactions observed in pre-adolescent children of divorce may be a function of their lowered capacities, both emotionally and cognitively, to handle depression (Solnit, 1974). The young child cannot use memory as effectively as a dependable, comforting mental activity because of an inadequately developed sense of the past and continuity with the present and future. Likewise, the capacity for closeness, which in psychoanalytic theory is said to be formed in the Oedipal period between the ages of 4 and 6 years, may be deficit and the child may lack the capacity to generalize to a substitute other to replace the lost love object. Other ego functions such as reality testing, acceptance of the reality principle, and control of id tendencies by the ego may be under-developed in the pre-adolescent child. Depression can then result from the child's feelings of sadness, loss, hopelessness, and inferiority and he may

react with behavior which seeks to ward off or suppress the impact of these powerful feelings. Basic depression has as its main features a decrease of self-esteem, an inhibition of functions, and an affective state related to despair and helplessness (Bibring, 1953). Such a depressive state may underlie the impulsive behavior or conduct disorders often seen in children of divorce.

Various studies support the idea that the perpetuation of an unhappy unbroken home may be more detrimental to a child's psychological well-being than an honest divorce. Goode (1956) in his extensive study on the effects of divorce on women, found that almost all of the mothers questioned felt their children were happier and better off since the divorce, and among those who had remarried 75% thought their children's life had greatly improved as a result of the divorce. In addition, as the child grows older and becomes an adolescent, he often seems better able to deal with the emotional repercussions of a parental divorce. Nye (1957) found that adolescents in broken homes showed less psychosomatic illness, less delinquent behavior, and better adjustment to parents than did children in unhappy, unbroken homes. They also did not differ significantly with respect to adjustment in school, church, or delinquent companions from normal controls. Nye argues that the crucial factor

in the adjustment of these adolescents was the socio-psychological success or failure of the family, not whether or not it was legally and physically broken. This finding was supported by Burchinal (1964) who found non-significant differences among the measures of personality characteristics of adolescents from differing family types. Measures of social relationships, participation in school and community activities, number of friends, and grades in school also showed non-significant differences, indicating that for some children, particularly at an older age, divorce may not be such a severe traumatic event. Reinhard (1971) asked adolescents themselves how they had reacted to their parent's divorce and found that they denied unpleasant, rejecting, or hostile feelings toward their mothers, and did not feel estranged from either parent. They reported that while they would rather their parents had reconciled, on the whole they felt their decision was sensible. They tended to see themselves as having to mature faster and as assuming greater responsibility than they might otherwise have done but denied any conflict with school or community, and felt their peer relationships had not been adversely affected. Likewise Haffter (1948) in studying 100 random divorce cases which occurred between the years 1920-1944 concluded that

normal, non-traumatic adjustment of children to divorce often occurs and poor adjustment is more directly traceable to an unhealthy family situation before the divorce. Conversely, Wallerstein and Kelly (1974) reported that in their survey of 131 adolescents, a significant number had an acutely painful experience following the parental divorce, though it was almost always time-limited. It should be noted that contradictory findings have been reported by Landis (1960) who found older age children to have significantly greater adjustment problems than the younger group. His 5-8 year old age group tended to feel more secure, to rate themselves happier, and to have been less aware of the pre-divorce conflict than the older children. They also indicated no change in their feelings of security. It was in the older age groups (9-12 and 13-16 years of age) that self-reports of feelings of inferiority, insecurity, and unhappiness as a result of the divorce were consistently found.

Child development and sexual identification theories.

Some basic understanding of child development and the process of sexual identification is helpful in assessing the possible variations in effects of divorce on male and female children at different ages. Children develop gradually and at many simultaneous levels. When they are born, they are totally

dependent on their parents or other caretakers for survival and only slowly develop coping mechanisms of their own in physical, social, intellectual, and emotional areas (Neubauer, 1972). A child's development, then, is "the unfolding progression through time of the changes which occur in the evolving psychic structure and function as part of a child's normal growth process" (Neubauer, 1972, p. 4). This evolution results from an interaction between biological maturation processes and environmental influences. Working from a psychoanalytic framework, it is felt that a baby is born with strong drives, or id forces, which represent biological demands for warmth, food, and other pleasurable sensations. Gradually, ego formation occurs as the child learns to temper his instinctual drives in response to environmental stimuli. The ego is charged with the task of synthesizing and coordinating these drives into an appropriate relationship with outside demands (Baldwin, 1967). For the first $3\frac{1}{2}$ years, the child develops in this way, moving through the oral and anal phases of psychosexual development (Baldwin, 1967) in which he successfully separates from his mother and begins the process of psychological individuation (Mahler, 1968). It is around age $3\frac{1}{2}$ -4 that he enters the Oedipal or phallic phase, during which the third psychic

structural component, the superego, emerges (Sutton-Smith, 1973). By means of the superego the child is able to internalize ethical standards and moral attitudes instilled in him by his family and his particular cultural milieu. The superego then is primarily concerned with the restriction of drive satisfaction (Freud, 1962). In addition, the phallic phase, which lasts until 6-6½ years of age, is marked by sexual identification with the same-sex parent (Freud, 1962).

All major developmental theories emphasize the importance of the father in the process of sex-role typing. Freudian theory states that the Oedipal phase in males involves the boy's longing for his mother both for dependency and sexual reasons, with resulting guilt feelings toward his father. In addition, he anticipates punishment for his sexual longings and fears retaliation from the more powerful father. This conflict is resolved by identification with the father and the establishment of a strong male identity. Girls, on the other hand, compete with the mother for the father's love but eventually learn to identify with the competitor and assume appropriate sex-role patterns (Sours, 1972). Fenichel (1954) stated that if the same-sex parent is lost in this phase, it fulfills the Oedipal wish, resulting in guilt. If, on the other hand, the parent of

the opposite sex leaves, the child develops an unsatisfied Oedipal wish, leading to a fantasized ideal of the lost parent and increased longing for reunion with this person.

Role theorists have proposed some modifications in Freudian identification theory. Johnson (1963) suggests that it is the father who is the most important figure in the reciprocal sex-role learning of children of either sex. She proposes that the child's personality development involves a series of successive identifications with increasingly specialized and differentiated social roles. Both sexes initially identify with the mother but not in a sex-typed way. She is instead a human whom the infant learns to be like through an interactional process. The mother thinks of both sexes as children whom she relates to in a general supportive and nurturant role. Johnson hypothesizes that the next identification with the father is the crucial one for appropriate sex-role learning, although the exact nature of this reciprocal role relationship may be different for each sex. The father in a sense represents the outside world to the child. Sex role internalization takes place with this parental figure after emancipation from infantile dependency with the mother has occurred. Deutsch (1944) supports this tendency in her statement about women:

"As the child with gradually increasing intensity turns away from the mother and childhood dependencies in favor of active adjustment to reality, this reality is represented more and more by the father - and this is true of both boys and girls." (p. 243)

Social learning theorists have frequently postulated that a female's acquisition of sex-appropriate behavior and sex-role orientation is at least partly a result of learning experiences and reinforcements received in interactions with the father (Hetherington, 1967; Mussen & Rutherford, 1963). Likewise, the importance of a father's presence in boys' sex-role development has been consistently reported. According to learning theories, a boy learns masculinity by identifying with his father and imitating his behavior (Bandura & Walters, 1963; Biller & Borstelmann, 1967). Boys who have ineffectual or passive fathers are judged as less masculine than boys who have strong fathers who are decisive in family interactions (Biller & Borstelmann, 1967). Goodenough (1957) found that on general observation the father shows a greater interest in sex differences than the mother, and therefore exerts a greater influence in general sex-typing for both sexes. Thus disruptions in the father-child relationship could be expected to significantly affect the child's learning of appropriate sex roles and this would hold for both male and female children.

The effect of father absence. The effect of father absence on the acquisition of appropriate sex roles has been exhaustively studied in males and varied studies have confirmed a disruption in masculine identification as a result of such separation (Biller & Borstelmann, 1967; Burton & Whiting, 1961; Hetherington, 1966; Nash, 1965; Winch, 1962; Yarrow, 1964). Douvan and Adelson (1966) found that at adolescence a boy from a divorced family who lacked a strong male identification figure had difficulty adjusting to the masculine sex role, was deficient in internalization of standards, and had trouble accepting authority. The exaggerated independence and masculinity of these boys were seen as denial mechanisms and as suggestive of serious insecurities in these areas. Sears, Pintler, and Sears (1946) investigated the effects of father absence on the doll-play activity of 3- to 5-year olds and found that father-absent boys manifested less doll-play aggression and seemed less influenced by the common sex factor of the boy and father dolls than boys from father-present homes. Similarly, Bach (1946) found 6- to 10-year old children were less aggressive in their play when the fathers were absent from the home. Koppitz (1957) found that boys deprived of their fathers tended to select peers or older boys as role

models but at the same time felt inferior and inadequate in comparison to other boys, indicating lack of strong masculine identification. Santrock (1970) assessed preschool father-absent black males and found them to be significantly more feminine, less aggressive, and more dependent than their father-present counterparts.

Human figure drawings have been used to assess differences in sex-role identification of father-absent and father-present boys. Phelan (1964) hypothesized that boys who drew females when asked to draw a person had not made the crucial shift in identification from the mother to the father and she found this was more prevalent in elementary school-age males where father absence had occurred. Biller (1968a) likewise found father-absent boys were significantly less likely to draw a male figure or to clearly delineate different sexes in their drawings. However, similar studies with older children have failed to produce such findings (Domini, 1967; Lawton & Sechrest, 1962).

Corresponding research for females is not as extensive nor as consistent. Lynn and Sawrey (1959) found an indication of greater dependency on their mothers by girls with limited access to their fathers. However Santrock (1970) found no differences in his sample of preschool black females on dependency, aggression, and femininity

measures as a function of father absence. Likewise, Hoffman (1973) reported that although white father-absent boys scored significantly lower on moral attributes and were judged as more aggressive by teacher ratings than father-present controls, no significant differences between father presence and absence were found for girls. Sears, Pintler, and Sears (1946) in their doll-play studies, reported father absence was associated with greater aggression, especially self-aggression, and speculate this may be a function of the father-absent girl's conflict with her mother. Heckel (1963) reported that 5 father-absent preadolescent girls manifested frequent school maladjustment, excessive sexual interest, and social acting-out behavior. However direct examination of sex-role identity disruptions is lacking in the research on father-absent females.

A few studies point to the possibility that effects of father absence on girls may only appear at puberty when contact with males becomes more frequent. Hetherington (1972) found that the effects of father absence did not appear until adolescence when such girls were unable to interact appropriately with males. Other expected deviations from appropriate sex-typed behaviors or in interactions with females did not occur. Father absence increased dependency in girls but no differences were noted

in sex-role orientation as measured by figure drawings. However, research points out that delinquent adolescent girls are more likely than delinquent boys to come from broken homes (Monahan, 1957a; Toby, 1957) and their delinquency is more often due to sexual misconduct (Cohen, 1955; Glaser, 1965).

For both sexes, the relationship to the mother is important in father-absent homes in determining sex-role identity. Bach (1946) and Colley (1959) both suggest that the mother-child relationship can have either a positive or negative effect on the child's personality development in a father-absent home. Hilgard, Neuman, and Fisk (1960), in support of this hypothesis, found that in cases of paternal death, the mother's ability to use her own and outside resources was strongly related to the child's later adjustment as an adult. The essential variable was not the mother's warmth and tenderness but her ego strength in meeting her own and her child's needs. Several studies with children (Hetherington, 1965; Hetherington & Frank, 1967; Mussen & Rutherford, 1963) have indicated the importance of a warm and nurturant mother-daughter relationship to feminine development. Hetherington (1972) proposed that one significant variable which helped to account for behavioral differences between father-absent daughters due

to divorce and those due to death was the attitudinal and behavioral differences in the widowed and divorced mothers. Both sets of mothers were appropriate feminine models and rewarded their daughters' sex-appropriate behavior. However they differed in their attitudes toward the absent father and men in general, the divorced mothers being significantly more hostile and bitter. With boys, the degree to which mothers encourage masculine behavior has been found to significantly affect their sons' masculinity of self-concept (Biller & Bahm, 1971). Biller (1969) reported that both sex-role preference and sex-role adoption as measured by behavior were positively related to maternal encouragement for masculine behavior in kindergarten-age boys. McCord, McCord, and Thurber (1962) found that behavior problems with father-absent boys were significant only if the mother was deviant or rejecting.

Age at time of divorce. The age at which father absence occurs has been found to be a significant variable in sex-role development. Hetherington (1972) found that the effects of early separation was usually greater than later separation in daughters studied at adolescence. Few time of separation effects were seen on direct interview or test measures, but emerged most dramatically in observational measures. Hetherington (1966) also found that

9- to 12-year old father-absent boys showed less masculine projective sex-role behavior and were rated as less aggressive, more dependent, and as engaging in fewer physical contact games than boys from intact homes. This finding was only significant however if the father's absence began in the first 4 years of the boy's life. D'Andrade (1973) reported that black working-class males who did not have a father present during the first 3 years of life exhibited a feminine response pattern on a projective sex identification task. Biller (1969) found father-absent boys had significantly less masculine sex-role preferences in terms of game choice and less masculine sex-role orientations than father-present boys. However significant differences were found for boys whose fathers were absent prior to 4 years of age (less masculine) than when the absence occurred in the 5th year. Money (1965) and Hampson (1965) have studied individuals with physical-sexual incongruencies and conclude that the first 2-3 years of life are crucial in the formation of basic sex-role orientation. Leichty (1960) reported that male college students who were father-absent between the ages of 3-5 were less masculine on a sex-role orientation measure (Blacky Pictures) than father-present matched controls. This indicates that sex-role identification disruptions

occurring at certain critical ages may continue to exist over an extended period of time.

Step-parent availability. Biller and Meredith (1972) have pointed out the paucity of studies relating to the psychological, intellectual, and social consequences of various types of father deprivation and urge more definitive research be attempted to investigate the effects of having father surrogates in the home and increasing masculine influence in the educational system. Various researchers have attempted to measure the extent to which the effects of father absence on children may be mitigated by contact with parent surrogates, such as step-parents. Greenstein (1966) unexpectedly found no differences on various sex-role measures between father-present and father-absent boys referred to a child guidance clinic by juvenile court. This was partially explained by the fact that at the time of the study, more than 1/3 of the boys were living in homes where an adult male was present. Likewise, Rubin (1974) suggested that the availability of male role models outside the home and the significance of adult males within the home could account for his finding no significant differences in self-concept between 280 black 5th and 6th grade boys in father-absent homes as compared to father-

present controls.

Some studies indicate that masculinity is related to the amount of contact boys have with adult males (Nash, 1965; Steimel, 1960). Biller (1968a), Brim (1958), Koch (1956), and others have found that boys with brothers are more masculine than boys with sisters and thus the presence of male siblings may lessen the effects of father absence on sexual identification. However Biller (1968a) indicated that the presence of a father is significantly more crucial in masculine development than the presence of an older brother. Systematic research on the effects of surrogate fathers on masculine behavior of sons is sketchy and corresponding research for daughters does not appear in the literature. As four in five divorces result in remarriage (Kessler, 1975), the significance of step-parents as substitute role models needs to be examined.

Aspects of sex-role development. Three aspects of sex-role development have been differentiated by Biller and Borstelmann (1967), in part based on earlier conceptualizations (Fenichel, 1945; Kagan, 1964; Lynn, 1959). Sex-role orientation is described as the person's conscious and/or unconscious perception and evaluation of his maleness/femaleness. This aspect is usually measured through responses to projective tests or fantasy play in which

the child is given an opportunity to project onto ambiguous stimuli his sex-role orientation. Commonly-used instruments in this area include human figure drawings, the Blacky Pictures, and the IT Scale for Children (Biller, 1970; Machover, 1957). Sex-role preference refers to the person's preferential set toward culturally-defined representations of sex role, such as toys, games, and activities. Here game preference tests have most frequently been used to assess whether the child chooses same sex activities (Biller, 1970). Other researchers have observed actual play habits (Sears, Pintler, & Sears, 1946) or used self-report measures such as the Gough Femininity Scale of the California Personality Inventory (Hetherington, 1972) or masculine-feminine interest inventories like the Strong (Greenstein, 1966). Sex-role adoption is the masculinity/femininity of the person's actual behavior in social and environmental settings and is measured through observer ratings, usually by parents or teachers. Biller (1969), Hetherington (1972), and others have developed various rating scales delineating specific culturally-defined masculine and feminine behaviors which can be used to measure this dimension. Usually such scales list positive adjectives associated with masculinity (e.g. adventuresome, competitive, independent) and with femininity (e.g. gentle,

charming, sensitive). Gough (1952), Jenkin and Vroegh (1964), and others have found that such adjectives describing personality characteristics are highly sex-typed in U.S. culture. Parents, teachers, or independent raters are asked to check those adjectives or behaviors which are characteristic of the child.

It is important to delineate these three separate, albeit overlapping, manifestations of sex role as research has indicated that father absence may affect these aspects to varying degrees. D'Andrade (1962) found that boys whose fathers were continually absent made masculine role preferences to the same degree as father-present boys. However a projective completion test showed that boys who experienced paternal loss in early years had unmasculine sex-role orientations. Likewise, Barclay and Cusumano (1967) found no difference on sex-role preference ratings between father-absent and father-present boys but significant differences on a field dependence-field independence test which reflected sex-role orientation. Biller (1968b, 1969) in two studies confirmed that sex-role orientation is more affected by father absence than sex-role preference or adoption of behavior. Miller (1961) likewise found no differences among such groups on a masculinity-

femininity interest inventory or on teacher's ratings for aggression and dependency. In contrast, Altus (1958) found that masculine sex-role preference, as reflected by the MF scale of the Minnesota Multiphasic Personality Inventory (MMPI), did differentiate between father-absent and father-present middle-class college students, with the sons from divorced families scoring significantly less masculine on this interest and attitudinal scale. Research to directly differentiate females' reactions to father absence on these three aspects of sex-role development is not available but Hetherington (1972) reported little apparent disturbance in sex-typed behaviors or preference for the female role as assessed by self-report and observational measures in her adolescent father-absent female sample.

Statement of the problem. Based upon the literature reviewed, it would appear that there are several significant factors which can affect a child's sex-role development following the loss of a father through divorce. It has usually been indicated that more disruptions occur in the earlier age groups and that the presence of a substitute role model may help the child make a more appropriate sex-role identification. Sex differences have been explored but in general the effect of father absence on girls'

6 years of age and male subjects who experienced parental divorce after 7 years of age on sex-role development measures.

2. Female subjects who experienced parental divorce prior to 6 years of age will score lower on sex-role development (as measured by sex-appropriate scores on the IT Scale for Children, a game preference task, and a behavior rating scale) than female subjects who experienced parental divorce after 7 years of age.

H_0 There is no significant difference between female subjects who experienced parental divorce prior to 6 years of age and female subjects who experienced parental divorce after 7 years of age on sex-role development measures.

3. Male subjects who have had no available step-father will score lower on sex-role development (as measured by sex-appropriate scores on the IT Scale for Children, a game preference task, and a behavior rating scale) than male subjects who have had an available step-father.

H_0 There is no significant difference between male subjects with step-fathers and male subjects without step-fathers on sex-role development measures.

4. Female subjects who have had no available step-father will score lower on sex-role development (as

measured by sex-appropriate scores on the IT Scale for Children, a game preference task, and a behavior rating scale) than female subjects who have had an available step-father.

H₀ There is no significant difference between female subjects with step-fathers and female subjects without step-fathers on sex-role development measures.

Secondary Research Hypotheses:

On the sex-role orientation dimension, the following hypotheses will be tested:

5. Male subjects who experienced parental divorce prior to 6 years of age will score lower on the sex-role orientation dimension (as measured by the IT Scale for Children) than male subjects who experienced parental divorce after 7 years of age.

H₀ There is no significant difference between male subjects who experienced parental divorce prior to 6 years of age and male subjects who experienced parental divorce after 7 years of age on the sex-role orientation dimension.

6. Female subjects who experienced parental divorce prior to 6 years of age will score lower on the sex-role orientation dimension (as measured by the IT Scale for Children) than female subjects who experienced parental

divorce after 7 years of age.

H_0 There is no significant difference between female subjects who experienced parental divorce prior to 6 years of age and female subjects who experienced parental divorce after 7 years of age on the sex-role orientation dimension.

7. Male subjects who have had no available step-father will score lower on the sex-role orientation dimension than male subjects who have had an available step-father.

H_0 There is no significant difference between male subjects with step-fathers and male subjects without step-fathers on the sex-role orientation dimension.

8. Female subjects who have had no available step-father will score lower on the sex-role orientation dimension than female subjects who have had an available step-father.

H_0 There is no significant difference between female subjects with step-fathers and female subjects without step-fathers on the sex-role orientation dimension.

9. Male subjects who have experienced parental divorce, holding the variables of age at divorce and step-father availability constant, will score lower on the sex-role orientation dimension than non-divorced comparison

subjects.

H_0 There is no significant difference between male subjects who have experienced parental divorce and non-divorced comparison male subjects on the sex-role orientation dimension.

10. Female subjects who have experienced parental divorce, holding the variables of age at divorce and step-father availability constant, will score lower on the sex-role orientation dimension than non-divorced comparison subjects.

H_0 There is no significant difference between female subjects who have experienced parental divorce and non-divorced comparison female subjects on the sex-role orientation dimension.

On the sex-role preference dimension, the following hypotheses will be tested.

11. Male subjects who experienced parental divorce prior to 6 years of age will score lower on the sex-role preference dimension (as measured by a game preference task) than male subjects who experienced parental divorce after 7 years of age.

H_0 There is no significant difference between male subjects who experienced parental divorce prior to 6 years of age and male subjects who experienced

parental divorce after 7 years of age on the sex-role preference dimension.

12. Male subjects who have had no available step-father will score lower on the sex-role preference dimension than male subjects who have had an available step-father.

H_0 There is no significant difference between male subjects with step-fathers and male subjects without step-fathers on the sex-role preference dimension.

13. Male subjects who have experienced parental divorce, holding the variables of age at divorce and step-father availability constant, will score lower on the sex-role preference dimension than non-divorced comparison subjects.

H_0 There is no significant difference between male subjects who have experienced parental divorce and non-divorced comparison male subjects on the sex-role preference dimension.

On the sex-role adoption dimension, the following hypotheses will be tested:

14. Male subjects who experienced parental divorce prior to 6 years of age will score lower on the sex-role

adoption dimension (as measured by a parental behavior rating scale) than male subjects who experienced parental divorce after 7 years of age.

H_0 There is no significant difference between male subjects who experienced parental divorce prior to 6 years of age and male subjects who experienced parental divorce after 7 years of age on the sex-role adoption dimension.

15. Male subjects who have had no available step-father will score lower on the sex-role adoption dimension than male subjects who have had an available step-father.

H_0 There is no significant difference between male subjects with step-fathers and male subjects without step-fathers on the sex-role adoption dimension.

16. Male subjects who have experienced parental divorce, holding the variables of age at divorce and step-father availability constant, will score lower on the sex-role adoption dimension than non-divorced comparison subjects.

H_0 There is no significant difference between male subjects who have experienced parental divorce and non-divorced comparison male subjects on the sex-role adoption dimension.

A comparison group consisting of 12 males and 12 females, ages 8-12 years with similar religious and economic backgrounds to experimental subjects who are members of non-divorced families will be used. These children will be selected from a variety of sources, including church groups, classrooms, and scout troops. Inasmuch as detailed normative data are not directly available for the 3 instruments used for this age range, these children's range of scores will constitute a standardized comparison with the scores of the experimental subjects.

Instruments

Sex-role orientation will be measured by the IT Scale for Children developed by Daniel G. Brown (1956). The IT Scale was specifically devised to measure male-female identification and consists of 36 picture cards depicting various objects, figures, and activities commonly associated with masculine and feminine roles. According to Brown (1956), "preferences for such male or female items are assumed to be indicative of preference for aspects of the masculine or feminine roles " (p. 5) and this assumption is the operational validity of the ITSC. A child-figure drawing labelled as "IT", unstructured as to sex, is utilized by each child in making choices among such items

as clothes, toys, or activities. The child, through a process of projection, is thought to make these choices for the IT figure on the basis of his or her own sex-role orientation. In the present study, following a procedure used by Biller (1969), the IT figure will be made more sexually neutral in appearance by presenting only the face (See Appendix B). The total range of the ITSC is from 0, an exclusively feminine score, to 84, an exclusively masculine score. In the present study, scorings will be modified in the direction of sex-appropriateness, so that a higher score will reflect more appropriate sexual orientation in both males and females. Standardization of the ITSC was on middle-class, urban American children between the ages of 5 and 6, with a normative sample group of 78 males and 68 females. Test-retest reliability reported by Brown (1956) was $r = .71$ for boys, $.84$ for girls. Split-half reliability as measured by Biller (1969) using the Spearman-Brown formula was $.83$. Because this study will be conducted on older children than were used for ITSC standardization, a normative comparison group will be tested.

A game-preference task will be used in the present study to assess sex-role preference. Pictures of four masculine games (basketball, football, baseball, and archery) and

four feminine games (hopscotch, jacks, dance, and jump rope) with age-appropriate children engaging in the games will be presented to the child in forced-choice pairings (See Appendix B). Rosenberg and Sutton-Smith (1964) have reported these games to be highly sex-typed. The 16 comparisons will yield one point for each sex-appropriate choice. Split-half reliability by the Spearman-Brown formula is .79 as measured by Biller (1969).

A behavior rating scale for sex-role adoption will be completed by each mother. Estimates on items of assertiveness, aggressiveness, competitiveness, independence, and activity directed toward physical prowess and mastery of the environment will be used. Items relating to relative passivity, dependency, and timidity will also be included. The behavioral scale for boys includes 16 items, 9 indicative of high masculinity and 7 of low masculinity. The female scale includes some different items but again has 9 scorings of high femininity and 7 of low femininity. Two different scales are necessary as some traits (i.e. sociable) have been found to be positively related to appropriate behavior for both sexes. The sex-role stereotypes used for each behavior scale appear in Appendix B. Scorings range from "very frequently" to "never," with each item being scored either 0, 1, 2,

3, or 4 respective to its position on the scale. The higher the score, the more sex-appropriate is the behavior.

Previous research by Biller (1969) has indicated the usefulness of these three instruments, the ITSC, game preference task, and behavior rating scale, in measuring sex-role development. In each case, the lower the person's score on the instrument, the more discrepant he is from appropriate sex-role scorings.

The Peabody Picture Vocabulary Test, Form B, will be used as a screening device to eliminate those children of below average intelligence (I.Q. level below 90 points). The Peabody measures verbal intelligence by asking the child to identify pictures by one-word descriptions. A sample of 4,012 children was used in the standardization of the Peabody. Reliability coefficients of equivalence ranged from .67 at the 6th year level to .84 at 17 and 18-year levels, with a median of 0.77 (Dunn, 1965). Validity data for the Peabody indicates it correlates at a significant level with Stanford-Binet (.71) and Wechsler IQ scores (.61) (Lindstrom, 1961; Lavitt, Note 1; Saslow & Larsen, Note 2).

Procedure

Parents of possible subjects will be asked to volunteer their children for participation in the current study.

They will be informed that the testing will involve approximately one hour and that the study is seeking to evaluate possible effects of divorce on children, particularly whether the child's age and the availability of male role models are important variables in the child's adjustment. General feedback concerning the over-all findings will be made available to the parents and children after completion of the data analysis. However, individual children's responses will not be communicated to parents.

Children will be tested individually either in their own homes or at the Child Study Center, Oklahoma City. The order of testing will be Peabody screening instrument, IT Scale for Children, and the game preference task. Each mother will be asked during this time to complete the behavior rating scale and a brief biographical questionnaire including information about the length of time since divorce, the child's age at the time of the divorce and at the present time, the presence at any time of a stepfather in the home, and the mother's work history. In addition, data concerning general level of income, religious affiliation, and indices of the amount of time the child has contact with his biological father and/or other males

will be gathered. This information will be used in informal assessment of factors which could affect results of this study. Comparison group mothers will receive a brief questionnaire on religious and economic status, maternal work history, and the child's contact with other males besides his biological father.

The child's responses to the sex-role orientation and game preference items will be recorded on number-coded sheets. All testing will be done by the author to control for sex of experimenter effects.

Analysis

A two-way multiple analysis of variance (MANOVA) following the procedures outlined by Huck, Cormier, and Bounds (1974) will initially be used to analyze the transformed data. Independent variables for this analysis are age of child at divorce and presence or absence of a step-father. Combined dependent variables are sex-role orientation, preference, and adoption scores. Hypotheses 1-4 will be tested from MANOVA results. Hypotheses 5-8, 11-12, and 14-15 will be tested from separate ANOVA results on each of the three dependent variables. If interactions occur, appropriate individual comparisons will be made. Hypotheses 9-10, 13, and 16 will be tested using Winer's

(1962) factorial experiment with a single control group design for each of the 3 dependent variables, or in the event of no differences, randomized t-tests between experimental and control groups. Alpha level of significance for all analyses will be set at .05 (Hays, 1963).

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APPENDIX B

ITSC RECORD FORM & "IT" FACE

ITSC Record Form

1. Toy Pictures

M	F
_____ Pocket knife	_____ Doll Buggy
_____ Soldiers	_____ Baby Bath
_____ Racer	_____ Dishes
_____ Dump truck	_____ Cradle
_____ Train Engine	_____ Purse
_____ Rifle	_____ High Chair
_____ Tractor	_____ Necklace
_____ Earthmover	_____ Doll

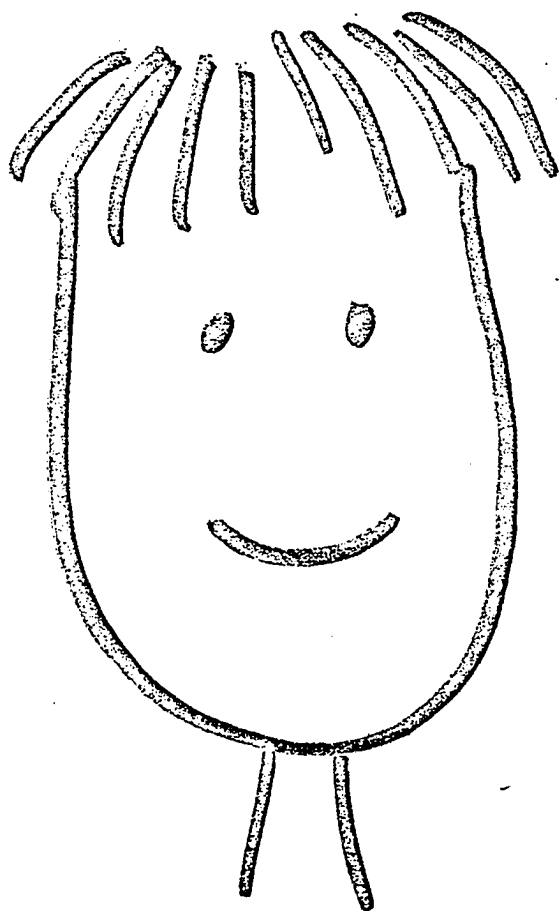
2. Paired pictures

a. Indians	M _____	F _____
b. Clothes	M _____	F _____
c. Airplane	_____	Sewing _____
d. Face articles	M _____	F _____
e. Tools	_____	Household Objec. _____
f. Shoes	M _____	F _____
g. Children	M _____	F _____
h. Building tools	_____	Baking _____

3. 4 child figures

boy _____ girlish boy _____ boyish girl _____ girl _____

MODIFIED "IT" FACE



APPENDIX C

GAME PREFERENCE FORM & DRAWINGS

Order of Paired Comparisons -

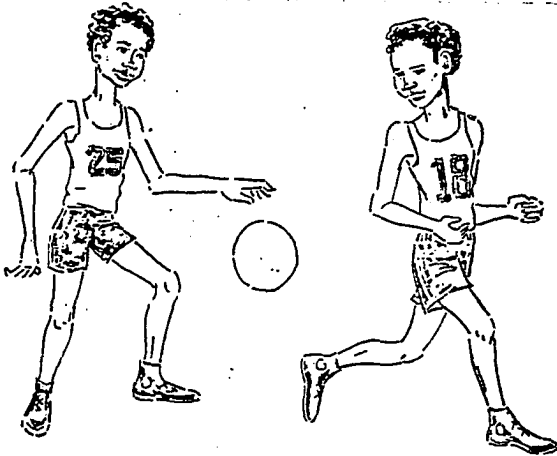
Game Preference Task

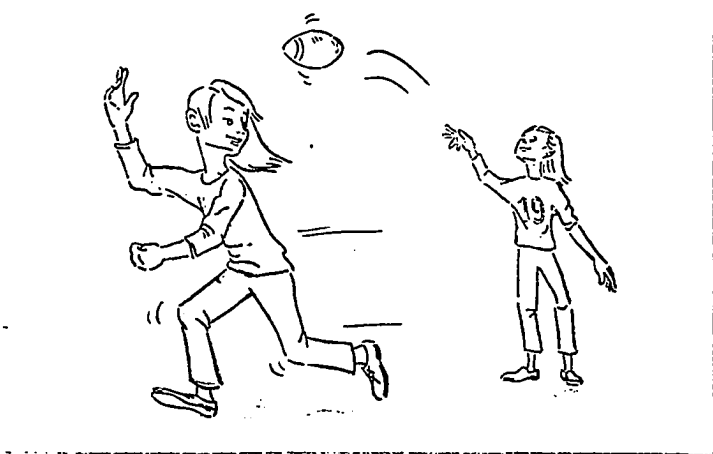
- | | | | |
|-----|------------|---|------------|
| 1. | Jacks | - | Baseball |
| 2. | Dancing | - | Football |
| 3. | Hopscotch | - | Basketball |
| 4. | Archery | - | Jump Rope |
| 5. | Football | - | Jacks |
| 6. | Baseball | - | Jump Rope |
| 7. | Dancing | - | Baseball |
| 8. | Hopscotch | - | Archery |
| 9. | Basketball | - | Jacks |
| 10. | Archery | - | Dancing |
| 11. | Jump Rope | - | Football |
| 12. | Baseball | - | Hopscotch |
| 13. | Jacks | - | Archery |
| 14. | Basketball | - | Dancing |
| 15. | Jump Rope | - | Basketball |
| 16. | Football | - | Hopscotch |

GAME PREFERENCE DRAWINGS

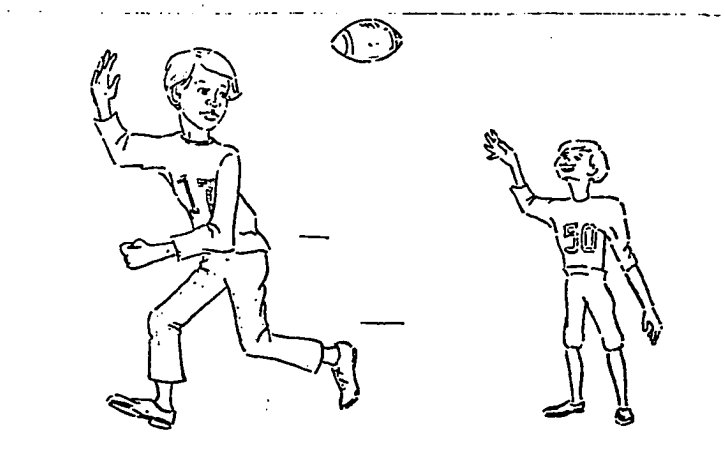


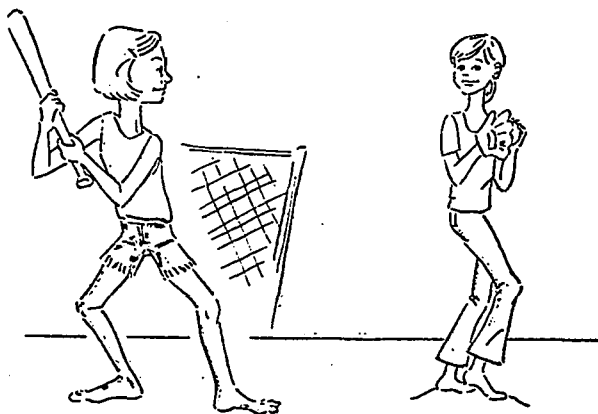
BASKETBALL



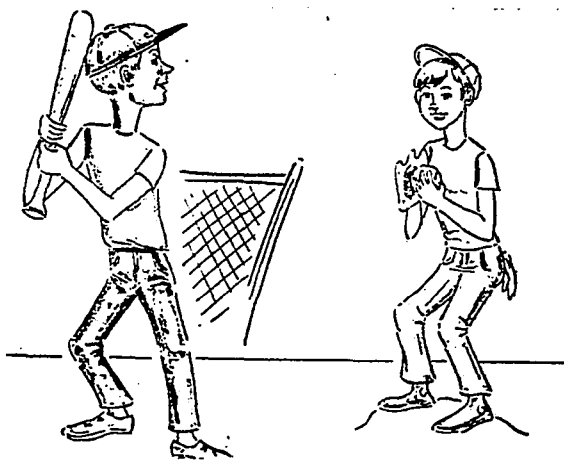


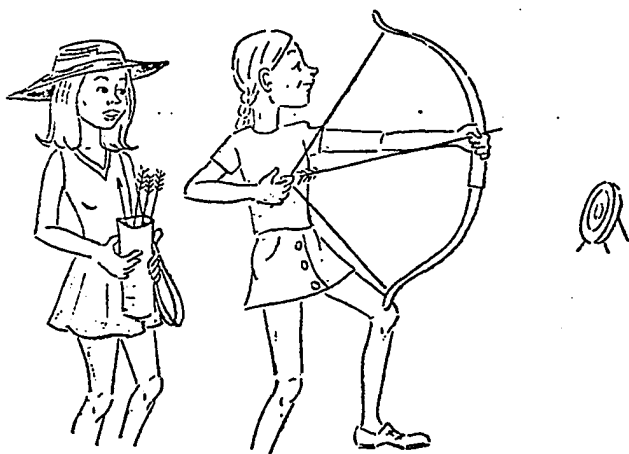
FOOTBALL



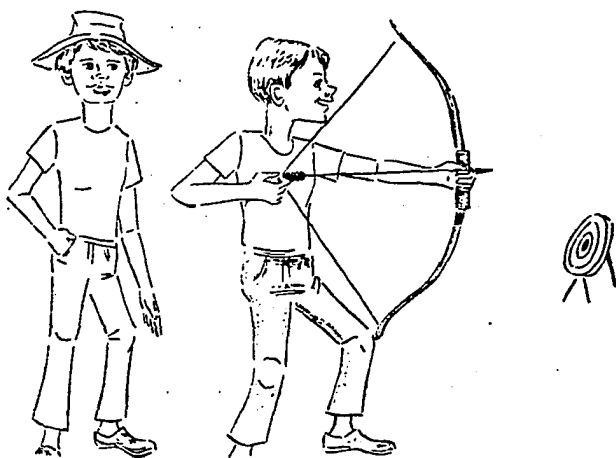


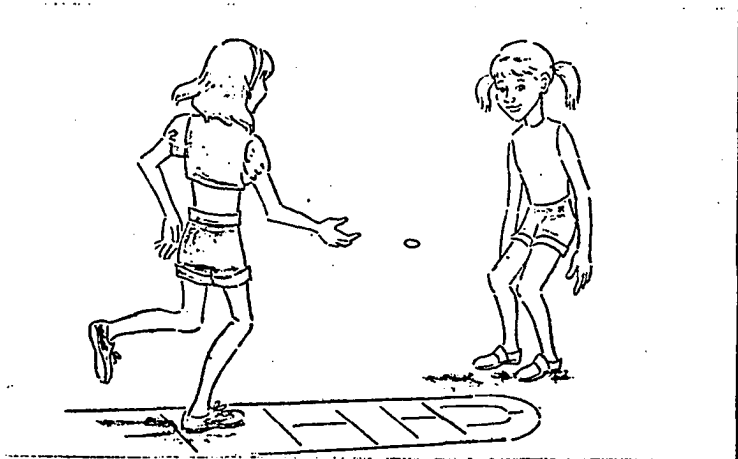
BASEBALL



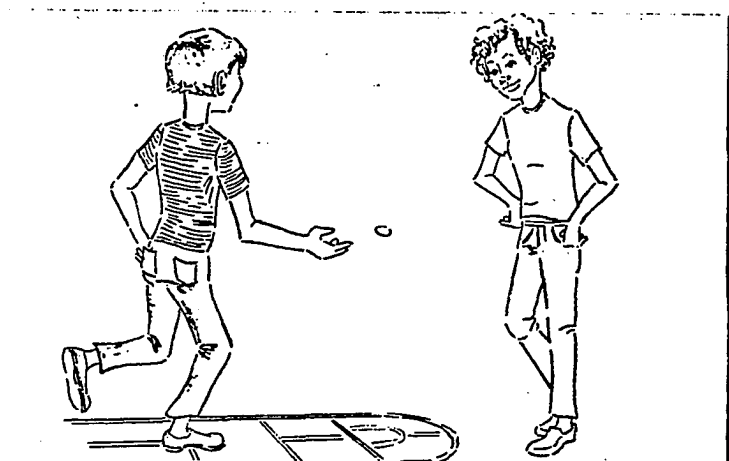


ARCHERY





HOPSCOTCH



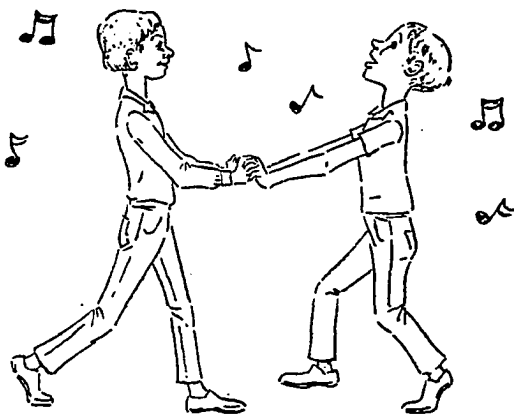


JACKS





DANCING



APPENDIX D

MALE & FEMALE BEHAVIOR SCALES

Sex-Role Stereotypes Used

In Behavior Scale

<u>Masculine</u>	<u>Feminine</u>
active/energetic	dependent
independent	passive
leader	helpless
brave	neat/clean
messy/not neat	non-assertive
decisive	follower - conforming
assertive	ladylike
daring	timid
competitive	not decisive
masters his environment	quiet
sociable	weak (physically)
curious	sociable - seeks company
protective of others	concerned with appearance
concerned with physical prowess	sensitive

Behavior Scale (Boys)

On the following pages, you will find 16 descriptions of behavior typical of normal children. Please check each item as to the frequency with which your child shows these behaviors. Be sure to check each item, placing a mark in either very frequently, frequently, sometimes, seldom, or never.

I would like you to refer mainly to things you have personally observed in making your judgements but you may use information given you by others who have had contact with your child, i.e. teachers, playmates, siblings.

	very frequently	frequently	sometimes	seldom	never
1. is active & energetic (on the move, plays hard)	_____	_____	_____	_____	_____
2. asks for help (acts helpless, wants someone to do things for him that he could do himself)	_____	_____	_____	_____	_____
3. leads other children (organizes play activities, assigns tasks to others)	_____	_____	_____	_____	_____
4. participates in sports and active games (plays rough & tumble games, and games where running & balls are involved)	_____	_____	_____	_____	_____
5. is timid around others (is fearful when introduced to new adults and children, fears physical contact)	_____	_____	_____	_____	_____

	very frequently	frequently	sometimes	seldom	never
6. concerned with neatness and cleanliness (avoids getting his clothes dirty while playing, stays away from sandbox, paints, etc.)	_____	_____	_____	_____	_____
7. makes own decisions (not swayed by other children when he has decided what he wants to play, doesn't ask others what he should do)	_____	_____	_____	_____	_____
8. clings on adults (tries to be near parent & to be held closely, wants to be protected)	_____	_____	_____	_____	_____
9. daring in play (the first to attempt a physical feat, takes chances in jumping, climbing trees, the jungle gym, etc.	_____	_____	_____	_____	_____
10. gives up easily (withdraws when he thinks another child is doing better, does not stand up for his rights)	_____	_____	_____	_____	_____

	very frequently	frequently	sometimes	seldom	never
11. builds and fixes things (uses blocks and other building materials, likes to put things together)	_____	_____	_____	_____	_____
12. prefers to stay by himself (engages in solitary play, plays at table games)	_____	_____	_____	_____	_____
13. curious (asks what makes things work, looks things over carefully and takes things apart)	_____	_____	_____	_____	_____
14. protects other children (aids children who are being bullied, helps children in danger)	_____	_____	_____	_____	_____
15. complains (does not settle own conflicts & runs to parent, claims others are hurting him)	_____	_____	_____	_____	_____

	very frequently	frequently	sometimes	seldom	never
16. likes to show his strength (picks up heavy things, challenges other children to feats of strength and speed)	_____	_____	_____	_____	_____

Behavior Scale (Girls)

On the following pages, you will find 16 descriptions of behavior typical of normal children. Please check each item as to the frequency with which your child shows these behaviors. Be sure to check each items, placing a mark in either very frequently, frequently, sometimes, seldom, or never.

I would like you to refer mainly to things you have personally observed in making your judgements but you may use information given you by others who have had contact with your child, i.e. teachers, playmates, siblings.

	very frequently	frequently	sometimes	seldom	never
1. asks for help (will seek out others to assist her, sometimes acts helpless, wants others to do things for her that she could do for herself)	_____	_____	_____	_____	_____
2. is active & energetic (on the move, plays hard)	_____	_____	_____	_____	_____
3. concerned with neatness and cleanliness (avoids getting her clothes dirty while playing, is careful about washing, stays away from paints, mud, etc.)	_____	_____	_____	_____	_____
4. gives up easily when confronted (withdraws when she thinks another child is doing better, does not usually stand up for her rights)	_____	_____	_____	_____	_____
5. leads other children (organizes play activities, assigns tasks to others, does not go along with the group)	_____	_____	_____	_____	_____

	very frequently	frequently	sometimes	seldom	never
11. is quiet (does not generally yell or talk in a loud voice, does not play rowdy, noisy games)	_____	_____	_____	_____	_____
12. likes to show her strength (picks up heavy things, challenges other children to feats of strength & speed)	_____	_____	_____	_____	_____
13. prefers to play with others rather than alone (plays cooperatively, initiates contact with other children, would not choose to play alone)	_____	_____	_____	_____	_____
14. concerned with personal appearance ("primps", enjoys dressing up, is interested in her hair, clothes)	_____	_____	_____	_____	_____
15. is physically aggressive (fights with other children, throws objects, hits others, animals)	_____	_____	_____	_____	_____

	very frequently	frequently	sometimes	seldom	never
16. clings on adults (tries to be near parent and to be held closely, wants to be protected)	_____	_____	_____	_____	_____

APPENDIX E

QUESTIONNAIRES TO MOTHERS

Questionnaire to Divorced Mothers

This study is seeking to examine the effects divorce may or may not have on various aspects of children's development. To clarify current conditions in your child's environment, as well as past events which may have had an effect on him, please answer each of the following questions as completely as you can:

1. What is your child's birthdate?

_____ month _____ year

2. When was your divorce decree finalized?

_____ month _____ year

3. Religious preference (check one):

Catholic _____ Protestant _____

Jewish _____ None _____

(other) _____

4. Yearly income level (check one): *

Above \$20,000 _____ \$9,500-7,500 _____

\$20,000-15,100 _____ \$7,400-5,700 _____

\$15,000-9,600 _____ below \$5,700 _____

*Note: Please include alimony, child support payments, investment dividends, etc. as well as salaries (yours, step-father's, etc.)

5. Are you currently employed at least half-time?

_____ yes _____ no

6. How long (after the birth of this child) have you worked at least half-time?

_____ or _____
years (months)

7. How many weeks a year does your child see his biological father? (For example, vacations, home visits, week-ends)

Less than 1 week _____ 3-4 weeks _____
1-2 weeks _____ more than 4 weeks _____
Never _____ (other) _____

8. How many times a year does your child have other kinds of contact with his biological father? (For example, letters, phone calls, presents)

_____ daily contact
_____ weekly contact
_____ monthly contact
_____ every 6 months
_____ yearly
_____ never
_____ (other)

9. Has your former husband remarried? _____ yes _____ no

Does he have children by this remarriage? _____ yes _____ no

10. Since your divorce from this child's biological father, has there been a step-father in the family unit by marriage for a period of at least one continuous year?

_____ yes _____ no

11. If yes, when did this step-father enter the home by marriage?

_____ month _____ year

If applicable: When did this step-father leave the home (by divorce or separation)

_____ month _____ year

12. Has your child had more than one step-father?

_____ yes _____ no

13. How many hours a week does your child spend interacting with a male 16 years or older who is not his step-father or biological father? (For example, male teachers, coaches, scout troop leaders, church school teachers, next-door neighbors, relatives such as older brothers, uncles, grandfathers) **

_____ 0-5 _____ 6-10
_____ 11-20 _____ 21-30
_____ over 30

** Total combined time with all other such males.

5. How long (after the birth of this child) have you worked at least half-time?

_____ or (_____)
years months

6. How many hours a week does your child spend interacting with a male 16 years or older who is not his biological father? (For example, male teachers, coaches, scout troop leaders, church school teachers, next-door neighbors, relatives such as older brothers, uncles, grandfathers) **

0-5 _____ 6-10 _____ 11-20 _____
21-30 _____ over 30 _____

** Total combined time with all other such males.

APPENDIX F
SUMMARY STATISTICS

TABLE 1
Multivariate Analysis of Variance
by Age and Step-Parent (Males)

Source of Variation	<u>df</u>		<u>F</u>
Age (A)	3	18	.2832
Step-parent (B)	3	18	.6030
A X B	3	18	2.5644

TABLE 2

Analysis of Variance: Sex-Role Orientation
Variable (Males)

Source of Variation	<u>df</u>	<u>MS</u>	<u>F</u>
Age (A)	1	1.0416	.0021
Step-parent (B)	1	77.0416	.1583
A X B	1	247.0416	.5076
Within (Error)	20	486.6749	

TABLE 3

Means and Standard Deviations of Sex-Role
Orientation Scores (Males)

	Pre-6 years	Post-7 years
Step.		
<u>M</u>	69.333	66.500
<u>SD</u>	34.004	12.095
No Step.		
<u>M</u>	63.333	73.333
<u>SD</u>	23.001	10.727

TABLE 4

Analysis of Variance: Sex-Role Preference
Variable (Males)

Source of Variation	<u>df</u>	<u>MS</u>	<u>F</u>
Age (A)	1	4.1666	1.6233
Step-parent (B)	1	.1666	.0649
A X B	1	8.1666	3.1818
Within (Error)	20	2.5666	

TABLE 5

Means and Standard Deviations of Sex-Role
Preference Scores (Males)

	Pre-6 years	Post-7 years
Step.		
<u>M</u>	14.667	16.000
<u>SD</u>	2.066	0.000
No step.		
<u>M</u>	15.000	14.000
<u>SD</u>	1.549	1.897

TABLE 6

Analysis of Variance: Sex-Role Behavior
Variable (Males)

Source of Variation	<u>df</u>	<u>MS</u>	<u>F</u>
Age (A)	1	1.5000	.0772
Step-parent (B)	1	13.5000	.6952
A X B	1	42.6666	2.1974
Within (Error)	20	19.4166	

TABLE 7

Means and Standard Deviations of Sex-Role
Behavior Scores (Males)

	Pre-6 years	Post-7 years
Step.		
<u>M</u>	46.833	42.667
<u>SD</u>	3.545	5.955
No Step.		
<u>M</u>	44.667	45.833
<u>SD</u>	2.422	4.875

TABLE 8

Multivariate Analysis of Variance
by Age and Step-parent (Females)

Source of Variation	<u>df</u>		<u>F</u>
Age (A)	3	18	.2585
Step-parent (B)	3	18	.2853
A X B	3	18	.4271

TABLE 9

Analysis of Variance: Sex-Role Orientation
Variable (Females)

Source of Variation	<u>df</u>	<u>MS</u>	<u>F</u>
Age (A)	1	42.6666	.0513
Step-parent (B)	1	294.0000	.3538
A X B	1	1093.4999	1.3162
Within (Error)	20	830.7833	

TABLE 10
Means and Standard Deviations of Sex-Role
Orientation Scores (Females)

	Pre-6 years	Post-7 years
Step.		
<u>M</u>	18.167	38.667
<u>SD</u>	26.294	22.695
No Step.		
<u>M</u>	29.000	22.500
<u>SD</u>	31.305	33.715

TABLE 11

Analysis of Variance: Sex-Role Preference
Variable (Females)

Source of Variation	<u>df</u>	<u>MS</u>	<u>F</u>
Age (A)	1	18.3750	.5070
Step-parent (B)	1	9.3750	.2586
A X B	1	12.0416	.3322
Within (Error)	20	36.2416	

TABLE 12
Means and Standard Deviations of Sex-Role
Preference Scores (Females)

	Pre-6 years	Post-7 years
Step.		
<u>M</u>	9.333	6.667
<u>SD</u>	5.538	6.713
No Step.		
<u>M</u>	9.667	9.833
<u>SD</u>	7.285	4.021

TABLE 13

Analysis of Variance: Sex-Role Behavior
Variable (Females)

Source of Variation	<u>df</u>	<u>MS</u>	<u>F</u>
Age (A)	1	5.0416	.1286
Step-parent (B)	1	15.0416	.3839
A X B	1	2.0416	.0521
Within (Error)	20	39.1749	

TABLE 14
Means and Standard Deviations of Sex-Role
Behavior Scores (Females)

	Pre-6 years	Post-7 years
Step.		
<u>M</u>	33.333	32.333
<u>SD</u>	6.501	2.805
No Step.		
<u>M</u>	33.000	30.833
<u>SD</u>	3.033	9.867

TABLE 15

Results of t-Tests Comparing Means
for Experimental & Control Subjects

Subjects	ITSC		Game		Behavior	
	<u>t</u>	<u>p</u>	<u>t</u>	<u>p</u>	<u>t</u>	<u>p</u>
<u>Males</u>	.0594	<u>ns</u>	.8223	<u>ns</u>	.3603	<u>ns</u>
<u>Females</u>	.3317	<u>ns</u>	.3434	<u>ns</u>	.1873	<u>ns</u>

TABLE 17

Means and Standard Deviations of Months of Maternal
Employment Since Birth of Child

	Pre-6 years		Post-7 years		Control
	step	no step	step	no step	
<u>Males</u>					
<u>M</u>	70.33	20.83	32.83	32.83	24.25
<u>SD</u>	52.83	25.46	31.37	25.03	11.46
<u>Females</u>					
<u>M</u>	38.00	123.00	74.16	25.33	40.16
<u>SD</u>	23.29	19.99	38.13	24.70	41.64

TABLE 18

Means and Standard Deviations of Hours Per Week
With Older Males

	Pre-6 years		Post-7 years		Control
	step	no step	step	no step	
<u>Males</u>					
<u>M</u>	11.25	10.50	7.41	13.41	8.62
<u>SD</u>	8.12	3.87	4.78	9.95	9.59
<u>Females</u>					
<u>M</u>	9.41	20.16	7.75	10.00	17.54
<u>SD</u>	9.39	11.12	6.37	10.64	10.41