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Preschoolers' Stereotypes about Sex Differences in Emotionality:

An Investigation of Possible Etiologies

by

Dana Wolfe Birnbaum

A thesis submitted to

the Faculty of Graduate Studies

in partial fulfillment of the requirements for

the degree of Doctor of Philosophy

Department of Psychology

Carleton University

December 1978

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The undersigned recommend to the Faculty
of Graduate Studies acceptance of the thesis
"Preschoolers' Stereotypes about Sex Differences in Emotionality:
An Investigation of Possible Etiologies"

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Abstract

The present research was designed to investigate the expression of sex stereotypes about emotionality in preschool-aged children and to consider parental attitudes, parents' reactions to their children's emotional behavior, and children's television programming as possible sources of the children's stereotypes.

In the first study preschool and daycare children were asked whether each of four emotions was more characteristic of boys or of girls. The children were found to possess definite stereotypes about sex differences in emotionality, for they associated anger with maleness and happiness, sadness, and fear with femaleness. No support was found in this study for social class differences among children in the sex-stereotyping of emotions.

In the second study daycare and preschool parents were asked to indicate how frequently and how intensely they perceived and desired boys and girls to show anger, happiness, sadness, and fear. This study provided some evidence of differential attitudes among the social classes, for preschool parents neither perceived nor desired sex differences in any of the emotions, while daycare parents perceived and desired boys to show anger more often and more intensely than girls and perceived and desired girls to show fear more often and more intensely than boys. These results suggest that daycare parents at least possess stereotypes about sex differences in emotionality which they may instill in their children.

The third study considered differential treatment of the sexes as a possible source of the children's stereotypes by assessing parents' reactions to their children's emotional behavior in hypothetical

situations. As in the previous study, differential treatment of the sexes was found only among daycare parents who encouraged boys but not girls to feel angry, and encouraged girls but not boys to feel afraid.

The final study examined whether television shows aimed at and/or popular with children provided a possible source of the children's stereotypes by consistently linking the expression of specific emotions with characters of a given sex. Little evidence was found implicating television as a major source of the children's stereotypes, for although males were depicted as angry more often than females in the programs analyzed, none of the other emotions were associated with a given gender.

The results suggest that each of the sources studied may enter as one variable in the socialization process and that the children's stereotypes may result from an interaction of these and other sources such as observed sex differences. Although no evidence that preschool children acquired their stereotypes from their parents is provided by these data, it is suggested that the preschool parents may simply have been unwilling to admit to any sex or socialization differences and that they, like daycare parents, may well contribute to the development of their children's stereotypes. In any case, there is good evidence that preschool-aged children do possess specific stereotypes about sex differences in emotionality.

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Introduction

The research reported in this dissertation derives from a previous study on stereotypes about sex differences in emotionality (Birnbaum, Nosanchuk, & Croll, in press). In that study, preschool children were found to associate anger with maleness and to associate happiness, sadness, and fear with femaleness. The research discussed here was designed as a follow-up investigation. First, it attempted a replication and extension of the previous study with preschoolers. Second, it investigated certain possible sources of the preschoolers' stereotypes, viz., parental attitudes, parents' reactions to their children's emotional behavior, and children's television programming.

The pervasiveness of sex-role stereotypes today is somewhat surprising, for it might have been expected in the light of the more egalitarian atmosphere of the feminist movement that sex-role stereotyping would have diminished. Although there is some evidence that this might be the case among certain groups, e.g., among prospective social workers (Harris & Lucas, 1976), recent studies in the literature still report cases of traditional sex-role stereotyping. In fact, there is much current interest in the finding of traditional sex-role stereotypes in young children (e.g., Best, Williams, Cloud, Davis, Robertson, Edwards, Giles, & Fowles, 1978; Koblinsky, Cruse, & Sugawara, 1978; Kuhn, Nash, & Brucker, 1978).

One of the traits typically considered in sex-role stereotyping studies is emotionality. Moreover, the belief that females are more emotional than males is one of the most common findings in research on

sex-role stereotypes (e.g., Rosenkrantz, Vogel, Bee, Broverman, & Broverman, 1968). This belief is of more than academic interest as it frequently has important practical significance, for not only are men and women thought to possess different traits, but those ascribed to women are often considered undesirable (Williams & Bennett, 1975). Fidell (cited in Maccoby & Jacklin, 1974, p. 183), for example, found that female medical patients who had ambiguous symptoms were more likely to have their condition diagnosed as psychosomatic than were male patients who had equally ambiguous symptoms. Similarly, the testimony of females in legal cases has been known to be discounted by the judge because of his belief that a female's emotionality may interfere with her objectivity (Wright, 1977). Furthermore, the fluctuations in emotionality alleged to accompany the menstrual cycle have been used to argue that women may be less effective leaders than men (Bernard, 1976, p. 22) and that women may be more accident prone than men (Tiger, 1971, p. 59).

As well, it has been shown that mental health professionals and college students associate mentally healthy traits with males but not females, suggesting that traits typical of females are indicative of poor mental health (Broverman, Broverman, Clarkson, Rosenkrantz, & Vogel, 1972). Thus, the stereotype of women forms part of a double standard of mental health which discriminates against women. Such a double standard apparently exists in the business world as well, for Schein (1973) reported that insurance management personnel consider traits typical of successful, middle-level managers to be similar to

those typical of men but quite different from those typical of women. All of these findings suggest that sex-role stereotypes may well provide the bases for discriminatory behavior.

Discriminatory practices on the basis of these sex-role stereotypes are not the only detrimental effects associated with them, however. Research suggests that there are negative consequences for both men and women when they behave in a manner contrary to that expected on the basis of a sex-role stereotype. Costrich, Feinstein, Kidder, Maracek, and Pascale (1975), for example, report that popularity ratings and perceived psychological adjustment are adversely affected by counter-stereotypic behavior. Although the deleterious effects of stereotyping are considered to be worse for girls than for boys (Flerx, Fidler, & Rogers, 1976), boys receive more negative consequences for cross-sex interests and cross-gender behavior than do girls (Fagot, 1977, 1978; Fling & Manosevitz, 1972). These findings suggest that sex-role stereotypes represent a double hazard, for not only do they set the scene for discriminatory practices on the basis of generalized personality traits, but they also lead to detrimental effects for those whose behavior runs counter to the sex-role stereotype.

The introduction to this thesis will describe and evaluate previous research on sex-role stereotypes in adults and in children with special reference to stereotypes about emotionality. Research pertaining to possible etiologies of the children's stereotypes will also be considered. Before the relevant literature is discussed, however, consideration must be given to the problems involved in the definition and measurement of stereotypes.

Definition and Measurement of Stereotypes

One of the difficulties faced by the researcher interested in sex-role stereotypes is the definition and measurement of "stereotype". To date, the methodology used in sex stereotyping research varies, with little consistency across studies. The problem of appropriate definition and measurement of stereotype is not unique to sex stereotyping research, however, for there is a growing literature in social psychology on the definition, measurement, and theoretical basis of stereotypes in general.

Interest in stereotyping has grown since Walter Lippmann first coined the term in 1922. Early researchers adopted Lippmann's stance that stereotypes are undesirable, incorrect generalizations which are products of a faulty thought process. Much of the research on stereotyping uses the Katz and Braly (1933) paradigm in the assessment of stereotypes. In this procedure, subjects are asked to select from a list traits which are most characteristic of the group in question. Subjects are then allowed to add traits to the list if they find it inadequate. Following their initial designation of characteristic traits by checking all which they consider appropriate, subjects are asked to go back over the list and star those most typical of each group under consideration. It is these latter traits that are used in the data analysis. There is usually a high degree of agreement among subjects in terms of the categories which apply to a given group. This degree of consensus is often what is used as the definition of the stereotype.

In a discussion of the conceptualization of stereotypes in psychology, Brigham (1971) indicated that at least six different meanings have been associated with the term. Perhaps the most common of these is the view that stereotypes are generalizations which are incorrect in either direction or magnitude. Most people expressing this viewpoint believe that stereotypes are overgeneralizations with some "kernel of truth" (Campbell, 1967; Triandis & Vassiliou, 1967). That is, the generalizations are incorrect in terms of magnitude rather than direction. Regardless of the definition of stereotype employed by various researchers, a common belief is that stereotypes are undesirable even though their validity and the process by which they are obtained cannot often be assessed. This is generally tied to favorability, for attitudes which are unfavorable are often considered to be stereotypes and, as they are unfavorable, they are thought to be incorrect.

Methodology. As previously mentioned, in the assessment of stereotypes many have followed the Katz and Braly (1933) within-subjects, check-list approach. This method, however, is subject to several methodological problems. First, the use of a within-subjects design may well produce contrast effects for, if one group being rated is more favorable than the others, the remaining groups will be rated as less favorable than if they had been rated without that group (Brigham, 1971). Secondly, this procedure actually forces the subject to think in terms of categories and generalizations and may create stereotypes that are merely products of the traits from which the subject is allowed to choose. Thus, in this situation, the stereotypes are determined by the

experimenter rather than the subject. In conjunction with this, Ehrlich and Rinehart (1965) have expressed concern that use of the Katz and Braly method does not permit differentiation between the subject's knowledge of the stereotype and his personal endorsement of it. They point out that the options provided by the experimenter may fail to tap personal and salient aspects of the respondent's intergroup imagery. Since the check list method rarely results in the subject's making spontaneous attributions, the researcher may in fact create new stereotypes in his own language. In support of this contention are Ehrlich and Rinehart's finding, in a study comparing check-list and open-ended methods, that there was little overlap of traits across methods, with more traits and greater agreement among subjects on the typical check-list measure.

Another difficulty associated with the typical stereotype methodology is the obtrusiveness of the method. The demand characteristics of the situation (Orne, 1962) may interfere with the collection of real opinions and may elicit socially desirable responses from the subject. In fact, Sigall and Page (1971) suggest that the refusal of some subjects to participate in studies of ethnic stereotypes is indicative of the sensitive nature of the research. Therefore, in an attempt to measure stereotypes more unobtrusively, Sigall and Page employed a new technique called the bogus pipeline. In this approach subjects are led to believe that the experimenter can directly measure a subject's covert reactions (and thus his attitudes) via physiological measures. The subject is then asked to predict what the machine used to

measure his physiological response is revealing about him. In a study comparing attitudes about ethnic groups obtained from the ratings procedure with those obtained from the bogus pipeline method, Sigall and Page found that attitudes varied across the two methods, with the ratings procedure producing more socially desirable responses. Thus, the typical check-list method of assessing stereotypes may indeed produce stereotypes more in keeping with social desirability than with real attitudes.

A related, though not strictly methodological, concern is that of the validity of the stereotype. That is, can a stereotype continue to exist without a "kernel of truth"? Given that this is a real concern among researchers in the area, how does one go about measuring the validity of a stereotype? Triandis and Vassiliou (1967) have suggested that one means of measuring the validity of a stereotype is to compare the heterostereotype (attitudes of others) with the autostereotype (attitudes of ingroup). Triandis and Vassiliou believe that presumptive evidence that the stereotype has validity is provided when the autostereotype and heterostereotype are in agreement in the absence of clear communication between the groups. Moreover, they contend that the greater the degree of contact between groups, the greater the validity of information one group has about the other and thus, the heterostereotype and autostereotype each become much clearer. In a summary of the data on the validity of stereotypes, Brigham (1971) concludes that there is sufficient evidence that ethnic stereotypes can have some "kernel of truth", at least in terms of agreement among groups.

as to the traits characteristic of a target group. Brigham contends, however, that the absence of acceptable validity criteria leaves the question unanswered as to whether all stereotypes have some validity.

In summary, there are several definitional and methodological difficulties with the typical measure of stereotyping. First, what is obtained is actually a measure of social sharedness, not stereotypy. The fact that a given attitude is widespread among a group of people provides no information nor measure of individual stereotypes which may indeed vary widely (Secord & Berscheid, 1963). Secondly, the typical measure of stereotypes does not permit differentiation between agreement about a stereotype and personal endorsement of it. Third, no information is provided about the subject's belief in the magnitude of the generalization. That is, it is not known whether subjects believe that certain traits they consider "typical" are found in 10%, 50%, 90% or all of the members of a group. Although many early researchers would suggest that stereotypes are held about all the members of a group, exceptionless generalizations are rare (Brigham, 1971; Brown, 1965). To date, survey of the literature on stereotyping reveals little agreement on what a stereotype actually is or how stereotypes are formed.

Recently, several new quantitative measures of stereotyping have been proposed. As a result of his displeasure with the ambiguity of the word "typical" which is most often used to define the target in stereotyping studies, Brigham (1971) asked subjects to judge the percentage of a group thought to possess a given characteristic. A strength of this procedure is that it permits the measurement of

individual as well as group stereotypes. Contrary to assumptions by previous investigators, Brigham found that typical traits were far from being exceptionless generalizations. That is, when subjects were asked to indicate the percentage of the members of an ethnic group thought to possess a given trait, they rarely gave an answer of 100 percent. Furthermore, on some occasions the traits for which the judged percentage was highest had the least relation to attitude toward the ethnic group.

McCauley and Stitt (1978) cite this discrepancy between attitude and highest judged percentage to support their contention that the Brigham measure is not properly a measure of stereotype. They indicate their displeasure as well with the Stereotype Differential Measure proposed by Gardner, Kirby, Gorospe, and Villamin (1972). Gardner et al.'s procedure requires subjects to rate groups on several bipolar scales. After analysis by t-test, stereotypes are determined to be those traits for which the group mean rating is reliably different from the neutral point of the scale. McCauley and Stitt point out that the Stereotype Differential Measure, although more quantitative than the check-list approach, is still a measure of social stereotypes rather than individual attitudes since it is dependent upon group consensus.

As a result, McCauley and Stitt (1978) have proposed a new quantitative and individual measure of stereotyping, based on Bayesian theory, in which stereotypes are defined as probabilistic predictions that distinguish the stereotyped group from others. Specifically, stereotypes are those attributes for which within-group predictions

differ from base-rate predictions. For example, in assessing the female emotionality stereotype, subjects would be asked to estimate the following probabilities: $p(\text{emotional}/\text{female})$, the percent of females who are emotional; $p(\text{emotional})$, the percent of all the world's people who are emotional; $p(\text{female}/\text{emotional})$, the percent of emotional people who are female and $p(\text{female})$, the percent of the world's people who are female. If the diagnostic ratio, $p(\text{emotional}/\text{female})/p(\text{emotional})$, is greater than 1.0; that is, if being emotional is more probable for women than for the world in general, then emotionality is defined as a stereotypic trait for females. One of the strengths of this method is that it permits the measurement of negatively distinctive (e.g., being less emotional) stereotypes as well as positively distinctive ones. Thus, this is a promising approach for further research.

Theoretical Issues. There have been several theoretical attempts to explain the nature and pervasiveness of stereotypes. Rothbart, Fulero, Jensen, Howard, and Birrell, (1978), for example, find the general averaging model of stereotype formation, which is based on unequal weights, inadequate as it fails to describe the subject's cognitive processes. They suggest instead, on the basis of cognitive theory, that information about individual members of a group are retrieved from memory and a determination made as to the salience of his/her characteristics for the entire group. Rothbart et al. point out that the probability of a class of events is judged from the availability of instances from the class and, since the frequency of items influences their availability, the availability of items in memory

is taken as an index of frequency. Since individuals with extreme characteristics are more memorable and thus more available in memory, impressions of groups are governed by their most extreme members. Therefore, we may overestimate the frequency of occurrence of confirming examples of our stereotypes simply because such instances are more easily noticed or retrieved from memory (Snyder, Tanke, & Berscheid, 1977). Rothbart et al. suggest, moreover, that this may account for the presence of so much negative behavior in common stereotypes.

Implicit personality theories, i.e., our preconceived notions of what traits and behaviors are associated with what other traits and behaviors (Bem & Allen, 1974; Secord & Berscheid, 1963), have also been used to explain the generality and pervasiveness of stereotypes. We may use our implicit personality theories to fill in missing data from our evidence base with information consistent with our preconceived notions of what traits go together or with what evidence should support our beliefs. Moreover, this may be affected by primacy effects for, once we have formed an initial impression of a person or have adopted a stereotype, we tend to perceive information inconsistent with that impression or stereotype as more consistent than it really is (Bem & Allen, 1974). Furthermore, the representativeness of our observations is often overestimated.

One of the reasons why social stereotypes are so pervasive may be that they lead to behavioral confirmation. Snyder et al. (1977) have demonstrated that stereotypes may create their own social reality by directing social interaction in such a way as to cause the stereotyped

individual to behaviorally confirm the perceiver's stereotype. Thus, social perceptions or attitudes may actually constrain the behavioral options of those with whom we interact. As a result, stereotypes may become self-fulfilling prophecies.

In a discussion of the conceptualization of the term stereotype, Brigham (1971) concludes that there is general agreement among psychologists that stereotypes are generalizations about the prevalence of a given trait within a group. He believes, however, that current conceptualizations of stereotypes are inadequate, for they fail to indicate how stereotypes and generalizations differ. Moreover, he points out that when a belief is described as being stereotypic, the person holding the belief is being criticized for lack of objectivity. That is, an observer considers the belief to be unjustified. It may be unjustified in one of two senses: either the belief has no demonstrable validity or it is used as justification for discriminatory practices which themselves are viewed as unjustified. Thus, it is an observer who determines whether a person's beliefs are stereotypic. Brigham (1971) suggests that future conceptualizations of stereotype take note of this. Therefore, he proposes that a stereotype may be defined as "a generalization made about an ethnic group, concerning a trait attribution, which is considered to be unjustified by an observer" (p. 31).

Attitude-Behavior Relations. An issue related to theoretical concerns is that of attitude-behavior relations. Wicker (1969) has indicated that there is little evidence to support the assumption that

attitudes expressed verbally correlate highly with overt behavior. For example, attitudes toward blacks assessed using a Likert-scale procedure have not correlated highly with such behaviors as inviting blacks for coffee or signing releases for photographs to be taken with particular blacks (Azjen & Fishbein, 1977). This is thought so since verbally expressed attitudes are subject to respondents wishing to appear socially desirable. Sigall and Page (1971), however, point out that "real-world behavior is also susceptible to effects accruing from social desirability needs" (p. 254). Since little research has been done in the area, it remains an open question whether knowledge of a person's stereotype allows increased prediction of his behavior beyond that by measures of attitude (Brigham, 1971). On the other hand, there is some evidence which indicates that we treat individual members different from that expected by our attitudes to the group (LaPiere, 1936).

A recent review article by Azjen and Fishbein (1977) further clarifies this issue of attitude-behavior relations. They suggest that a person's actions are systematically related to his attitudes when the nature of the attitude predictors and behavioral criteria are taken into consideration. While a person's attitude toward an object may influence his overall pattern of responses to that object, it does not necessarily predict any given action. Moreover, Azjen and Fishbein contend that personality traits have little validity for predicting specific behaviors as they only represent generalized behavioral tendencies without reference to a specific target, context, or time.

Further, Azjen and Fishbein (1977) believe that the strength of the attitude-behavior relationship is dependent upon the degree of correspondence between attitudinal and behavioral entities. According to Azjen and Fishbein, attitudinal and behavioral entities consist of four elements: the action, the target at which the action is directed, the context in which the action is performed, and the time at which it is performed. Attitudinal and behavioral entities may be defined by any one of these elements or by combinations of two or more of them. For example, an investigator could examine attitudes toward targets (e.g., children, own child), toward actions (e.g., playing, punishing), toward contexts (e.g., at home, in school), toward times (e.g., 4:00 a.m. tomorrow, next March), or toward any combination of elements (e.g., punishing own child at home, playing with children in school next March). Correspondence between attitudinal predictors and behavioral criteria occurs to the extent that the attitudinal entity is identical in all four elements with the behavioral entity. For example, attitudes toward a target (e.g., one's own child) without specification of action, context, or time corresponds directly only to a behavioral criterion based on the observation of different behaviors with respect to a person's own child (e.g., playing with, punishing) in different contexts, and at different times. Similarly, attitudes to targets will predict actions provided that both attitudinal and behavioral entities involve the same target in the same context. When attitude target (e.g., "typical" child) differs from the behavior target (e.g., own child), the lack of correspondence yields low correlations between

attitude and behavior (cf. LaPiere, 1936). However, when target and action elements of attitudes correspond to the target and action elements of behaviors, the attitude-behavior correlation is high and significant.

The conceptual framework provided by Azjen and Fishbein (1977) is particularly useful in understanding many of the contradictory findings in stereotype research. Lack of correspondence between targets in studies using adjective check-lists and open-ended questionnaires may be responsible for the absence of agreement between the two methods. In the case of the check-list, for example, when subjects are asked to consider the "typical" person or "people in general", there are adjectives listed to use as a basis in making the ratings. In the open-ended format, however, subjects are asked to provide the traits and may well visualize a specific person in that category (cf. Cowan & Stewart, 1977). This would result in comparisons of people in general with specific individuals, a lack of correspondence which may yield conflicting results.

This brief review of the concept of stereotype in the social psychology literature reveals the confusion in the area. There is little agreement as to what a stereotype is, the proper means of measuring it, or how a stereotype is acquired. The recent work by Brigham (1971) and McCauley and Stitt (1978) hold promise for the better definition and measurement of stereotypes. There is still, however, a great need for research on the process of the acquisition of stereotypes, i.e., identifying the sources from which they are learned

(Brigham, 1971). The research reported in this dissertation is addressed to this question.

Methods of Measuring Sex-Role Stereotypes

The sex-role stereotype literature is subject to the same problems as the general stereotype literature; that is, there is little agreement on the appropriate definition and measurement of the sex-role stereotype. In fact, many methods may have been employed in the assessment of sex-role stereotypes. These methods may be roughly divided into two groups based on their obtrusiveness. The more obtrusive methods typically ask subjects to indicate by checking on a scale or from a list which of several attributes or behaviors are characteristic of either one or both sexes. These more obtrusive methods may be further divided in terms of whether they present the subject with a forced or unforced choice; that is, some studies ask subjects specifically to select either male or female as the gender of which the attribute or behavior is more characteristic, whereas other studies give subjects the option of indicating that they do not believe the attribute to be more characteristic of either sex.

The less obtrusive methods typically present subjects with the voice or videotape of a child which previously has been rated ambiguous with respect to gender and ask subjects, half of whom have been misled as to the child's sex, to rate the child along a number of dimensions. The data are then examined for rating differences as a function of gender label. Condry and Condry (1976), for example, showed a videotape of an infant to adults, half of whom were told it was a girl and half

that it was a boy, and asked them to rate the type and intensity of its emotional reactions.

A researcher may have any number of reasons for employing a particular method of measuring sex-role stereotypes. There are, however, certain advantages and disadvantages associated with each approach. One of the problems with the more obtrusive methods is that subjects are aware of the researcher's interest in sex differences. As a result of the demand characteristics of the experimental situation, they may then respond in socially desirable ways which are not consistent with their real beliefs (Orne, 1962). One of the advantages of an unobtrusive method then is that theoretically, since the real purpose of the study is hidden, the likelihood of socially desirable responses is reduced.

There is, however, a danger involved in the interpretation of the results obtained from a study using the typical unobtrusive method of the sex stereotype research. It was noted earlier that Azjen and Fishbein (1977) contend that there is little relation between attitude and behavior when there is a lack of correspondence between the attitudinal and behavioral components. In the typical unobtrusive method, subjects are asked to respond to or to evaluate the behavior of a particular individual (e.g., a child whose gender has been mislabelled). Since the researcher uses the subject's responses as indicative of his attitude toward males and/or females in general, there is a lack of correspondence between attitude and behavioral entities. Thus, what the researcher obtains may indeed be free of distortion by

social desirability, but it may have little bearing on the subject's reactions to the group in which the researcher is interested.

The researcher using the more obtrusive methods in the assessment of sex-role stereotypes has the decision of whether to use forced- or unforced-choice procedures. The forced-choice procedure has the advantage of being sensitive to small perceived differences between groups. On the other hand, this as well may be a disadvantage in that these small differences may be of little importance and the researcher may cause stereotyped responding by forcing the choice. While being insensitive to small differences, the unforced-choice procedure has the advantage of not forcing subjects to indicate that there is a difference between the sexes when they believe that there is none. The decision as to which of these two procedures is to be used usually rests on how small a difference between the sexes is of interest to the experimenter. If any difference, no matter how small, is of interest, then the researcher would be advised to employ a forced-choice procedure. Otherwise, the unforced-choice procedure should be used.

Another decision facing the sex-role stereotypes researcher is whether to use a within-subjects or between-subjects design. In the within-subjects design, each subject rates both men and women or boys and girls. While this procedure has the advantage of reducing between-subjects variability, it suffers from the problem of context effects. In this case, the ratings made first provide an anchor for the second set and thus may contaminate the second of the two measures. The between-subjects design, on the other hand, while avoiding the problem

of order effects, permits the introduction of between-subjects variability. Although numerous sex-role stereotype studies have used within-subjects designs, it might appear that the between-subjects design is more appropriate since it avoids any context effects. If the researcher is interested in absolute differences between males and females, contamination of ratings resulting from context effects may be particularly undesirable. If, however, the researcher is interested in subjects' relative judgments of men and women, s/he may find the within-subjects design more appropriate. Moreover, as real-world judgments are often relative and contextual, this design may correspond more closely to real-life situations.

As in the general stereotype research, most studies of sex-role stereotypes employ different operational definitions. These definitions are usually based either on consensual agreement among subjects or on a specified level of statistical significance. Differences in the methods employed and in the definition of sex-role stereotypes make it difficult to assess whether there are indeed common stereotypes about sex differences.

Because of the variety of definitions of sex-role stereotypes, it should be noted at this juncture how the writer defines the term. In the survey of the sex stereotype literature which follows, the word "stereotype" is used as the experimenter in a given study defined it. These definitions are noted as each study is discussed. In the dissertation research which follows the literature review, the writer has defined sex-role stereotypes on the basis of statistically

significant differences at $p < .05$. This approach was chosen as its meaning is conventional and universally understood.

Adjective Check Lists. Early work on sex-role stereotypes used the adjective-check-list procedure so common in the study of ethnic stereotypes. In this case, subjects are required to select from a list of traits those which they believe characterize men and those which they believe characterize women. In a series of studies by Sherriffs and his coworkers (McKee & Sherriffs, 1957; Sherriffs & Jarrett, 1953; Sherriffs & McKee, 1957), Sarbin's list of adjectives was used to assess sex stereotypes in college students. In a forced-choice within-subjects procedure, Sherriffs and Jarrett (1953) presented selected items from Sarbin's list to subjects who were asked to indicate whether they were more characteristic of one or the other sex, one or another of two age groups, or one or another of three religious groups. Items were considered stereotypic if they were attributed to one sex significantly more often than the other at the .05 level. This criterion resulted in findings of few non-sex-stereotyped items.

A within-subjects design was also used by McKee and Sherriffs (1957) and Sherriffs and McKee (1957) to compare forced-choice, unforced-choice, and open-ended procedures. In the unforced-choice procedure, subjects were asked to check on separate cards those adjectives which were in general true of men and of women. In the forced-choice procedure, subjects were asked to indicate for each adjective whether it was more true of men or of women. In the open-ended procedure, subjects were simply asked to list ten

characteristics of men and ten characteristics of women. Once again, stereotypes were defined on the basis of significant differences (at the .05 level) in the frequency with which adjectives were ascribed to men and women. Similar stereotypes were obtained with each method with women being viewed less favorably by both male and female subjects.

More recently, Williams and Bennett (1975) have voiced their concern over the failure of most sex stereotyping studies to specify on an a priori basis the scope of traits to be considered by those making the initial selection of masculine and feminine traits to be rated. They suggest that, as a result of this failure, the initial set of items selected for use in sex stereotyping studies may have been limited in scope due to a failure to consider a sufficiently broad range of representative human traits. According to them, a better approach would involve providing the judges with a diverse list of human characteristics, developed to describe people in general, and asking them to select those which are more typical of men, and those which are more typical of women. Thus, in their study of sex stereotypes in college students, Williams and Bennett used the Adjective Check List (Gough & Heilbrun, 1965) which they felt would provide the necessary scope of traits. In a within-subjects design, subjects were given one copy of the Adjective Check List on which they were asked to indicate whether each trait were more characteristic of males or of females. Since subjects were also allowed to underline a trait if they felt they could not determine that it was more characteristic of one sex than the other, this was really an unforced-choice procedure. The criterion for

the inclusion of a particular adjective in the male or female stereotype was that at least 75% of the subjects of both sexes had indicated that the adjective was characteristic of a particular sex. Traditional sex-role stereotypes were reported for this consensual agreement measure.

Edwards Personality Inventory. Recent studies have at times employed some method by which the subject predicts or produces the responses he feels would be given by a typical male or a typical female. Lunneborg (1970), for example, asked different groups of subjects to predict the answers most men or most women would give to items on Edwards' Personality Inventory (EPI). Patterns of responses given under stereotypic instructions (i.e., "typical" male or female) were compared to those obtained by men and women in Edwards' normative sample who completed the EPI as they would be described "by those people who know you best". Lunneborg found that stereotypic responding exaggerated existing sex differences and created differences that males and females did not normally acknowledge. As is common in most studies of sex stereotyping, males and females were in agreement on the stereotyped characterizations.

Sex Attribution Questionnaire. The Sex Attribution Questionnaire, in which subjects rate on a 4-point scale the degree to which a speaker's attitude is due to his/her gender, was developed by Zeldow and Greenberg (1975). Statements obtained from the validity scales of the Minnesota Multiphasic Personality Inventory (MMPI) and the Femininity Scale of the California Psychological Inventory (CPI) were categorized

as sex-appropriate, sex-discrepant, or sex-neutral. Subjects were asked to read these statements and to indicate the degree to which the attitude expressed was a product of gender. The results revealed that sex attributions were made when the expressed attitude was sex-appropriate but were not made when the attitudes were sex-neutral or sex-inappropriate. Zeldow and Greenberg believe that this means that people perceive the behavior of others in terms of sex roles and can and do discriminate when it is appropriate and when it is inappropriate.

Sex Role Stereotype Questionnaire. A series of studies by the Brovermans and their coworkers (Broverman, Broverman, Clarkson, Rosenkrantz, & Vogel, 1970; Broverman et al., 1972; Rosenkrantz et al., 1968) have used the Sex Role Stereotype Questionnaire (SRSQ) in which subjects are asked to indicate on a bipolar scale the extent to which traits and behaviors characterize adult men, adult women, and themselves. Like the previous approaches, this method also revealed traditional, consensual stereotypes of men and women, with the majority of stereotypic male characteristics considered as more desirable. Although these studies vary somewhat methodologically, in each of them sex-role stereotypes were defined as those items on which at least 75% agreement existed among subjects of each sex as to which pole was more descriptive of the average man than the average woman and vice versa.

Rosenkrantz et al. (1968) first devised the Sex Role Stereotype Questionnaire, consisting of 122 items, to assess sex-role perceptions. In a within-subjects design, college students were asked to imagine that they were meeting a person for the first time and the only thing they

knew in advance is that that person is an adult male or an adult female. They were then asked to rate on the same rating scale, first for one sex and then for the other, the degree to which they expected the item to characterize that person. Subjects also indicated where they would rate themselves on each of the scales. Social desirability was determined by another group of subjects who were asked to indicate which pole of each item was more desirable for the population at large. Rosenkrantz et al. found general agreement among the college students about the stereotypes of men and women which were clearly defined. Although they found that self-concepts differed from stereotyped expectations in that they were less extreme, self-concepts and stereotypes were similar in that females were stereotyped and reported themselves in negatively valued terms.

Perhaps the most interesting use of the Sex Role Stereotype Questionnaire may be found in those studies which have considered the relationship between judgments of mental health and sex-role stereotypes. Since social desirability has been found to be related both to differences between male and female characteristics and to judgments of mental health, Broverman et al. (1970) hypothesized that clinical judgments about the traits characterizing healthy, mature individuals would differ as a function of the sex of the person judged. Since masculine stereotypic characteristics seem to be valued more highly, it was hypothesized that the behavior attributes considered healthy for an adult of unspecified sex would be more often considered by clinicians as more healthy or more appropriate for men than for women. Clinicians were divided into groups which completed the Sex Role

Stereotype Questionnaire for mature, healthy, adult males; mature, healthy, adult females; or mature, healthy, adult persons. Broverman et al. found that clinicians tend to ascribe the more valued male traits more often to healthy men than to healthy women, revealing a strong negative assessment of women (e.g., very emotional, not at all adventurous, illogical, not at all independent). The study also revealed significant differences between the ratings of the healthy adult and the healthy woman but no differences between ratings of healthy adult and healthy male, thus confirming the existence of a double standard of mental health for men and women. Although Nowacki and Poe (1973) have extended these findings of differing conceptions of mental health for males and females to a sample of college students, Harris and Lucas (1976), who also used the Sex Role Stereotype Questionnaire, have recently reported the absence of such stereotyping among social work students. They suggest that standards of mental health in relation to sex-roles may be changing in the light of the feminist movement. A surprising aspect of their study was the finding that while undergraduates showed most of the traditional negatively-valued female sex-role stereotypes, graduate students showed the reverse and actually tended to discriminate against men instead of women.

These findings of existing stereotypic differences between men and women appear to apply also to ideal sex-role concepts of men and women. In a shortened version of the Sex Role Stereotype Questionnaire, Elman, Press, and Rosenkrantz (1970) asked men and women to indicate the point

on each item which is ideal for men and for women, respectively. The results revealed a close parallel between sex-role stereotypes of males and females and concepts of the ideal man and ideal woman.

The procedure used to measure stereotypes on the Sex Role Stereotype Questionnaire has been criticized by Stricker (1977) who was concerned about the manner in which traits were labelled and assigned to a given sex's stereotype. He pointed out that if, on a given trait, e.g., logical, males were given a mean rating of 55 and females were given a mean rating of 50, the scoring procedure would allow the description of males as logical and females as illogical even though the difference between the ratings was small. Since no statistical analysis was provided by the Broverman group, he asserts that there is no indication these differences are even statistically significant. Yet, labels are assigned as if males and females are on the opposite poles of the dimension in question. This is further compounded, he claims, by misuse of pejorative labels. For example, in the case of logic, males are described as logical and females as illogical instead of less logical. If indeed there were cases in which the differences between the ratings of the sexes were small, such labelling would, at the very least, be misleading. In the absence of statistical analysis, it is impossible to determine whether Stricker's concerns are well founded. Yet, his points underline the problems with the bipolar scale measurement of stereotypes when consensual agreement is used to determine the presence of stereotypic responding.

Personal Attributes Questionnaire. Whereas the Sex Role Stereotype Questionnaire asks subjects to make independent ratings of each sex, the Personal Attributes Questionnaire (Spence, Helmreich, & Stapp, 1974) requires subjects to compare directly the typical male and female. The Personal Attributes Questionnaire was derived from an extended version of the Sex Role Stereotype Questionnaire. Spence et al. asked college students to rate either the typical male and female or the ideal male and female on a series of bipolar characteristics. Items on which significant differences in the ratings of the typical member of each sex were reported in several independent samples were chosen for the Personal Attributes Questionnaire. Three subscales were then derived. Items on which the mean ratings of both ideal male and ideal female were toward the feminine end of the scale as defined by the ratings of "typical" female were classified as female-valued; those items for which the ratings of both ideal male and female were toward the masculine end of the scale as defined by ratings of "typical" male were classified as male-valued. Items for which the means differed in direction from the scale midpoint for the two sexes, ideal female ratings being toward the typical female pole and ideal male ratings being toward the typical male pole, were characterized as sex-specific.

Two sets of ratings are made on the Personal Attributes Questionnaire. First, subjects rate themselves on a series of 55 bipolar items on a 5-point scale. Then, they are given an abbreviated description of one pole of each item and are asked to compare the typical male and female directly using a 5-point scale on which one end

indicates the item is more characteristic of men and the other that it is more characteristic of women. Spence, Helmreich, and Stapp (1975) report that, among college students, self-ratings are most often consistent with the stereotypic data provided by the ratings of typical men and women, although more differences are perceived between the typical male and typical female college student than are revealed by the self-ratings.

Comparisons of Survey Methods. As can be seen in the studies reported here, the methodology employed in the study of sex-role stereotypes varies greatly. Few studies have systematically examined the effect of the methodology employed on the results and conclusions concerning sex-role stereotypes. In a recent study, however, Cowan and Stewart (1977) investigated the influence of the methodology and the instruments utilized on sex stereotypes in college students. They compared the stereotypes obtained when different groups of subjects were administered the Adjective Check List, the Sex Role Stereotype Questionnaire, and an open-ended form which consisted of a request for the description of a male and a female. After completion of one of the instruments, subjects were also asked a set of questions on visual imagery designed to determine whether they were responding in terms of generalized concepts of male and female or whether they were responding in terms of a specific person.

Cowan and Stewart's definition of stereotype differs from that used in many of the previous studies. For them an item was considered stereotypic if it was used by 40% of the subjects in their description

of the male and female stimulus cues that differentiated the two descriptions at $p < .01$. Thus, their measure of stereotype takes into account both statistical significance and consensual agreement. Differential stereotypes for men and women were found on the Adjective Check List and on the Sex Role Stereotype Questionnaire but not on the open-ended form.

Cowan and Stewart (1977) suggest that there may be real differences in subjects' perceptions of males and females, but how that difference is expressed and what conclusions can be drawn about these perceived differences is determined by the response alternatives of the instrument. As an example, they cite the stereotype of emotionality presented on the Adjective Check List as compared to the Sex Role Stereotype Questionnaire. On the Adjective Check List, items reflecting a positive aspect of emotionality emerged as significantly more characteristic of an adult female than of an adult male, but the same content item on the Sex Role Stereotype Questionnaire did not produce significant differences in male-female descriptions. Instead, the more negative aspects of emotionality were seen as stereotypic of females. Subjects on both questionnaires then perceived females as more emotional than males, but the characteristics of that emotionality differed on the two instruments.

Another interesting finding of the Cowan and Stewart (1977) study was that the number of items found to be stereotypic on the Sex Role Stereotype Questionnaire was fewer than that reported by Rosenkrantz et al. (1968) even though they employed more subjects and used a larger

p value (i.e., .01 instead of .001) to determine significant differences. They attributed this discrepancy to a reduction in demand characteristics produced by their use of a between- rather than a within-subjects method which was used by Rosenkrantz et al. Examination of responses to the imagery questions revealed that subjects generally reported visual imagery of specific persons while responding to the various questionnaires. This suggests that visual imagery of specific persons may be involved in the stereotyping process. An interesting aspect of this finding is that significantly more females than males reported the use of visual imagery when responding to the female stimulus.

Cowan and Stewart's (1977) study points to the problems encountered in studies using obtrusive methods. First, use of within-subjects designs may provide subjects with an anchor for making ratings and thus may contaminate the second set of ratings. As a result, different stereotypes may be obtained from the same measuring instrument when between- as compared to within-subjects designs are employed. Second, the response alternatives of the instrument may well affect the nature of the stereotypes obtained. In a forced-choice situation, for example, more stereotypes may be produced than would be obtained in an unforced-choice situation. This point is even more telling when referring to the absence of stereotypes on the open-ended form reported by Cowan and Stewart. This indicates that the response alternatives present on any instrument may indeed produce stereotypes that are not found when subjects are asked to provide their own descriptions of the stimulus cues.

Cross-Labelled Child Studies. The aforementioned problems encountered in the use of obtrusive methods have sent some sex-role stereotype researchers in another direction. Several researchers have studied the possible implications of sex-role stereotyping by examining the effects of the sex of the child on adult interpretations of its behavior. (Condry & Condry, 1976; Gurwitz & Dodge, 1975; Lambert, Yackley, & Hein, 1971; Meyer & Sobieszek, 1972; Rothbart & Maccoby, 1966; Seavey, Katz & Zalk, 1975; Sobieszek, 1978). These studies are generally less obtrusive than those discussed previously. Typically, they involve presenting subjects with the voice or videotape of a child which previously has been rated gender-neutral. Subjects, half of whom have been misled as to the child's sex, are asked to rate the child along a number of dimensions. The data are then examined for differences in rating as a function of gender label.

In the earliest study of this genre, Rothbart and Maccoby (1966) used a hypothetical situation to assess parents' reactions to child behavior as a function of attributed sex of child. Specifically, parents of nursery school children were told either that a taped child's voice, independently rated to be sexually ambiguous, was that of a four-year-old boy or that of a four-year-old girl. They were asked to imagine that the child was in the next room interacting with a year-old sibling and to listen to statements made by the child on the tape. After the experimenter had repeated the statement of the child on the tape, parents were asked to write down what they would do or say in response to the child. Parents' responses were coded for their

reactions to the child's aggression and dependency. If attributed sex were important, then it would be expected, in keeping with sex-role stereotyping and social-learning theory, that boys be reinforced for aggressive behavior and girls for dependency behavior. The results indicated, however, that sex of parent interacted with gender label of child, for fathers were found to be more tolerant of both aggression and dependency from girls than from boys, while the reverse was found for mothers. These results are interesting as they suggest that differences between the attitudes and behaviors of mothers and fathers may actually be dependent upon the child's sex.

Lambert et al. (1971) examined parental reactions as a function of gender label in English and French Canadian working-class parents using a modification of the above procedure. Their study differed from that of Rothbart and Maccoby in several respects. First, their parents all had 6-year-old children attending public elementary school; Rothbart and Maccoby's subjects had their three- to four-year-old children enrolled in a parent education nursery school. Second, subjects were run individually at their homes instead of in groups at the school. Third, subjects were assigned a gender label condition on the basis of the sex of their 6-year-old child instead of being matched on sex of child and then randomly assigned to condition. Finally, rather than hearing the experimenter repeat each of the child's statements, parents were given a typed manuscript to follow as they heard the taped voice.

Like Rothbart and Maccoby (1966), Lambert et al. found a few instances of cross-sex permissiveness in which both English and French

Canadian mothers were more permissive with boys than girls and English and French Canadian fathers were more permissive with girls than boys. There were, however, numerous other situations in which both English and French Canadian parents showed a consistent tendency to be harsher with boys than girls. Specifically, parents of boys were less likely to comply with a plea for comfort from boys than girls and were more likely to deal harshly with outbursts of temper from boys than from girls. A cultural difference of interest was that English Canadian parents were more punitive than French Canadian parents in reacting to temper outbursts. In general, however, English Canadian and French Canadian parents were in agreement concerning their differential treatment of boys and girls; a finding which is in contrast to the cross-sex permissiveness reported by Rothbart and Maccoby (1966). Since the samples differed with respect to social class in addition to cultural background, however, the difference in obtained results may reflect socioeconomic rather than cultural differences.

A within- rather than between-subjects design was employed by Meyer and Sobieszek (1972) in their investigation of the effect of perceived sex of child on adult interpretations of its behavior. Nursery school parents, presumed to have high contact with children, and unmarried college students, presumed to have low contact with children, were asked to watch two videotapes, each of a different 17-month-old child playing with toys in a laboratory setting with an experimenter. For half of the subjects, one of the children was identified as male and the other female; for the other half, the sex attribution was reversed. After

each tape subjects were asked to rate the child's behavior on a series of 6-point scales, most of which concerned sex-linked attributes. Although few effects reached statistical significance, Meyer and Sobieszek found that males and those with low contact with children were more likely to respond to the children in terms of sex-role stereotypes, while females and those with high contact with children saw child behavior as having fewer sex-role qualities if the child was perceived to occupy that sex-role. Although females were more likely than males to attribute any characteristics to the children, both males and females rated children of their own sex as having more positive qualities. These findings suggest that males and females may behave differently in their roles as sex-role socializers irrespective of their degree of contact with children. This position has been supported by other research which found that, even among childless adults with no contact with children, males stereotyped behavior significantly more often than did females (Fagot, 1973).

One of the problems with the within-subjects approach used by Meyer and Sobieszek (1972) is that their subjects may have been sensitized to the sex variable when viewing and rating the second child. For this reason, Gurwitz and Dodge (1975) used a videotape of the same child for all their subjects but mislabelled its sex for half of them. The videotape showed a 3-year-old child performing various non-sex-typed activities and interacting with a male interviewer. Subjects were asked to rate the child on a series of personality attributes and ability measures on a 7-point scale, the poles of which had been rated

previously for favorability and masculinity-femininity. Cross-sex effects appear to be the most important finding of this study. On both personality and ability measures, when the child was labelled as a boy, it was rated more positively by female subjects. On the other hand, when it was labelled as a girl, it was rated more positively by male subjects. Gurwitz and Dodge point out that these data are inconsistent with those of Meyer and Sobieszek (1972) who reported that same-sex rather than opposite-sex children were responded to more favorably. They suggest that differences in the design as well as in age of stimulus children may have contributed to the different results obtained. However, since their findings are similar to those reported by Rothbart and Maccoby (1966), Gurwitz and Dodge suggest that preference for opposite-sex children may be a general adult phenomenon.

In order to determine whether observers see differences in a child's emotional behavior as a function of gender label alone, Condry and Condry (1976) had college students rate the same 9-month-old infant's emotional response to four different arousing stimuli (teddy bear, jack-in-a-box, doll, buzzer), half the subjects being told they were observing a boy, and half a girl. Subjects were shown a videotape in which the child was presented with each of the four stimuli on several occasions and were asked to give an overall intensity rating on a 10-point scale of the child's responses to each stimulus along the dimensions of anger, pleasure, and fear. When the infant was labelled as a boy, it was seen as showing more pleasure across all situations than when the infant was labelled as a girl. This tendency was more

pronounced for male subjects. The infant's responses were unambiguous and consistent in most situations (e.g., smiling and laughing to the teddy bear and crying to the buzzer) and few differences between the attributed sexes were found in these cases. In one situation, however, the child's response was ambiguous, for over successive presentations of the jack-in-the-box, the infant became more and more agitated, eventually crying and screaming. In this case, subjects who thought the child was male tended to think he was angry, whereas those who thought the child was female thought she was afraid. Sex of subject and experience with infants interacted with attributed sex of infant. Specifically, males with much experience with infants saw more differences due to the gender label than males with little experience with infants. Females, on the other hand, showed a tendency to give a higher intensity rating of emotion to girls than to boys if they had high experience with infants with the opposite true of females with low experience with infants. Thus, experience with infants may have a differential effect for females and males. Condry and Condry's findings suggest that with other situational variables held constant, the manipulation of gender label alone is sufficient to yield differences in perceived emotional responsiveness. These differences tend to be most obvious in ambiguous situations and to follow the lines of socially accepted sex-role stereotypes.

In contrast to the previous studies, Seavey et al. (1975) investigated adult behavior during an actual interaction with a three-month-old infant, under conditions in which the child was

introduced as a boy, as a girl, or with no gender information given. Subjects were allowed to play with the infant in a room in which there were three toys: a small plastic football, a doll, a teething ring. These adults were found to interact differently with the child as a function of the gender label used or its absence. Specifically, subjects used the doll more when the child was introduced as female than when it was introduced as male. In the absence of gender information, males handled the child less and most often used a neutral toy, whereas females handled the child more and most often used a sex-stereotyped toy. Although this method may be problematical in that subjects found the absence of gender information disturbing and usually asked the experimenter to indicate the child's sex, an interesting finding of this study is that subjects in this condition reported making gender determinations (in most cases, male) and found cues (e.g., lack of hair) in the child's appearance or behavior which supported their choices. Thus, Seavey et al. suggest that gender labels and their associated expectations may be deeply ingrained and that variations in infant behavior may be less important than adult expectations in determining interactions.

As with the more obtrusive studies, variety in the methods employed by the unobtrusive methods may have contributed to the variety of results obtained. For example, use of the within-subjects method in the Meyer and Sobieszek (1972) and Sobieszek (1978) studies may have affected subjects' responses to the second child rated, resulting in differences not found in between-subjects studies (e.g., Gurwitz &

Dodge, 1975). Additionally, the use of widely varying subject populations (e.g., American middle-class versus English and French Canadian working class) may have contributed substantially to the differences in results across studies. In some ways, it is then surprising to find across studies that manipulation of gender label alone is sufficient to produce differences in adult interpretations of and reactions to children's behavior.

As with the general stereotype literature, examination of the research on sex-role stereotyping reveals confusion in the area. In fact, there is even less agreement here on the definition of stereotype and the proper means of measurement than in the literature on ethnic stereotypes. As none of the various methods employed in the study of sex-role stereotypes is completely free of methodological problems, the researcher must decide for himself/herself which to use on the basis of the intended purpose of the research. For example, one might choose to make use of the obtrusive forced-choice method even with its attendant difficulties in order to be able to compare results with those of previous studies. On the other hand, a researcher more interested in the ways in which stereotypes affect interpretations of and reactions to behavior may choose to use more unobtrusive measures of sex-role stereotypes. These measures may indeed prove to be of value in eliminating socially desirable responses, but once again caution must be advised in their interpretation. If the researcher is ultimately interested in effects of subjects' attitudes to men and women or to boys and girls in general, then utilization of these unobtrusive methods may

prove to be misleading due to a lack of correspondence between target and action elements. Subjects may well react differently to a specific stimulus-child than they would to a "typical" boy or girl. Finally, if one is most interested in the general nature of attitude-behavior relations, then it might be wise to combine the obtrusive and unobtrusive methods and use both attitude ratings and reactions to cross-labelled children in the same study (cf. Lambert et al., 1971; Rothbart & Maccoby, 1966).

Sex-Role Stereotypes in Children

Studies of sex-role stereotypes in children are much less common than are those of sex-role stereotypes in adults. As is the case with the literature on adult stereotypes, these studies have used several methods which vary in definition of stereotype and in obtrusiveness. These studies also differ from the adult studies in several other respects. First, many of the studies are not really studies of the sex-role stereotypes of children as much as they are studies of children's understanding and knowledge of adult stereotypes. Secondly, because the subjects are often young children, doll-choice is often substituted for the pencil and paper measure of stereotyping.

In an early study of sex-role stereotyping in children, Smith (1939) asked eight- to fifteen-year-olds whether each of a series of desirable and undesirable traits was more characteristic of boys or of girls. The study was conducted in the classroom where the questions were read to the subjects who circled the appropriate response on an answer sheet. Although he found that association of desirable traits

with males varied with age, Smith assessed desirability of the traits by asking a group of teachers for their opinions rather than a group of children similar to his subjects.

Like Smith (1939), Williams et al. (1975) and Best et al. (1978) used a forced-choice format in their determination of the degree to which children were aware of adult (i.e., college student) sex stereotypes. To do this, Williams et al. (1975) constructed children's stories to represent specific stereotypes they had previously obtained from adults. Twelve stories were written to represent male stereotypes and twelve for female stereotypes. Stereotypes were defined by consensus, that is the criterion for inclusion of a specific stereotype in the study was a minimum of 75% agreement among college students of both sexes that a particular adjective was descriptive of a particular sex. In order to indicate the sex of which a given trait was more characteristic, kindergarten, second-, and fourth-grade students were presented with pictures of adult males and adult females and asked to choose between them. Unfortunately, this procedure produced a story-picture confound. Different pictures of males and females were used for each story and an examination of a subgroup of children receiving a different order of stimuli revealed order effects. This limited the usefulness of any item analyses since it suggests that the percentage of children choosing the male or female figure on certain items may have been influenced by irrelevant, nonsexual characteristics of the pictures.

These limitations were corrected in the follow-up cross-cultural research (Best et al., 1978), however. In this study, silhouettes were used as male and female figures and the Sex Stereotype Measure of the first study was revised to include thirty-two instead of twenty-four stories which were judged to be stereotypic by 80% of a sample of college students of both sexes. Five- and eight-year-olds in Ireland, England and the United States were administered the Sex Stereotype Measure aurally on an individual basis, while eleven-year-old Americans received a group administration in which they read the items and circled the appropriate figure. Like Williams et al. (1975), Best et al. reported evidence that the male stereotype is learned at an earlier age than the female stereotype.

A variation of the doll-choice technique often employed to measure ethnic attitudes was used by Flerx, Fidler, and Rogers (1976) in their assessment of sex-role stereotypes among kindergarten children. By pointing to either a male or female doll, children indicated who possessed certain characteristics, played particular roles, or participated in specific activities. As children were informed that they could point to both dolls should the need arise, this was an unforced-choice procedure. After finishing a series of questions for boys' and girls' roles, the children were given items assessing their attitudes and beliefs about parents. In this study stereotypes were determined on the basis of agreement with the response considered stereotypic in previous empirical research (e.g., Kohlberg, 1966; Rosenkrantz et al., 1968). Unfortunately, methods used to obtain and

define sex-role stereotypes differed in this research which makes understanding the nature of agreement obtained in the Flerx et al. study somewhat unclear. This is further compounded by the fact that some of the previous research utilized college students or other adults as subjects, whereas others used children as subjects. Thus, in this study, stereotyped responding meant agreement with stereotypes found in previous research sometimes for adults and sometimes for children.

In response to several of the aforementioned methodological concerns, Silvern (1977) constructed a sex-role questionnaire comprising stereotypes from various sources and asked a group of seventh-grade children to identify those likely to be viewed as sex-typed by other children. A particular item was considered stereotypic if the comparison was significant at $p < .01$ and at least 60% of the responses fell on one side of the midpoint of the rating scale and not more than 10% of the responses fell on the other side. Once those items considered stereotypic by seventh graders were identified, they were presented to fourth and sixth graders using a 5-point Likert-scale format. In contrast to previous findings, Silvern found that children of both sexes perceived their own sex role as more desirable.

In a procedure similar to that used by Best et al. (1978) and Flerx et al. (1976), Kuhn et al. (1978) assessed the sex-role stereotypes of two- and three-year-olds. In this case, subjects were asked to indicate the sex of which certain traits, activities, and roles were more characteristic. Unlike the Flerx et al. (1976) study, this procedure was forced-choice as subjects were asked to indicate their choice by

handing one of a set of paper dolls, labelled Lisa and Michael, to the experimenter. Items were considered stereotypic if statistically significant differences were found between the frequencies of traits labelled male and female.

Like Silvern (1977), Koblinsky et al. (1978) utilized an unforced-choice format in the assessment of sex-role stereotypes among fifth graders. In this study subjects were asked to check whether an item applied more to boys, more to girls, or applied equally to both sexes. Items were considered stereotypic if there was at least 65% agreement among the children as to sex of greater applicability. An interesting finding of this study was that a memory test revealed that information consistent with sex-role stereotypes was remembered significantly better than inconsistent information.

The above studies used methods that were largely obtrusive. Birnbaum et al. (in press), however, assessed stereotypes about sex differences in emotionality in preschoolers using a less obtrusive method. In this study, preschool subjects were shown a series of puppy faces which were neutral with respect to gender but which depicted various emotions. Children were asked to identify the gender and then the emotion of each of the stimulus faces. Items were considered stereotypic on the basis of statistical significance at $p < .05$. Anger was found to be associated with maleness, whereas happiness, sadness, and fear were associated with femaleness.

In his study of sex-role stereotypes among fifth and sixth graders, Perloff (1977) used Baruch's adaptation of the Sex Role Stereotype

Questionnaire. Children were asked to imagine that they were meeting someone for the first time and that the only information they had beforehand was that the person was an adult male or an adult female. They were then asked to rate the hypothetical male or female on certain stereotypic characteristics. Perloff's definition of "stereotypic" was, as for Birnbaum et al. (in press), determined by statistical significance; that is, an item was considered stereotypic if one of the sexes was rated as possessing a given trait significantly more than the other sex at $p < .05$.

Stereotypes About Emotionality in Children

The present research on stereotypes about sex differences in emotionality derives from the Birnbaum et al. (in press) study in which preschool children were found to associate anger with maleness and to associate happiness, sadness, and fear with femaleness. Previous research on sex-role stereotypes in children provides little information concerning stereotypes about sex differences in specific emotions. Generally, studies merely ascertain that females are thought to be more emotional than males without following up whether this holds for specific emotions (e.g., Williams et al., 1975).

There is, however, some information, primarily in the case of fear, provided by several of the aforementioned studies. Smith (1939) found that, among both male and female eight- to fifteen-year-olds, fear is considered more characteristic of girls than of boys. Likewise, Koblinsky et al. (1978) reported that among their fifth-grade subjects fear was considered to be stereotypic of girls.

Silvern (1977) and Kuhn et al. (1978), on the other hand, present contrasting data. Kuhn et al. found no stereotype for fear among their two- to three-year olds nor did Silvern among fourth and sixth graders.

In addition, Silvern reported finding no stereotype for happiness, while Smith's (1939) data fail to indicate any evidence of a stereotype for anger. No other studies report testing for and/or finding any other stereotypes for specific emotions in children.

There are then several interesting questions arising from this literature. First, are the findings of Birnbaum et al. generalizable beyond the stimulus set of puppy faces to real children? Some of the responses of the children in that study suggested that they may be (e.g., "Should be a boy, he's mad." "My daddy's a boy and he's angry."). The evidence provided by the literature cited above, however, is less clear. Some studies provide evidence for some of these stereotypes (i.e., fear), whereas others suggest that stereotypes about sex differences in certain emotions are nonexistent. Unfortunately, studies vary so greatly with respect to age of subject, methodology, and definition of stereotype, that it is impossible to ascertain at this time whether or not children possess stereotypes about sex differences in emotionality for real people. This question was addressed in the first study done as part of this dissertation.

Possible Sources of the Children's Emotionality Stereotypes

Assuming for the moment that children do possess stereotypes about sex differences in emotionality, what are their possible sources? Mischel (1970) suggests that parents' stereotypes about the nature of

sex-appropriate behaviors for boys and for girls are reflected in their sex-role training methods. At an early age, children learn the differences in parental expectations concerning sex-appropriate behavior. In fact, Fauls and Smith (1956) have demonstrated that five-year-olds already are aware of parental expectations of behavior consistent with each of the sex roles. According to social learning theory, sex-typed behaviors are acquired through the learning process (Mischel, 1966). A child first learns to discriminate sex-typed behaviors, then to generalize from specific learning situations to new situations, and then to perform sex-typed behavior. Acquisition of sex-typed behavior may result from observational learning from live or symbolic models or from direct reinforcement of specific sex-appropriate behaviors. The child's attitudes concerning sex-appropriate behaviors may also be acquired through the same process. Differences in the attitudes of the sexes to specific stimuli may arise through their own conditioning histories or through observational learning of the labelling of behaviors with respect to their appropriateness or inappropriateness for the sexes.

Observed Sex Differences. One source of the children's stereotypes could be their observation of actual sex differences in emotionality, which may be either biologically or environmentally determined. Perhaps males are in fact more often angry than are females, while females are more often happy, sad, and fearful. If so, then the children's stereotypes might simply mirror behavior that they have observed in other children or adults. The existing data, however, provide support

for this hypothesis only in the case of anger. Although these data are subjective as they are based on parents' diaries, they do provide some support for the contention that boys do in fact show anger more often than do girls (Maccoby & Jacklin, 1974, p. 180).

The accuracy of the children's stereotypes about happiness and sadness is difficult to assess on the basis of existing data. Cameron (1975) found that females are more likely than males to feel happy or unhappy rather than neutral. However, as this result was based on self-reports, it is possible that it simply reflects a greater willingness of females to report positive and negative rather than neutral emotional states. Some support for this latter interpretation is provided by Emmerich (cited in Maccoby & Jacklin, 1974) who found that when adults rate the behavior of children they find no sex differences in happiness and unhappiness.

There is, however, some conflicting evidence in the case of fear. Some studies find that girls show a fear of strangers at a younger age than boys (Robson, Peterson, & Moss, 1966), whereas others have not found this to be the case (e.g., Bronson, 1972). Jersild and Holmes (1935) found that, at two years of age and older, girls showed more intense fear than boys to fear-provoking stimuli, but there were no differences in the percentages of each sex developing fear to any of the stimulus situations. Although girls are rated more fearful by themselves and by their teachers, Maccoby and Jacklin suggest that these sex differences may be due to boys' lesser willingness to admit to fears. In view of the conflicting evidence, Maccoby and Jacklin

conclude that there is little unambiguous evidence for actual sex differences in fear. Block (1976), however, has suggested that the same data Maccoby and Jacklin use to conclude that there are no differences in the expression of fear may be used equally to support the contention that females express more fear than males. Thus, the evidence for sex differences in fear is at best equivocal.

In a recent study, Allen and Haccoun (1976) found that female college students reported greater responsiveness (i.e., feeling of emotion) than males for sadness, fear, and joy. Although these data may merely reflect a greater willingness of females to report the feeling of affect, they suggest that there may well be sex differences in emotionality. Of further interest is Allen and Haccoun's finding that females reported greater expressiveness than males for fear, sadness, joy, and anger. Taken together, these findings suggest that males and females may differ in both the experience and expression of emotion. These data then provide some evidence for children's observation of sex differences in these individual emotions as a source of their stereotypes, at least in the cases of happiness, sadness, and fear.

Whereas Allen and Haccoun report finding greater expressiveness among females for specific emotions, there are several other studies which suggest that females in general are more emotionally expressive than males. Buck, Savin, Miller, and Caul (1972) and Buck, Miller, and Caul (1974), for example, found that women were more effective in communicating their emotional responses than men. On the other hand, Buck, Worthington, & Shiffman (1973) and Buck (1975) reported finding

few differences among boys and girls in the communication of emotional responses. Thus, they have suggested that the differences found between adult males and adult females probably results from sex-role learning rather than from innate differences between the sexes. It is possible, of course, that adult sex differences in emotional traits might be a function of the differential opportunity to express such traits. The fact that males are generally discouraged from freely expressing their emotions lends support to this hypothesis. Moreover; there is ample physiological evidence that males inhibit overt displays of emotion (Buck, 1976). Furthermore, Mazanec and McCall (1976) report that males attend less to expressive cues than do females. Thus, females might make more accurate inferences about emotions in others. This is further supported by Gitter, Black, and Mostofsky (1972) who found that females were more accurate expressors of emotion. In addition, numerous studies have found that girls are more empathic than boys, suggesting that they are more sensitive to the feelings of others (M.L. Hoffman, 1977).

Examination of the research then provides some (albeit limited) support for observation of real sex differences in the expression of emotions as a possible source of children's stereotypes about sex differences in emotionality.

Parental Attitudes. Another source of children's stereotypes may be the attitudes of their parents. Yet, few studies have asked parents directly how they believe the sexes do in fact differ. Two exceptions are Rothbart and Maccoby (1966) and Lambert et al. (1971) who used the same instrument in obtaining parents' perceptions of how similar or

different boys and girls are in their behaviors and reactions. Parents could say that an item in their experience applied more to girls, more to boys, or that they saw no boy-girl differences. In a second part of the questionnaire, parents were asked their opinions as to whether sex-role differences in behavior should exist by indicating whether it was important or not for boys and, separately, girls to possess a particular trait.

Neither Rothbart and Maccoby (1966) nor Lambert et al. (1971) provide an item analysis of the questionnaire but Maccoby and Jacklin (1974) have done an item analysis of the Lambert et al. data. They report that the groups of English and French Canadian parents employed in the study both thought that the typical behavior of boys and girls was different on many items, but their values concerning how the two sexes ought to behave were quite similar. For example, boys were described as being more likely to be rough at play, be noisy, defy punishment and be competitive; whereas girls were described as more likely to be helpful, be neat and clean, be a tattletale, cry or get upset, and be easily frightened. But, when asked which of these characteristics they thought it was important for boys and girls to have (or not to have), parents said they thought it was important for both boys and girls to be neat and clean, not to be easily angered, not to cry, and to defend themselves from attack and be competitive. There were few differences in values held for the behavior of sons and daughters. Maccoby and Jacklin suggest that these studies indicate that parents are trying to socialize children of both sexes toward the same

major goals, but that they believe they are starting from different points, with each sex having a different set of natural assets and liabilities.

These results suggest that parents may indeed be an important source for the learning of sex stereotypes in children. Specifically, parents indicated that they thought girls were more likely to cry or get upset and be easily frightened. This latter finding is consistent with the children's stereotype about fear. Thus, it seems particularly important to consider parents' stereotypes as a possible antecedent of their children's stereotypes about sex differences in emotionality.

The role of parental attitudes appears even more important in view of a study by Rubin, Provenzano, and Luria (1974). Rubin et al. had parents of newborns rate their day-old babies along a number of dimensions. Although male and female babies did not differ in terms of weight, length or APGAR score, the parents perceived boys and girls quite differently. Baby boys were rated as being firmer, larger-featured, better coordinated, more alert, ~~stronger~~ and hardier; while the baby girls were rated as softer, finer-featured, more awkward, and more delicate. Fathers and mothers rated the babies in the same fashion, although fathers' ratings were more extreme. Surprisingly, these ratings were made on the basis of minimal interaction with the children; fathers had only viewed the babies through an observation window. These findings suggest that later childhood sex differences might well result from differences in how the sexes are expected to differ, which in turn affects how they are treated.

The findings cited above attest to the possible importance of parental attitudes in the development of children's stereotypes. Expectations of sex differences could well affect the manner in which parents interact with and respond to their children. This, in turn, may provide the bases on which children develop their stereotyped expectations of differences between men and women.

Differential Reinforcement. Differential reinforcement of the sexes has been proposed as another major mechanism in the process of sex-role socialization. According to social learning theory, parents and other socializing agents selectively reinforce behavior which they consider to be sex-appropriate (Mischel, 1966, 1970). Children's awareness of the behaviors which are associated with reinforcement for either sex may then serve as a basis for their sex-role stereotype formation.

There is presently some controversy in the sex-role literature about the importance of differential treatment of the sexes. Maccoby and Jacklin (1974) conclude that there is little evidence that boys and girls are shaped toward behaviors which are part of sex stereotypes. They suggest, furthermore, that there is remarkable uniformity in the socialization of the sexes. Several studies, however, do provide evidence for differential treatment of the sexes. Moss (1974), for example, reports finding consistent differences in parents' behavior toward male and female infants in that parents engaged in more social behaviors with girls than boys. Likewise, Frisch (1977) reports differential treatment by parents of male and female 14-15-month-old infants.

Block (cited in Fagot, 1978) has recently questioned the contention that parents do not differentially socialize the sexes. Instead, she points to numerous studies, including several cross-cultural investigations, as evidence of consistent differences in the treatment of the sexes. This evidence reports that consistent sex differences in behavior are found by three years of age and that both homes and schools provide differential treatment of boys and girls (Birns, 1976).

Fagot (1978) suggests that the contradictory findings in the literature on the question of whether the sexes are differentially socialized are due to the different ways in which sex differences in children are defined, and to confusion between behavioral and dispositional (e.g., stereotypes) variables. Thus, when parents are asked to determine the sex-appropriateness of given behaviors or are observed interacting with children, differences in the definitions employed by the various researchers may preclude the finding of consistent results.

In a recent review, L.W. Hoffmann (1977) concludes that there are, in fact, differences in the ways in which parents treat girls and boys. Moreover, she specifically reports that both parents encourage sons more than daughters to control their expression of affect. Similarly, Fagot (1974) found that fathers encouraged sex-appropriate play in their children. Rabban (1950) also found that parents reported directing children in accordance with their perceptions of the appropriate role for the child. In sum, there is adequate evidence of parents' differential responding as a function of sex of child.

Examination of differential treatment of the sexes is problematical, for it requires assessment of parent-child interactions. Block (1976) contends that current observational methods are unreliable and suggests that parent ratings may be able to reveal relationships which are beyond the current capacity of objective observational measures. Asking parents about their socialization practices in retrospect may also be unreliable; however. Fagot (1978) suggests, for example, that for young children parental stereotypes and description of socialization practices do not coincide well with the actual process of sex-role socialization.

Rothbart and Maccoby (1966) and Lambert et al. (1971), however, measured parental socialization practices in a more indirect manner by having parents respond to the taped statements of a stimulus child imagined to be their own. Rothbart and Maccoby found evidence of cross-sex permissiveness rather than of consistent differential treatment of the sexes, but Lambert et al. reported numerous occasions on which parents differentially treated behaviors as a function of sex of child.

In a method somewhat similar to that used by Rothbart and Maccoby (1966) and Lambert et al. (1971), Atkinson and Endsley (1976) presented parents with a questionnaire containing a series of hypothetical situations involving their own sons or daughters interacting with others in sex-stereotyped ways. Parents were asked whether they liked their child's behavior in a given situation, whether they would try to change it, and how important it was that it be changed. Atkinson and Endsley

found that mothers and fathers liked more and more often encouraged feminine behaviors in their daughters and masculine behaviors in their sons. This hypothetical-situation procedure appears to hold promise for the assessment of parents' socialization practices. It has an advantage over traditional survey methods in that it provides more correspondence between target and action elements (cf. Azjen and Fishbein, 1977), and thus, should be more useful as a predictor of actual parent behavior.

Although Block (cited in Fagot, 1978) has reported that general expression of affect is discouraged more in sons than in daughters, no studies have systematically examined whether parents differentially reinforce the emotional behavior of their children. Therefore, the third study in the following dissertation research was addressed to this question.

Television. As television has become increasingly prominent as a socializing agent in today's world, the question of its contribution to the furthering of sex-role stereotypes has been of increasing interest. Recently a number of studies have attempted to determine whether television, particularly television aimed at children, generates stereotyped portrayals of males and females. This research is founded on the beliefs of the social learning theorists (e.g., Mischel, 1966) that observational learning from symbolic models such as those portrayed on television are an important part of the child's acquisition of sex-role behavior. In terms of the preschool child, this may provide a crucial part of learning the sex role since it has been noted that children spend more time watching television than in any other single activity except sleep (Sternglanz & Serbin, 1974).

Television has been indicted in children's sex-role stereotyping as well, for several studies have reported that heavy viewers of television possess more traditional sex-role stereotypes than do light viewers (Beuf, 1974; Frueh & McGhee, 1975). In addition, there is evidence that children may learn stereotypes about physical appearance, foreigners, and ethnic minorities from the mass media (Stein & Friedrich, 1975). The influence of the media on attitudes appears to be greatest when children have little personal contact with the group in question (Greenberg, 1972). In general, the research appears to show that stereotypes portrayed on TV are an important source of children's learning, especially when the groups have little personal contact.

Stereotyped presentation of women and the female role on television is well-documented (Stein & Friedrich, 1975). This presentation is not limited to prime-time television of which preschool children may see a limited amount. Sternglanz and Serbin (1974) studied the male and female models presented on ten commercially-produced children's programs and found striking differences both in the number of male and female models presented and in the behaviors which were emitted by male and female characters. Males appeared more than twice as often as females in the programs and were more often portrayed as aggressive and constructive, while females were most likely to be shown as deferent. Men were more often rewarded for their behavior with women usually receiving no consequence. An exception to the latter was the finding that women were more often punished for high level activity than were males. Thus, not only is a female model present less often, when one is

present she is most often ignored for her behavior or punished if it consists of much activity. Certainly this must have some effect on the preschool children who spend so much time watching the television.

The greater presence of males on television programs has not abated significantly since Sternglanz and Serbin's 1973 examination. Seggar (1977), for example, reported that the proportion of women in dramatic roles increased from 1971 to 1975 from 33% to 54% but that women were still portrayed proportionately less than men in significant roles except in bit parts at a ratio of approximately 70% to 30%. Nolan, Galst, and White (1977) likewise report a male-to-female character ratio of 74% to 26%.

With respect to emotionality, Long and Simon (1974) found that women in Saturday morning and late weekday afternoon children's programs were portrayed as over-emotional in the traditional view of women as "dependent and performing expressive and socio-emotional roles within a family context". Similarly, Busby (1975) found in a 1974 analysis of commercial network programs aimed at children that females were portrayed as more emotional than males.

In a summary of media research findings, Busby (1975) points out that (1) research has found that media users personalize media content and become directly involved in it; (2) children use the media to gain insight into the roles they will later fill in life; (3) children model behavior they see on television; (4) the sex of viewer is related to the characters who are watched on television. The last finding, reported by Maccoby (1964), found specifically that children attend most to

characters of their own sex. In addition, Schramm, Lyle and Parker (1961) found that girls watched programs related to adult responsibilities (i.e., domestic activities), whereas boys watched adventure programs. Furthermore, Lyle and Hoffman (1972) reported that preschool boys recognized more male characters from TV, whereas preschool girls recognized more female characters.

Bushy (1975) cites a paper by Miller and Reeves which reported that a survey of children found that children chose characters of their own sex as models for their behavior. Since these characters are stereotypically presented, it is conceivable that television is directly or indirectly reinforcing or teaching these stereotypes. Beuf (1974) reports that more stereotypical occupational choices were made by children who were heavy rather than light TV viewers. In the same study children gave male tasks higher ratings of importance.

There is ample evidence that children imitate what they see on television (e.g., Bandura, 1965; Bandura, Ross, & Ross, 1963; Hicks, 1975). Thus, it seems reasonable that children who observe stereotypic presentations of the sexes on TV will imitate them. This is particularly true of low income and minority group children who have been shown to believe and emulate more of what they see portrayed on television (Greenberg & Reeves, 1976).

These findings indicate that television presents a stereotypic model of males and females which may affect the child's sex-role development and his perception of sex differences. Television then must be considered as an important influence in the learning of stereotyped

sex roles and could well be influential in children's learning of stereotypes about sex differences in emotionality. This question was addressed in the fourth study done as part of this dissertation.

Summary and Conclusions

Several conclusions may be reached from the foregoing literature review. First, although there is some consensus that stereotypes are generalizations about the prevalence of a given trait within a group, there is little agreement in the general stereotyping literature as to the proper means of measuring stereotypes or as to how stereotypes are acquired. The variation of typical stereotype methodology proposed by Brigham (1971), in which subjects indicate the percentage of a group thought to possess a given trait, and the new quantitative and individual measure of stereotyping based on Bayes' theory proposed by McCauley and Stitt (1978) appear to be promising approaches for future research in this area.

Second, the sex-role stereotype literature as well yields little agreement on the definition and proper means of measuring stereotypes. Here, sex-role stereotypes are generally defined either in terms of group consensus or in terms of statistical significance. Although some sex stereotypes are commonly found across studies, the variety in reported stereotypes may result from the variety of methods used to obtain them. The sex-role stereotype researcher may choose between within- and between-subjects designs and obtrusive or unobtrusive methods. If s/he chooses an obtrusive approach, s/he must then determine whether to use a forced- or unforced-choice procedure.

Although there are advantages and disadvantages to each approach, in the end, the decision as to type of method employed to measure sex-role stereotypes is dependent upon the researcher's interests.

Third, with the variety of methods employed, it is somewhat surprising to discover that manipulation of gender labels alone is apparently sufficient to produce differences in adult interpretations of children's behavior.

Fourth, studies of stereotyping in children have primarily measured children's knowledge of adult stereotypes rather than children's stereotypes per se. Although previous studies have provided contradictory results for stereotypes about sex differences in emotionality in children, Birnbaum et al. (in press) have provided evidence for such stereotypes. At this point, it is difficult to reconcile the differences in obtained results as studies have employed varying methods, definitions, and ages of subjects.

Finally, examination of possible sources of the children's stereotypes reported by Birnbaum et al. reveals that there is some support for observed sex differences in emotionality and for parental expectations of such sex differences, but there is no evidence concerning the differential reinforcement of emotional behavior or the possible role of television in the development of children's emotionality stereotypes.

Description of the Research Program

The present research consists of four studies. The first study was designed as a replication and extension of the Birnbaum et al. (in

press) study which, using an unobtrusive method, found stereotypes about sex differences in emotionality in preschool children. The present study used the obtrusive method of simply asking children whether a given emotion is more characteristic of boys or of girls to ascertain whether the children hold these attitudes for real children. This method has the advantage of a higher correspondence between attitudinal and behavioral targets than the earlier study (i.e., boys and girls versus puppies). In addition, since previous research (e.g., Rabban, 1950) has suggested that sex-role stereotypes may be even stronger among lower-class children than among those from middle-class and professional families, the attitudes of a group of daycare children from working-class families were compared to those of a group of preschool children from professional families.

The remaining three studies were designed to examine some of the possible sources of the children's stereotypes, viz., parental attitudes, parents' reactions to their children's behavior, and children's television programming. The first of these studies assessed parental attitudes about the expression of various emotions in boys and in girls. The questionnaire used in this study employed an obtrusive method whereby subjects indicated, on separate 5-point scales, the frequency and intensity they perceived and believed optimal in boys and in girls.¹ Since previous research using subjects of varying social class has yielded contradictory results, suggesting that social class may be an important variable, the attitudes of middle-class preschool parents were compared to those of working-class daycare parents. A

group of college students was also employed as subjects to provide a basis for comparison with previous research.

The second of the studies investigating possible sources of the children's stereotypes also employed college students, as well as middle-class preschool and working-class daycare parents as subjects. The purpose of this study was to consider differential treatment of the sexes as a possible source of the children's stereotypes by assessing parents' reactions to their children's emotional behavior in hypothetical situations. While parents were asked to imagine their own child in each situation, college students were assigned to gender condition. Subjects in this study responded to a questionnaire consisting of four situations each about their child's expressing anger, happiness, sadness, and fear. They were then asked whether they would encourage their child's feeling the emotion in that situation, neither encourage nor discourage their child's feeling the emotion or discourage their child's feeling the emotion in that situation. Because of the high correspondence between attitude and behavior targets, it was felt that this more unobtrusive approach would provide a good measure of actual behavioral responses.

The final study of the thesis examined whether television shows aimed at and/or popular with children provided a possible source of the children's stereotypes by consistently linking specific emotions with characters of a particular sex. In this study, a random selection of children's programs was subjected to content analysis for the association of gender and emotion.

Thus, this research attempted a replication and extension of the earlier findings of stereotypes about sex differences in emotionality in preschool children by providing for higher correspondence between attitude and behavior targets and by examining possible social class effects. In addition, the possible roles which parental attitudes, parental reactions to emotional behavior, and television might play in the development of these stereotypes were considered.²

Study 1

The purpose of this study was to determine whether preschool children possess stereotypes linking gender and emotion. Previous research (Birnbaum et al., in press) using an unobtrusive method (i.e., asking for the gender and emotion of puppy faces) has suggested that preschoolers do indeed associate gender and emotion, anger being associated with males and happiness, sadness, and fear with females. The present study was conducted to determine whether the above findings are stimulus specific or whether preschool children hold these same attitudes about gender and emotion for real children. In order to promote high correspondence between target and action elements (Azjen & Fishbein, 1977), a more obtrusive measure (i.e., asking whether an emotion were more characteristic of girls or of boys) was used. Additionally, since there is reason to believe that children from lower-class families may possess even stronger stereotypes than those from middle-class and professional families (Hall & Keith, 1964; Rabban, 1950), the attitudes of a group of preschool children from professional families were compared to those of a group of daycare children from nonprofessional families.

Method

Subjects. Eighty-six preschool children, 3 to 6 years of age, served as subjects. Thirty-seven of these children, 22 males and 15 females, were obtained from the Carleton University Preschool in Ottawa, Ontario. The remaining forty-nine subjects, 24 males and 25 females, were obtained from the Andrew Fleck Daycare Centre in Ottawa, Ontario. As permission to use the subjects rested upon the preservation of each subject's anonymity, specific data about mean age and socioeconomic status are unavailable. However, ninety percent of the daycare families were government subsidized, because of low income, while none of the preschool families were eligible for government subsidies as their income was sufficiently high.

Materials. A short questionnaire comprising four questions was used in the study. Each child was asked each of the following four questions about emotion:

Who are angry more, boys or girls?

Who are happy more, girls or boys?

Who are sad more, boys or girls?

Who are afraid more, girls or boys?³

Both emotion order (i.e., anger, happiness, sadness, fear) and gender response order (i.e., boys or girls, girls or boys) were varied to control for possible order effects. Subjects were randomly assigned a given order when they were selected to participate in the study.

Procedure. All subjects were tested individually by the female experimenter in the daycare or preschool setting. The experimenter

approached each subject when s/he was playing by herself/himself and showed the child her notebook and pen. She then told the child that "I have some questions about children here and I don't know the answers. Do you think you can help me?" If the child agreed to help, the experimenter asked him/her the questions in the predetermined random order and manually recorded his/her responses. When questioning was finished, the experimenter thanked the child and allowed him/her to return to his/her activity. Children who were unwilling to participate on the first occasion were approached at another time and asked again. If subjects replied inappropriately or failed to choose one gender, the question was repeated and both initial and final replies were recorded. In only one case (preschool male, happiness) did a subject fail to choose one gender and in this case, the child repeated his answer upon requestioning.

Results

Preschool Subjects. A separate analysis was conducted for each of the four emotions to determine whether the subjects tended to associate a given gender with that emotion. Table 1 shows the proportion of gender emotion attribution for preschool subjects. Preliminary chi-square analyses indicated that in the case of each emotion there was no significant difference between male and female subjects in the attribution of gender and emotion (anger, $\chi^2(1) = .044$; happiness, $\chi^2(1) = 2.22$; sadness, $\chi^2(1) = .94$; fear, $\chi^2(1) = 1.05$; all p 's $> .05$). Consequently, the data from the two sexes were pooled for subsequent analyses. Analysis of the frequency with which subjects attributed a

Table 1
Proportion of Gender-Emotion Attribution by Sex of Subject
for Preschool Subjects

Emotion	Male Subjects ^a		Female Subjects ^b	
	Boys	Girls	Boys	Girls
Anger	.77	.23	.80	.20
Happiness	.33	.67	.07	.93
Sadness	.32	.68	.53	.47
Fear	.14	.86	.33	.67

^a_n = 22 except 21 for happiness

^b_n = 15

given sex with each emotion using a chi-square goodness-of-fit test revealed that maleness was associated with anger ($\chi^2(1)=11.92$, $p < .001$), whereas femaleness was associated with happiness and fear ($\chi^2(1)=11.12$, 11.92 , respectively, p 's $< .001$). Sadness, however, was not attributed to either sex ($\chi^2(1)=.97$, $p > .05$).

Daycare Subjects. Table 2 shows the proportion of gender-emotion attribution for daycare subjects. Since preliminary chi-square analyses indicated that there were no significant differences between male and female subjects in the cases of anger, sadness, and fear ($\chi^2(1)=1.49$, $.24$, $.008$, respectively, all p 's $> .05$), the data from the two sexes on these emotions were pooled for subsequent analyses. Chi-square goodness-of-fit tests revealed that daycare subjects associated anger with maleness ($\chi^2(1)=22.22$, $p < .001$) and associated sadness and fear with femaleness ($\chi^2(1)=4.60$, $p < .05$ and $\chi^2(1)=7.36$, $p < .01$, respectively). Happiness was found to be associated with femaleness for female subjects only (males, $\chi^2(1)=.66$, $p > .05$; females, $\chi^2(1)=14.44$, $p < .001$).

Both Samples Combined. Table 3 shows the proportion of gender-emotion attribution for daycare and preschool subjects combined. Preliminary analyses indicated that there were no significant differences between male and female subjects in the cases of anger, sadness, and fear ($\chi^2(1)=1.07$, 1.17 , $.15$, respectively, all p 's $> .05$). Consequently, the data from the two sexes on these emotions were pooled for subsequent analyses. Since the preliminary analysis was significant in the case of happiness ($\chi^2(1)=7.35$, $p < .01$), further analyses were

Table 2

Proportion of Gender-Emotion Attribution by Sex of Subject
for Daycare Subjects

Emotion	Male Subjects ^a		Female Subjects ^b	
	Boys	Girls	Boys	Girls
Anger	.75	.25	.92	.08
Happiness	.42	.58	.12	.88
Sadness	.29	.71	.40	.60
Fear	.33	.67	.28	.72

^a $\underline{n} = 24$

^b $\underline{n} = 25$

Table 3

Proportion of Gender-Emotion Attribution by Sex of Subject
for All Subjects

Emotion	Male Subjects ^a		Female Subjects ^b	
	Boys	Girls	Boys	Girls
Anger	.76	.24	.88	.12
Happiness	.38	.62	.10	.90
Sadness	.31	.69	.45	.55
Fear	.24	.76	.30	.70

^a_n = 46 except 45 for happiness

^b_n = 40

conducted separately for each sex subject. Analysis of the frequency with which¹ subjects attributed a given sex with each emotion using a chi-square goodness-of-fit test revealed that maleness was associated with anger ($\chi^2(1)=33.91, p < .001$), whereas sadness and fear were associated with femaleness ($\chi^2(1)=5.63, p < .02$ and $\chi^2(1)=18.60, p < .001$, respectively). Although both male and female subjects numerically associated happiness with femaleness, this effect reached significance for female subjects only (females $\chi^2(1)=25.60, p < .001$; males, $\chi^2(1)=2.68, p > .05$).

Because of the differences in obtained effects in samples, a separate chi-square analysis was performed to test for independence of the population and attributed gender variables. The data from the two sexes were pooled in the cases of anger, sadness, and fear as the earlier analyses indicated the absence of significant differences between the sexes. Analysis was conducted separately for the sexes for happiness as previous analysis revealed a significant difference between the sexes. These analyses revealed no significant differences between the samples on any of the emotions (anger, $\chi^2(1)=.12$; sadness, $\chi^2(1)=.11$; fear, $\chi^2(1)=.47$; happiness - males, $\chi^2(1)=.06$; happiness - females, $\chi^2(1)=.00$, all p 's $> .05$).

Discussion

The results of this study clearly indicate that preschool-aged children possess definite attitudes about sex differences in emotionality which they hold for real children. Specifically, they associate anger with maleness and happiness, sadness, and fear with

femaleness. Therefore, these results are consistent with those reported by Birnbaum et al. (in press) in the earlier study which used a more unobtrusive method.

Although these findings are generally consistent with those of the earlier study, there is one specific difference. Unlike the previous study in which no sex of subject differences were found, in the present study the attribution of happiness with femaleness was found to be significant for female subjects only. This sex of subject difference is generally not found by other studies (e.g., Kuhn et al., 1978), and, although Silvern (1977) reports a few cases in which there were sex of subject differences, happiness was not among them.

Since previous research (e.g., Hall & Keith, 1964; Rabban, 1950) had suggested that sex-role stereotypes may be even stronger among lower class children than among those from middle-class and professional families, the attitudes of a group of daycare children from working-class families were compared to those of a group of preschool children from professional families. The data from this study, however, provide no support for social class differences in the sex stereotyping of these emotions.

Comparison of these findings to those of other studies reveals discrepancies. Smith (1939), for example, found no stereotype for anger among his 8- to 15-year-old subjects. Although the stereotype for fear was also reported by Smith as well as Koblinsky et al. (1977), who used fifth grade subjects, no such stereotype was reported either by Kuhn et al. (1978) or Silvern (1977) who used 2- to 3-year-olds and 4th and 5th graders, respectively.

Reconciliation of these differences is difficult since these studies varied in definition of stereotype and methodology as well as in age of subjects. Although all of these studies employed relatively obtrusive measures (i.e., subjects were aware that the gender variable was of interest), they differ in the manner in which subjects responded and/or in the choice procedure used. For example, although Smith (1939), Silvern (1977) and Kuhn et al. (1978) all employed forced-choice procedures to determine the sex of which a given trait was more characteristic, Silvern's subjects checked the appropriate spot on a 5-point Likert-scale, while Smith's subjects circled "boy" or "girl" and Kuhn's subjects pointed to a boy doll or a girl doll. Koblinsky et al. (1978) used an unforced-choice procedure whereby subjects could indicate that a given trait applied equally as well to both sexes. Thus, even though the present study was similar to these previous studies in that a relatively obtrusive measure was used, other differences between studies render interpretation of obtained differences impossible.

It would be interesting to consider, however, whether the findings of the present study would be considered stereotypic using the criteria employed by other researchers. Silvern (1977) considered items to be stereotypic if differences were significant at $p < .01$ and if at least 60% of the subjects attributed a given gender with that emotion. If these criteria are applied to these data, all gender-emotion attributions would be considered stereotypic except the attribution of sadness with femaleness, since in that case, a statistically significant difference was found only at $p < .02$. If the criterion of 75% of

subjects of both sexes making a given gender-emotion attribution used by Rosenkrantz et al. (1968) and Williams et al. (1975) were used, then responding would be considered stereotypic for anger and happiness only, as percentage of subjects making gender-emotion attributions was less than 75% in the cases of both sadness and fear.

A comparison of the proportion of subjects making specific gender-emotion attributions in this and the Birnbaum et al. (in press) study revealed the interesting finding that the percentage of subjects making gender-emotion attributions was fewer in the present study in every case. Although differences between percentages were generally small, in the case of sadness, only 63% of the subjects in the present study attributed it to femaleness, whereas 83% of the subjects did so in the Birnbaum et al. study.

This study revealed stereotypes about sex differences in emotionality in preschool-aged children, but it provides no information regarding the etiology of these stereotypes. One possibility is that children might acquire such stereotypes through observation of actual sex differences in emotionality. Thus, their attitudes might simply mirror behavior that they have observed in other children and adults.

The evidence for real sex differences in specific emotions in children is at best inconclusive. There is some evidence that boys show anger more often than girls (Maccoby & Jacklin, 1974), but this evidence is old and is based on parent diaries. (In the cases of happiness and sadness, the data suggest that there are no sex differences and, in the case of fear, the data are at best equivocal. (Block, 1976; Maccoby &

Jacklin, 1974). Recent research by Allen and Haccoun (1976), however, provide some evidence of sex differences in individual emotions in college students. In terms of self-ratings, female college students reported more fear and sadness than did males in terms of responsiveness (i.e., feeling of emotion) and in the cases of fear, sadness, joy, and anger, females reported more expressiveness than did males.

Another means by which children might acquire these stereotypes is through their parents and other adults involved in the socialization process. Research has demonstrated that the stereotype of females as more emotional than males is a common one (e.g., Rosenkrantz et al., 1968; Williams & Bennett, 1975). In fact, Parsons and Bales (1955) have suggested that males in a family play an instrumental role, whereas females play an expressive role. Certainly, there is plenty of evidence that males are discouraged from expressing affect (Buck, 1976). If children are socialized in accordance with this, then most of the findings reported here are not surprising. These data, however, might provide some difficulty for this interpretation as a result of the anger-maleness attribution. Are females always more expressive than males or are there some exceptions? If one considers anger to be qualitatively different from the other three emotions in that it may have an instrumental component, then this finding as well could be considered consistent with the Parsons and Bales theory.

Further research about possible sources of the children's stereotypes is needed. The following studies consider parental attitudes, parental reactions to their children's emotional behavior,

and television as possible sources of the stereotypes expressed by preschool-aged children in this study.

Study 2

Study 1 revealed the existence of specific stereotypes about sex differences in emotionality in preschool-aged children but provided no information regarding the possible etiology of these stereotypes. There are, of course, numerous ways in which children might acquire such stereotypes about sex differences in emotionality. An obvious possibility is that parents, as prime socializing agents, possess similar beliefs which they may instill in their children.

Few studies, have asked parents directly how they believe the sexes differ. Rothbart and Maccoby (1966) devised a questionnaire to assess parents' perceptions of whether boys and girls differ on certain traits and behaviors and parents' opinions as to whether sex differences in those traits and behaviors should exist. On the parent perception part of the questionnaire, parents indicated whether an item was more characteristic of boys or of girls or whether they saw no boy-girl differences. A limitation of this approach is that it measures the direction but not the strength of the parents' attitudes. One purpose of the present study was to examine parents' perceived and desired sex differences in emotionality in children using a method that measures strength of attitude as well as direction.

In addition, since Allen and Haccoun (1976) have reported finding sex differences in college students for various emotions with intensity but not frequency measures, the study was also designed to examine

parents' perceived and desired sex differences in emotionality in children using a method that separates attitudes about frequency from attitudes about intensity of emotional expression. Since previous research using subjects of varying social classes has produced conflicting results (e.g., Lambert et al., 1971; Rothbart & Maccoby, 1966), implicating the importance of the social class variable, the attitudes of a group of middle-class preschool parents were compared to those of a group of working-class daycare parents. Along with samples of preschool and daycare parents, the study also employed a group of college students as subjects as a basis for comparison with the previous research (i.e., Allen & Haccoun, 1976).

The present study employed an obtrusive method whereby subjects indicated, on adjacent scales, the frequency and intensity of various emotions which they perceived and desired in boys and in girls. Since the present research attempted to assess parental attitudes in a new area, it was felt that any difference even if small would be of interest. Thus, it had been intended originally to use, in keeping with many of the earlier studies of stereotyping, a forced-choice procedure. However, when this was attempted, parents refused to complete the questionnaire, attesting to the sensitive nature of the research. In order to allow parents to indicate when they believed no sex differences to exist, scales for measuring the emotions in boys and in girls were placed in adjacent position. This would permit subjects to indicate no sex difference by marking each scale in the same place, yet would at least provide some indication of how often and how intensely subjects

perceived and desired boys and girls to show the various emotions. A within-subjects method was chosen because of the interest in parents' relative rather than absolute judgments about emotional behavior in boys and in girls. An obtrusive rather than unobtrusive method was selected for use to facilitate comparison between results obtained in this study with that of previous research on sex-role stereotypes which has suggested that emotionality is more characteristic of females than of males.

Method

Subjects. Eighty-three adults served as subjects in the study. Twenty-three of the subjects, one male and twenty-two females, were parents of 3- to 5-year-old children attending a summer preschool program at the Glebe Centre which is located in a middle-class, residential area of Ottawa, Ontario. Another twenty-four of the subjects, 4 males and 20 females, were parents of 3- to 6-year-old children attending Andrew Fleck Daycare in Ottawa, Ontario. The remaining thirty-six subjects, 18 males and 18 females, were undergraduates enrolled in an introductory psychology class at Carleton University in Ottawa, Ontario. The data of nine additional subjects (one college student, 3 preschool parents, 5 daycare parents) were excluded from the analysis due to their failure to complete the questionnaire as requested. As anonymity was a condition of subject participation, specific data about mean age and socioeconomic status are unavailable.

Materials. The questionnaire used in this study was an adapted version of that used in an earlier pilot study (see Appendix A). In that pilot study, parents had indicated an unwillingness to complete a questionnaire (which utilized a forced-choice format) like that used with the children in Study 1. Thus, in the questionnaire used in this study (see Appendix B for complete questionnaire and instructions); subjects were asked to answer four questions about each of four emotions on separate scales for boys and girls.

For each of the four emotions, there were two questions about its frequency of expression in boys and in girls and two questions about its intensity of expression in boys and in girls. The first of the two questions asked about perceived sex characteristics (e.g., how often does a typical boy or girl show anger, how strongly does a typical boy or girl show anger), whereas the second asked about desired sex characteristics (e.g., how often do you believe a typical boy or girl should show anger, how strongly do you believe a typical boy or girl should show anger). The questionnaire employed 5-point rating scales throughout. All four questions for a given emotion were on the same page in the order: frequency perceived, frequency desired, intensity perceived, intensity desired. Although replies to the questionnaire were anonymous, subjects were asked to provide certain demographic data (i.e., sex; age range; intact or single-parent family; number, age, and sex of children).

Procedure. Parents were given the questionnaire when they arrived at the daycare or community centre to pick up their children. Upon

arrival at the centre parents were given either the questionnaire used in the present study or that used in Study 3. The procedure for questionnaire dispersement varied slightly across groups. In the daycare centre, questionnaires were alternated such that every other parent received the present questionnaire. At the community centre, parents were given questionnaires according to session; that is, all the parents in one morning session and all the parents in one afternoon session received one questionnaire, whereas all the parents in a different morning session and all the parents in a different afternoon session received the other questionnaire.

Upon arrival at the centre, parents were asked to fill out the questionnaire by the female experimenter, who explained that it was part of a research project and that replies were anonymous. Parents were encouraged to fill out the questionnaire on the spot and to return it to a box provided in the centre, although parents were allowed to take the questionnaires home and return them later. Eighty-seven percent of the questionnaires were returned by the preschool parents and eighty-one percent of the questionnaires were returned by the daycare parents.

College students were administered the same questionnaire as the parents with additional instructions attached (see Appendix C) in their regular classroom at the end of a class period.

Results

Subjects' responses were converted to numerical scores using 5-point rating scales with low scores indicative of low frequency and intensity and high scores indicative of high frequency and intensity.

Separate analyses were conducted for each of the four questions: frequency perceived, frequency desired, intensity perceived, intensity desired. The basic analyses were $3 \times 2 \times 4$ analyses of variance with one between-subjects factor (population) and two within-subjects factors (rated sex and emotion).

Frequency Perceived. A three-factor analysis of variance (see Table 4) on the perceived frequency ratings revealed significant main effects for rated sex, $F(1,80)=11.30$, $p < .001$, and emotion $F(3,240)=95.05$, $p < .001$. The two-way sex $\times$ population, $F(2,80)=7.67$, $p < .001$, and sex $\times$ emotion, $F(3,240)=38.01$, $p < .001$, interactions were also significant as was the three-way sex $\times$ emotion $\times$ population interaction, $F(6,240)=3.18$, $p < .005$.

The mean scores (average 5-point-scale ratings) and standard deviations according to population and emotion are given in Table 5. Post hoc tests using Tukey's HSD procedure (Kirk, 1968) revealed significant differences ($p < .01$) in the cases of anger, sadness, and fear. Only daycare parents perceived a sex difference in frequency of anger, perceiving boys as showing anger more often than girls.

Only college students perceived a sex difference in frequency of sadness, perceiving girls as showing sadness more often than boys. Both daycare parents and college students perceived sex differences in the frequency of fear, with both groups perceiving girls as showing fear more often than boys.

Of secondary interest in the analysis were the findings of different perceived frequencies of emotional expression between

Table 4

Analysis of Variance Table for Frequency Perceived Measure

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Population (A)	2	.838	.908
Subjects w. groups	80	.923	
Sex (B)	1	4.16	11.297**
AB	2	2.83	7.671**
B x Subj w. groups	80	.36	
Emotion (C)	3	50.171	95.048**
AC	6	.964	1.827
C x Subj w. groups	240	.527	
BC	3	10.591	38.010**
ABC	6	.884	3.175*
BC x Subj w. groups	240	.278	

** $p < .001$ * $p < .05$

Table 5

Means and Standard Deviations (in parentheses) of Ratings of Boys and Girls
on Frequency Perceived as a Function of Population and Emotion

Emotion	Daycare ^a		Preschool ^b		College ^c	
	Boys	Girls	Boys	Girls	Boys	Girls
Anger	3.71 (.55)	2.79 (.66)	3.87 (.34)	3.39 (.50)	3.33 (.72)	3.25 (.65)
Happiness	4.25 (.44)	4.33 (.56)	4.13 (.34)	4.13 (.34)	3.86 (.72)	4.19 (.52)
Sadness	2.88 (.67)	3.04 (.62)	3.13 (.55)	3.17 (.58)	2.83 (.88)	3.33 (.63)
Fear	2.29 (1.08)	3.38 (.97)	2.70 (.56)	3.04 (.47)	2.50 (.97)	3.36 (.87)

^an = 23

^bn = 24

^cn = 36

populations for a given sex. Specifically, preschool parents perceived boys as showing anger more often than did college students and perceived girls as showing anger more often than did daycare parents.

Frequency Desired. A three-factor analysis of variance (see Table 6) on the desired frequency ratings revealed a significant main effect only for emotion $F(3,240)=93.56$, $p < .001$. The two-way sex $\times$ emotion interaction was significant, $F(3,240)=19.03$, $p < .001$ as was the three-way sex $\times$ emotion $\times$ population interaction, $F(6,240)=9.14$, $p < .001$.

Post hoc tests using Tukey's HSD test revealed desired sex differences ($p < .01$) in the frequency of expression for anger and fear only. The mean scores according to population and emotion are given in Table 7. In the case of anger, only daycare parents reported desired sex differences in frequency, desiring boys to show anger more often than girls. In the case of fear, daycare parents again were the only group that desired sex differences in the frequency of expression, desiring girls to show fear more often than boys.

Findings of secondary interest revealed that daycare parents desired boys to show anger more than did college students, whereas preschool parents desired girls to show fear more than did daycare parents.

Intensity Perceived. A three-factor analysis of variance (see Table 8) on the perceived intensity ratings revealed significant main effects for population, $F(2,80)=4.21$, $p < .05$, sex, $F(1,80)=20.97$, $p < .001$, and emotion, $F(3,240)=24.54$, $p < .001$. The two-way emotion $\times$

Table 6

Analysis of Variance Table for Frequency Desired Measure

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Population (A)	2	1.797	1.371
Subj w. groups	80	1.310	
Sex (B)	1	.068	.896
AB	2	.084	1.117
B x subj w. groups	80	.076	
Emotion (C)	3	66.135	93.558*
AC	6	.621	.879
C x subj w. groups	240	.706	
BC	3	3.345	19.031*
ABC	6	1.606	9.136*
BC x subj w. groups	240	.175	

* $p < .001$

Table 7

Means and Standard Deviations (in parentheses) of Ratings of Boys and Girls on Frequency Desired As a Function of Population and Emotion

Emotion	Daycare ^a		Preschool ^b		College ^c	
	Boys	Girls	Boys	Girls	Boys	Girls
Anger	3.50 (.88)	2.63 (.97)	3.22 (.42)	3.17 (.49)	3.08 (.60)	2.94 (.67)
Happiness	4.25 (.53)	4.25 (.61)	4.22 (.42)	4.22 (.42)	4.25 (.55)	4.28 (.57)
Sadness	2.71 (.81)	2.79 (.78)	3.04 (.56)	3.04 (.56)	2.86 (.93)	3.00 (.86)
Fear	2.25 (1.07)	3.08 (.78)	3.04 (.20)	3.04 (.21)	2.89 (.95)	3.11 (.89)

^a_n = 23

^b_n = 24

^c_n = 36

2 2

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Table 8

Analysis of Variance Table for Intensity Perceived Measure

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Population (A)	2	6.799	4.214*
Subj w. groups	80	1.613	
Sex (B)	1	9.342	20.974***
AB	2	.804	1.806
B x Subj w. groups	80	.445	
Emotion (C)	3	17.353	24.541***
AC	6	2.065	2.920**
C x Subj w. groups	240	.707	
BC	3	14.156	36.304***
ABC	6	2.196	5.634***
BC x Subj w. groups	240	.389	

*** $p < .001$ ** $p < .01$ * $p < .05$

population, $F(6,240)=2.92$, $p < .01$, and sex x emotion, $F(3,240)=36.30$, $p < .001$, interactions were significant as was the three-way sex x emotion x population interaction, $F(6,240)=5.63$, $p < .001$.

The mean scores according to emotion and population are given in Table 9. Post hoc tests using Tukey's HSD ($p < .01$) revealed perceived sex differences in the intensity of emotional expression for anger, sadness, and fear. In the cases of anger and sadness, it was only the group of daycare parents who perceived differences in the intensity of expression. Specifically, daycare parents perceived boys as showing anger more intensely than girls and perceived girls as showing sadness more intensely than boys. Both daycare parents and college students perceived girls as showing fear more intensely than boys.

Additional findings were that preschool parents perceived girls to show anger more intensely than did either daycare parents or college students. Preschool parents also perceived boys as showing sadness more intensely than did daycare parents.

Intensity Desired. A three-factor analysis of variance (see Table 10) on the desired intensity ratings revealed significant main effects for population, $F(2,80)=6.25$, $p < .01$, and emotion $F(3,240)=63.52$, $p < .001$. The two-way emotion x population, $F(6,240)=5.13$, $p < .001$, and sex x emotion, $F(3,240)=17.17$, $p < .001$, interactions were significant as was the three-way sex x emotion x population interaction, $F(6,240)=5.42$, $p < .001$.

The mean scores according to emotion and population are given in Table 11. Post hoc tests using Tukey's HSD ($p < .01$) revealed desired

Table 9

Means and Standard Deviations (in parentheses) of Ratings of Boys and Girls
on Intensity Perceived As a Function of Population and Emotion

Emotion	Daycare ^a		Preschool ^b		College ^c	
	Boys	Girls	Boys	Girls	Boys	Girls
Anger	3.67 (.96)	2.67 (1.05)	3.91 (.51)	3.83 (.58)	3.58 (.77)	3.17 (.70)
Happiness	4.17 (.82)	4.25 (.79)	4.17 (.49)	4.17 (.49)	3.58 (.87)	3.97 (.61)
Sadness	2.75 (.79)	3.42 (.88)	3.57 (.51)	3.57 (.51)	3.11 (1.04)	3.56 (.97)
Fear	2.71 (1.20)	4.17 (.87)	3.26 (.69)	3.74 (.62)	2.86 (.99)	3.75 (.97)

$a_n = 23$

$b_n = 24$

$c_n = 36$

Table 10

Analysis of Variance Table for Intensity Desired Measure

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Population (A)	2	10.984	6.246*
Subj w. groups	80	1.758	
Sex (B)	1	.184	1.040
AB	2	.002	.015
B x subj w. groups	80	.177	
Emotion (C)	3	44.212	63.516**
AC	6	3.568	5.127**
C x subj w. groups	240	.696	
BC	3	4.251	17.167**
ABC	6	1.342	5.422**
BC x subj w. groups	240	.247	

** p < .001

* p < .01

Table 11

Means and Standard Deviations (in parentheses) of Ratings of Boys and Girls on Intensity Desired As a Function of Population and Emotion

Emotion	Daycare ^a		Preschool ^b		College ^c	
	Boys	Girls	Boys	Girls	Boys	Girls
Anger	3.38	2.54	3.65	3.70	3.17	2.83
	(.82)	(.93)	(.63)	(.65)	(.81)	(.81)
Happiness	4.21	4.25	4.21	4.22	4.08	4.08
	(.72)	(.68)	(.52)	(.52)	(.65)	(.69)
Sadness	2.83	2.96	3.48	3.56	3.28	3.53
	(.87)	(.91)	(.59)	(.66)	(.85)	(.84)
Fear	2.13	2.96	3.09	3.17	3.17	3.36
	(.90)	(.75)	(.60)	(.49)	(1.00)	(.96)

a_n = 23

b_n = 24

c_n = 36

sex differences in the intensity of emotional expression for anger and fear. In each case it was only the group of daycare parents who desired sex differences in intensity, desiring boys to show anger more intensely than girls and desiring girls to show fear more intensely than boys.

Subsidiary analyses revealed that preschool parents desired girls to show anger more intensely than did either daycare parents or college students, whereas both preschool parents and college students desired boys to show fear more intensely than did daycare parents. In addition, preschool parents and college students desired girls to show sadness more than did daycare parents while preschool parents desired boys to show sadness more intensely than did daycare parents.

Discussion

The purpose of this study was to consider parents' conceptions of perceived and desired sex differences in emotionality in children as a possible source of the children's stereotypes using a method that separated attitudes about intensity from attitudes about frequency of emotional expression. Of additional interest was the comparison of attitudes of parents whose children attended daycare with those of parents whose children were enrolled in preschool programs.

The attitudes of a group of college students were also obtained to provide a basis for comparison with previous studies. This study revealed no differences between attitudes about frequency and attitudes about intensity of emotional expression except in the case of perceived sadness, where daycare parents perceived sex differences in intensity of expression and college students perceived differences in frequency of

expression. In both cases, girls were perceived as expressing greater sadness than boys. In all other cases, attitudes about intensity of emotional expression did not differ from attitudes about frequency of emotional expression. These findings are not consistent with those of Allen and Haccoun (1976) who found sex differences in emotional expression and responsiveness for intensity but not frequency measures in a self-report study among college students. In this study, however, subjects were asked about boys and girls in general rather than about themselves. It is not surprising, therefore, as a result of lack of correspondence between the target elements of the two studies to find discrepant results.

Turning to the perceived versus desired dimension, it will be recalled that in an analysis of the Lambert et al. (1971) data, Maccoby and Jacklin (1974) found that on many items parents perceived but did not desire differences between the sexes. In the present study, it is primarily the college students who provide support for this finding, though only in the cases of sadness and fear. Daycare parents, in addition, in agreement with college students, perceive but do not desire sex differences in the expression of sadness. In all other cases, however, perceived and desired sex differences were in agreement.

This study provides some evidence of differential attitudes among the social classes. Preschool parents were found to neither perceive nor desire sex differences in the frequency or intensity of expression of any of the four emotions, whereas daycare parents reported sex differences for some emotions and not others. Daycare parents perceive

and desire sex differences in anger and fear, perceiving and desiring boys to show anger more intensely and more frequently than girls, and perceiving and desiring girls to show fear more often and more intensely than boys.

College students were in agreement with daycare parents in their perceptions that girls show fear more often and intensely than boys but they did not agree that such differences are desired. The students additionally perceived girls to show sadness more than boys.

These results then agree only partially with the findings of Study 1 where consistent attitudes about sex differences in emotionality were found for both daycare and preschool children. Daycare parents were in agreement with daycare children in their stereotypes about anger, sadness, and fear. Unlike the daycare girls, however, daycare parents perceived no sex differences in the expression of happiness. Preschool parents, unlike preschool children, perceived no sex differences in the expression of these four emotions.

One problem with the interpretation of the above differences is that the daycare parents came from the same population as the daycare children, while the preschool parents did not come from the same population as the preschool children. There is some reason to believe, however, on the basis of the general refusal by the parents of the preschoolers to complete an earlier stereotype questionnaire, that the results obtained here for preschool parents (i.e., no sex differences) would also have been obtained had the parents of the preschoolers completed the questionnaire.

Thus, although these results suggest that there may well be a social class difference in beliefs about sex differences in emotionality among parents of preschool-aged children, it is also possible that the middle-class preschool parents are simply unwilling, in the light of the feminist era, to admit to believing in the existence of sex differences in the expression of emotionality.

It is interesting to compare some of the results obtained here with the few item analyses of the Lambert et al. (1971) data which are reported by Maccoby and Jacklin (1966). In the Lambert et al. study, Canadian working-class parents felt that girls were more likely than boys to be easily frightened. The Canadian working-class, daycare parents in this study, as well, believe that girls express fear more often and more intensely than boys. Although Lambert et al. subjects indicated that they felt it was important for both boys and girls not to become easily angered, the daycare parents in this study perceived and desired boys to be angry more often and more intensely than girls.

The results of the present study suggest that daycare parents at least possess stereotypes about sex differences in emotionality which they may instill in their children. It is possible that parents transmit these stereotypes explicitly (e.g., "Boys aren't scared.") or implicitly by selectively reinforcing only those emotional behaviors they feel are sex-appropriate. Although this has not been directly investigated, it has been shown that adult sex-role stereotypes can influence their assessment of children's behavior (e.g., Condry & Condry, 1976; Rubin et al., 1974) and likely their actions toward the child.

Does the finding of stereotypes in daycare but not in preschool parents mean that the source of the children's stereotypes is different for preschool and daycare children? This is difficult to assess in light of the fact that the preschool parents were not the parents of the children in the study, whereas the daycare parents were parents of the daycare subjects. It is, however, possible that there are other sources primarily responsible for the children's stereotypes and parental attitudes only serve to confirm or strengthen the children's attitudes. Parental attitudes most likely enter in as one of many variables involved in the socialization process.

Another factor limiting the interpretation of this study is that the majority of parents were mothers. As studies have suggested that sex of parent may be an important variable (e.g., Lambert et al., 1971; Rothbart & Maccoby, 1966), future research should attempt to obtain fathers as subjects.

A difficulty with the interpretation of the differences between the samples is that the variable of single-versus two-parent families is confounded with the social class variable. Whereas only one of the preschool parents was a single parent, the majority of the daycare parents were single parents. Thus, working-class parents were for the most part single parents, while middle-class parents were from two-parent homes. Therefore, the apparent social class differences cannot be interpreted. There is a great need; however, for further research involving the socialization practices and attitudes of the working class parent, as most research has dealt exclusively with middle-class and professional parents.

Although it would be tempting to draw conclusions about the socialization practices of parents based on the attitudes expressed in this questionnaire, Smith and Daglish (1977) and Fagot (1978) argue against the behavioral significance of stereotyped opinions from questionnaires, as they have, in the past, proved not to correlate highly with sex-typed behavior. Also, since the interest of socialization studies is in parents' interactions with their children, a method which provides higher correspondence between attitude and behavior targets is needed. Study 3 was designed to provide such a procedure.

Study 3

The purpose of the present study was to consider parents' socialization practices as a possible source of the children's stereotypes. Previous research has suggested that asking parents in retrospect directly about their socialization practices may be unreliable and/or may produce little information related to actual parent behavior (e.g., Block, 1976; Fagot, 1978). Thus, it was felt that an unobtrusive measure which might provide a high degree of correspondence between attitude and behavior elements would be a more appropriate method to use. In fact, Atkinson and Endsley's (1976) modification of the Rothbart and Maccoby (1966) procedure seemed to be a good model for this undertaking. In their study, Atkinson and Endsley asked parents to complete a questionnaire containing a series of hypothetical situations involving a child's reacting in sex-stereotyped ways. In some situations the child reacted in a male stereotypic

fashion, while in others it reacted in a female stereotypic fashion. Parents were asked to imagine their son or daughter in each situation and to indicate whether they liked the behavior and whether they would try to change it. This method of presenting parents with hypothetical situations involving their own child and asking how they would respond was adopted for this study.

There is some evidence that socialization practices may differ as a function of social class. In fact, Rothbart and Maccoby (1966) and Lambert et al. (1971) each used the same procedure to measure parental responses in hypothetical situations but obtained different results. Since these studies differed with respect to cultural background of subjects as well as social class, it is possible that differences in obtained results may reflect cultural rather than socioeconomic differences. However, the social class variable is at least implicated as a possible source of variance. As a result, in this study, the response of middle-class parents were compared to those of working-class parents. In order to compare their responses to those of subjects in the previous study, a group of college students was also asked to complete the present questionnaire.

Method

Subjects. Ninety-seven adults served as subjects in the study. Twenty-nine of the subjects, 5 males and 24 females, were parents of 3- to 6-year-old children attending the Andrew Fleck Daycare Centre in Ottawa, Ontario. Another twenty-nine subjects, all females, were parents of 3- to 5-year-old children enrolled in a summer preschool

program at the Glebe Centre in Ottawa. The remaining 39 subjects, 13 male and 26 female, were undergraduates in an introductory psychology class at Carleton University, Ottawa, Ontario. As anonymity was a condition of subject participation, specific data about mean age and socioeconomic status are unavailable.

Materials. The questionnaire used in the study (see Appendix D) consisted of 16 situations concerning a child's emotional reaction. The general situations without the child's emotional reaction had been rated for sex neutrality by 42 students in a developmental psychology class. The sixteen situations used in the study were chosen from among those rated as sex-neutral. Once the situations were selected, additional sequences describing a child's emotional reaction to the situation were added. The final questionnaire consisted of four situations each about a child's expressing anger, happiness, sadness, and fear. The questionnaire instructed parents to imagine the 3- to 6-year-old child they had enrolled in the centre in each situation. They were then asked to indicate whether they would encourage the child's feeling that emotion in that situation, neither encourage nor discourage the child's feeling that emotion, or discourage the child's feeling that emotion in that situation. For example, parents were presented with the following situation:

Your child _____ is taking his/her afternoon nap.

Suddenly there is a noise underneath the bed. He/She is very scared.

They were then asked to indicate which of the following responses to the child's reaction in that situation would be most similar to their own: encourage feeling afraid, neither encourage nor discourage feeling afraid, discourage feeling afraid. The questionnaire also asked subjects to provide certain demographic data (i.e., sex; age range; intact or single-parent family; number, age, and sex of children). The order of questions on the questionnaire was randomly determined, subject to the restriction that questions about the same emotion could not appear consecutively. All subjects received the same questionnaire with the situations in the same order. College students received the same questionnaire as the parents with additional instructions attached (see Appendix E). Half of these questionnaires instructed them to imagine a girl in each situation, while the other half instructed them to imagine a boy in each situation.

Procedure. Parents were given the questionnaire when they arrived at the daycare or community centre to pick up their children. Upon arrival at the centre parents were given either the questionnaire used in the present study or that used in Study 2. The procedure for questionnaire dispersement varied slightly across groups. In the daycare centre, questionnaires were alternated such that every other parent received the present questionnaire. At the community centre, parents were given questionnaires according to session; that is, all the parents in one morning session and all the parents in one afternoon session received one questionnaire whereas all the parents in a

different morning session and all the parents in a different afternoon session received the other questionnaire.

Upon arrival at the centre, parents were asked to fill out the questionnaire by the female experimenter, who explained that it was part of a research project and that replies were anonymous. Parents were encouraged to fill out the questionnaire on the spot and to return it to a box provided in the centre, although parents were allowed to take the questionnaires home and return them later. Eighty-five percent of the questionnaires were returned by the preschool parents and eighty-one percent of the questionnaires were returned by the daycare parents. College students were asked to complete the questionnaire in their regular classroom at the end of a class period.

Results

Subjects' responses were converted to numerical scores using 3-point rating scales in which categorical responses were coded as follows: discourage feeling emotion = -1, neither encourage nor discourage feeling emotion = 0, encourage feeling emotion = +1. The scores obtained for each of the four situations concerning a given emotion were then intercorrelated using Pearson's r (see Tables 12-15). The mean intercorrelations for anger, happiness, sadness, and fear were +.49, +.24, +.54, and +.51, respectively, yielding internal reliabilities (coefficients alpha) of +.79, +.56, +.82, +.81 for the composites (Nunnally, 1967). Since all four coefficients alpha exceeded +.50, the minimum considered acceptable by Nunnally, summary measures of

Table 12

Intercorrelations Among Anger Situations

Situation	Situation			
	A ₁	A ₂	A ₃	A ₄
A ₁		.37*	.53*	.53*
A ₂			.40*	.59*
A ₃				.53*

* $p < .001$

Table 13

Intercorrelations Among Happiness Situations

Situation	Situation			
	H ₁	H ₂	H ₃	H ₄
H ₁		.32***	.36***	.18*
H ₂			.28**	.20*
H ₃				.13

*** $p < .001$ ** $p < .01$ * $p < .05$

Table 14

Intercorrelations Among Sadness Situations

Situation	Situation			
	S ₁	S ₂	S ₃	S ₄
S ₁		.57*	.50*	.52*
S ₂			.56*	.60*
S ₃				.51*

* $p < .001$

Table 15.

Intercorrelations Among Fear Situations

Situation	Situation			
	F ₁	F ₂	F ₃	F ₄
F ₁		.50*	.55*	.51*
F ₂			.42*	.39*
F ₃				.68*

* $p < .001$

each emotion were constructed by adding together the scores for each of the four situations. For each emotion, 2×3 analyses of variance with two between-subjects factors (sex and population) were performed on the composite scores.

Anger. A two-factor analysis of variance on the summary measure for anger (see Table 16) revealed a significant effect for sex $F(1,91)=32.68, p < .001$, as well as a significant population $\times$ sex interaction $F(2,91)=3.61, p < .03$. The mean scores according to population and attributed gender are given in Table 17. Post hoc tests using Tukey's HSD ($p < .01$) to find the source of the interaction revealed that daycare parents encouraged boys to feel anger while discouraging girls, whereas college students discouraged girls from feeling anger more than boys.

Happiness. A two-factor analysis of variance on the summary measure for happiness (see Table 18) revealed only a significant main effect for population, $F(2,91)=14.97, p < .001$. The mean scores according to population and attributed gender appear in Table 19. Post hoc tests using Tukey's HSD ($p < .01$) revealed that daycare and preschool parents encouraged children to be happy more than did college students.

Sadness. A two-factor analysis of variance (see Table 20) on the summary measure for sadness revealed only a significant main effect for population, $F(2,91)=5.97, p < .01$. Means and standard deviations appear in Table 21. Post hoc Tukey's HSD tests ($p < .01$) revealed that both

Table 16

Analysis of Variance Table for Anger Situations

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Population	2	8.371	2.081
Sex	1	131.489	32.683**
Population x Sex	2	14.516	3.608*
Error	91	4.023	

* $p < .05$ ** $p < .001$

Table 17

Means and Standard Deviations (in parentheses) of Anger Measure as a Function of Population and Attributed Gender

Population	Attributed Gender	
	Boy	Girl
Daycare	1.47 ^a (2.33)	-2.43 ^b (1.87)
Preschool	.06 ^c (2.17)	-2.15 ^d (2.54)
College	-.84 ^e (1.42)	-2.10 ^f (1.77)

Note. Range equals -4 to +4.

^a_n = 15

^b_n = 14

^c_n = 16

^d_n = 13

^e_n = 19

^f_n = 20

Table 18

Analysis of Variance for Happy Situations

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Population	2	8.478	14.969*
Sex	1	.733	1.293
Population x Sex	2	1.658	2.927
Error	91	.566	

* $p < .001$

Table 19

Means and Standard Deviations (in parentheses) of Happiness Measure
As a Function of Population and Attributed Gender

Population	Attributed Gender	
	Boy	Girl
Daycare	3.93 ^a (.26)	3.71 ^b (.83)
Preschool	3.88 ^c (.34)	3.85 ^d (.38)
College	2.68 ^e (1.00)	3.30 ^f (1.03)

Note. Range equals -4 to +4

^a_n = 15

^b_n = 14

^c_n = 16

^d_n = 13

^e_n = 19

^f_n = 20

Table 20

Analysis of Variance Table for Sadness Situations

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Population	2	28.101	5.972*
Sex	1	.758	.161
Sex x Population	2	1.783	.379
Error	91	4.705	

* $p < .01$

Table 21

Means and Standard Deviations (in parentheses) of Sadness Measure as a
Function of Population and Attributed Gender

Population	Attributed Gender	
	Boy	Girl
Daycare	-.93 ^a (2.40)	-.64 ^b (2.17)
Preschool	-.50 ^c (2.71)	.15 ^d (1.77)
College	-1.84 ^e (1.92)	-2.10 ^f (1.94)

Note. Range equals -4 to +4.

$a_n = 15$

$b_n = 14$

$c_n = 16$

$d_n = 13$

$e_n = 19$

$f_n = 20$

daycare and preschool parents would encourage boys and girls to feel sad more than would college students.

Fear. A two-factor analysis of variance (see Table 22) on the summary measure for fear revealed a significant main effect for sex, $F(1,91)=7.61$, $p < .01$, as well as a significant sex x population interaction, $F(2,91)=4.96$, $p < .01$. The mean scores according to population and sex are given in Table 23. Post hoc Tukey's HSD tests ($p < .05$) revealed only that daycare parents discouraged boys but not girls from feeling fear.

Discussion

The purpose of this study was to consider parental socialization practices as a possible source of children's sex stereotypes about emotionality. Since previous studies (e.g., Lambert et al., 1971; Rothbart & Maccoby, 1966) have implicated social-class as a possibly important variable, the responses of middle-class parents were compared to those of working-class parents. In addition, a group of college students was employed as a basis of comparison with the previous study.

The data revealed only two instances in which differential socialization practices for the sexes were reported. In the case of anger, daycare parents indicated that they would treat boys and girls differently: That is, they would encourage boys to feel anger, but would discourage girls from doing so. In the case of fear, daycare parents revealed that they would discourage boys from feeling afraid but would neither encourage nor discourage this in girls.

Table 22

Analysis of Variance Table for Fear Situations

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Population	2	11.706	2.585
Sex	1	34.451	7.607*
Sex x Population	2	22.462	4.960*
Error	91	4.529	

* $p < .01$

Table 23

Means and Standard Deviations (in parentheses) of Fear Measure as a
Function of Population and Attributed Gender

Population	Attributed Gender	
	Boy	Girl
Daycare	-2.47 ^a (2.20)	.00 ^b (3.23)
Preschool	-2.00 ^c (1.90)	.15 ^d (2.15)
College	-1.84 ^e (1.74)	-2.30 ^f (1.53)

Note. Range equals -4 to +4.

^a_n = 15

^b_n = 14

^c_n = 16

^d_n = 13

^e_n = 19

^f_n = 20

The finding of differences among daycare but not preschool parents supports Atkinson and Endsley's (1976) contention that parents' responses to their children's behavior in hypothetical situations should be more in tune with stereotypes with a more traditional (i.e., lower- rather than middle- to upper-middle class) sample. As with the previous study, however, care must be taken in generalizing the results and relating them to the children's stereotypes found in Study 1 since the preschool parents here were not the parents of the preschoolers in the first study, while the daycare parents were parents of the daycare children.

There was also some evidence that parents differed from college students in terms of the socialization of happiness and sadness. In each case, preschool and daycare parents would encourage the feeling of the emotion more than would college students. Specifically, parents indicated that they would encourage happiness more than would college students and agreed on a neutral approach to sadness, while college students indicated they would discourage it.

The differences that were obtained between the sets of parents and college students are interesting. Although college students have been used in the past as a group of subjects with little experience with children (e.g., Meyer & Sobieszek, 1971), there have been conflicting findings in regard to the experience with children variable. What is of interest, here, however, is that college students differed from parents in respect to their socialization responses for three of the emotions.

Specifically, they indicated that they would encourage less happiness than parents and that they would discourage sadness and fear in boys and in girls. This suggests that the manner in which these students are dealing with differential socialization is by discouraging the experiencing and, perhaps the expression, of affect in both sexes. In view of the comments by some of the parents that they would encourage the feeling of emotion in general in their children (e.g., "I always encourage my child to express his feelings."), this represents quite a different attitude towards socialization.

Another point of interest is that the three groups of subjects are in complete agreement in their discouragement of feeling anger in the case of females and of feeling fear in the case of males. As might have been expected, all groups encouraged happiness in both boys and girls. There seems to be a pattern then in that generally subjects are either neutral or discourage the feeling of any of the negative emotions (i.e., anger, sadness, fear), but encourage happiness, a positive emotion. The only exception to this is in the case of anger where daycare parents would encourage boys to feel angry.

Atkinson and Endsley (1976) reported that parents believed it most important to encourage feminine behaviors in girls and masculine behaviors in boys. This study, however, suggests that, rather than encouraging the expression of sex-appropriate emotions, parents may instead discourage the expression of sex-inappropriate emotions. Specifically, given that in Study 2 anger and fear were considered to be

more appropriate by daycare parents for boys and for girls, respectively, the findings here suggest that parents wish to discourage the expression of sex-inappropriate emotions (i.e., anger in girls and fear in boys).

There is no evidence provided by these results that parents discourage cross-sex interests in boys more than girls (cf. Fling & Manosevitz, 1972). Had this been so, in keeping with the findings of the previous study, it might have been expected that daycare parents would also discourage the experiencing of sadness by boys. These findings suggest that it is not as simple as Block's (cited in L.W. Hoffmann, 1977) finding that parents encourage sons more than daughters to control the expression of affect. It apparently is dependent upon the specific emotion, for here daycare parents encouraged boys to feel anger, while both groups of parents encouraged boys to feel happiness and did not discourage boys from feeling sad.

It is somewhat unclear here whether it is the expression of affect that is being encouraged or discouraged or whether it is the appropriateness of experiencing that particular emotion as was asked by the questions (e.g., discourage from feeling anger). Several comments on the daycare questionnaires suggest that parents are considering the expression of affect as well (e.g., "I believe my child should always express his emotions.") It is possible, therefore, that parents may have responded in terms of expressiveness rather than responsiveness (cf. Allen & Haccoun, 1976).

Thus, this study provides some evidence for differential socialization of emotional behavior according to sex of child. This is in contrast to Maccoby and Jacklin's (1974) belief that there is little evidence of differential treatment of the sexes, but it is consistent with the views expressed in more recent reviews and criticisms of the Maccoby and Jacklin conclusions (e.g., Birns, 1976; Block, 1976; Fagot, 1978).

The findings of this study then extend those of previous research that parents' sex-role stereotypes can influence their assessment of children's behavior (Rubin et al., 1974) by suggesting that parental attitudes may well influence their responses to and subsequent treatment of their children. Because of the attempt to provide a high correspondence between attitudinal and behavioral entities, it is believed that the responses obtained here may well be reflective of actual parental behavior.

Study 4

Researchers have demonstrated that children's television programs may provide opportunities for the learning of sex stereotypes (e.g., Frueh & McGhee, 1975; McArthur & Eisen, 1976; Nolan et al., 1977; Stein & Friedrich, 1975; Sternglanz & Serbin, 1974) and since it has been demonstrated that television has a strong modelling effect (e.g., Bandura et al., 1963), it seems reasonable to determine whether television provides children with stereotyped models in regard to specific emotions and to consider television as a possible source of the

stereotypes found in Study 1. The purpose of this study was to determine whether television shows aimed at and/or popular with children consistently link specific emotions with characters of a particular gender.

Method

Programs Analyzed. It was originally intended to choose programs for analysis on the basis of Nielsen ratings of popularity among children. Unfortunately, it proved impossible to obtain the Nielsen ratings even with the intervention of a United States Congressman. Therefore, three shows were randomly chosen from each network to represent Saturday and Sunday morning children's programming (ABC—Gilligan, Scooby Doo, Superfriends; CBS—Ark II, Fat Albert, Isis; NBC—Land of the Lost, Muggsy, Pink Panther), while three shows were randomly chosen from afternoon syndicated programming (The Brady Bunch, My Three Sons, Partridge Family). Three evening programs popular with children (Bionic Woman, Emergency, Six Million Dollar Man) and Sesame Street were also included in the analysis. Two episodes of each program were recorded on videotape during the period of February 12, 1977 to March 9, 1977.

Procedure. As in previous television studies, a time-sampling procedure was used in the coding analysis. Specifically, programs were broken down for scoring into one-minute intervals. An audio tape defined the one-minute intervals by indicating that coding was to begin for the next interval with a verbal instruction, e.g., "start column

two". At the beginning of the coding session, the rater aligned the beginning of the audio tape and the beginning of a program episode (i.e., weekly lead-ins were not coded). The timing tape and videotape were then started simultaneously and the minute-by-minute coding of the program was begun. The rater had in front of her a coding sheet (see Appendix F for example) which listed the gender and emotional categories to be coded by rows and successive minutes by columns. Recording continued in each column until the timing tape indicated that it was time to move on to the next column (e.g., "Start column 2"). If a commercial appeared during an interval, that interval was discarded and the timer and videotape were realigned for the next interval (e.g., commercial occurs in minute 15, minute 15 is discarded from analysis, coding begins).

Two types of measures were coded for each one-minute interval. The presence of characters of a particular gender was indicated by the placement of a check mark in the appropriate row (i.e., Male, Female). As this was an interval recording procedure, no indication was made of number of characters of a given gender (i.e., a check mark meant that at least one character of a given gender appeared during that interval). The presence of characters of a given gender expressing anger, happiness, sadness, and fear was recorded by the placement of an "M" or an "F" in the appropriate row (see Appendix F for specific example). Animal characters were coded for gender if it could be readily determined by name (e.g., "Bert") or pronoun (e.g., "There he goes").

As there is no universal agreement as to what constitutes specific emotions, categories were not specifically defined but a liberal criterion was used in defining the presence of an emotion; that is, visual, auditory and/or situational cues may have been indicators of the presence of a particular emotion. Pilot work had demonstrated that the use of such criteria yields a high degree of interobserver agreement. If the rater felt that two emotions were simultaneously present in the same character, both were coded, whereas no emotion was coded if the rater was unclear as to what emotion was present.

When taping was completed, five programs (3 hours) were randomly chosen for reliability measures. These five programs were viewed simultaneously by a male and a female observer and then interobserver reliabilities were assessed according to the following formula:

$$\frac{\text{agreements on occurrence}}{\text{agreements + disagreements on occurrence}} \times 100$$

Reliabilities were determined separately by emotion for male and female characters as their frequency of appearance differed markedly from program to program. Interobserver reliabilities ranged from 77% to 100% with average agreements of 95% for female characters, 94% for male characters and 93% overall. Reliabilities by gender and emotion were as follows: Male anger, 94%; Female anger, 96%; Male happiness, 94%; Female happiness, 92%; Male sadness, 92%; Female sadness, 94%; Male fear, 96%; Female fear, 90%. Once these reliabilities were obtained, the female observer coded the remaining programs.

Results

Each sex's score on a given emotion was summed over the 2 episodes of each program.

Examination of the data revealed that males were present on the average 98% of the time, whereas females were present on the average 73% of the time. A correlated t -test revealed that this difference was significant, $t(15)=3.56$, $p < .01$.

Each sex's score on a given emotion was corrected for the greater frequency of appearance of males (Sternglanz & Serbin, 1974) by expressing it as a proportion derived from the formula:

$$\frac{\text{Number of segments in which sex emitted the emotion}}{\text{Number of segments in which sex appeared}}$$

This represented the proportion of appearance of a given sex in which it expressed a particular emotion. For example, if characters of a given sex were present in 20 segments and expressed anger in 5 of these, the rate of anger expression was .25 for that sex. Means and standard deviations of the rate measure for each emotion appear in Table 24.

Correlated t -tests performed on the rate measure revealed significant male-female differences only in the case of anger, $t(15)=2.40$, $p < .05$. No significant differences were found for the remaining emotions (Happiness, $t(15)=.71$; Sadness, $t(15)=-.74$; Fear, $t(15)=1.00$; all p 's $> .05$).

Table 24

Mean Rates and Standard Deviations (in parentheses) of Emotion Expression
by Male and Female Characters

Emotion	Character Sex	
	Male	Female
Anger	.23 (.03)	.11 (.01)
Happiness	.26 (.02)	.23 (.02)
Sadness	.08 (.02)	.10 (.01)
Fear	.17 (.05)	.13 (.02)

Discussion

As has been the case in earlier studies of children's television (e.g., Sternglanz & Serbin, 1974; McArthur & Eisen, 1976), this study found that males appeared in children's television programs more often than females.

The purpose of this study was to determine whether television shows aimed at and/or popular with children consistently linked the expression of specific emotions with characters of a given gender. Examination of the data revealed only that anger was associated with males. No other emotions were associated with a given gender. Thus, this study provided no evidence that females are portrayed as being more expressive than males. This finding is inconsistent with previous research in which females found to be depicted as more emotional than males (e.g., Busby, 1974; Long & Simon, 1974). However, recent research by McArthur and Eisen (1976) provided no evidence for sex stereotyping in children's programs for the emotions of anger, happiness, and fear. These results are partially consistent with their findings in that happiness and fear were not found to be sex-stereotyped, but anger was found to be associated with maleness.

These data then provide little evidence for much sex stereotyping of emotional behavior on children's television programs. Although television has been shown to be a potent socializing agent (e.g., Bandura et al., 1963; Stein & Friedrich, 1975), there is little here that implicates it in any major sense in the socialization process. The

association of anger with males is, however, consistent with the children's stereotype about anger reported in Study 1, so it is possible that television plays some role in the development of gender-emotion stereotyping. It does not appear in this case, however, to be a prime socializing agent in the development of stereotypes about sex differences in emotionality.

General Discussion

The purpose of this research was to investigate the expression of sex stereotypes about emotionality in preschool and daycare children and to consider parental attitudes, parents' reactions to their children's emotional behavior, and children's television programming as possible sources of the children's stereotypes. Study 1 revealed that both daycare and preschool children possess specific stereotypes about sex differences in emotionality. These preschool-aged children associated anger with maleness and happiness, sadness, and fear with femaleness.

Study 2 provided only partial evidence for parental attitudes as sources of the children's stereotypes. Daycare but not preschool parents were found to perceive and desire boys to show anger more frequently and more intensely than girls, whereas girls were perceived and desired to show fear more often and more intensely than boys. Although these data suggest that there are social class differences in parental attitudes, care must be taken in their interpretation, for though the daycare parents were parents of the daycare subjects, the preschool parents were not the parents of the preschool subjects. In

addition, since a parenting variable (single- vs two-parent) was confounded with social class, interpretation of these results is even less clear.

It is suggested that further research along these lines attempt a correlational analysis to determine whether there are any direct relationships between parent and child attitudes about sex differences in emotionality. One of the problems such a study must overcome is the reluctance of parents, particularly those of the middle and upper class, to disclose or reveal their attitudes in any area of sex differences. Although this problem would suggest the use of more unobtrusive methods to deal with the demand characteristics of the situation, the researcher should ensure that there is a high degree of correspondence in the target and action elements of the attitudinal and behavioral measures which s/he uses (Azjen & Fishbein, 1977). This is critically important when attempts are made to predict future behavior.

Study 3 found results similar to those of Study 2 in that daycare but not preschool parents were found to treat the sexes differentially in terms of their reactions to their children's expression of emotion in hypothetical situations. Once again, the emotions of importance were anger and fear, with daycare parents encouraging boys to feel angry while discouraging girls from doing so, and discouraging boys from feeling afraid while neither encouraging nor discouraging girls in this respect. Study 3 differed from Study 2 in that subjects were asked to imagine a specific child in each situation and to respond to its

behavior. It is therefore somewhat surprising that similar results were obtained in the two studies since there was not a high degree of correspondence of target elements. That is, in Study 2 parents responded to boys and girls in general, whereas in Study 3, they responded hypothetically to their own son or daughter. It is, however, conceivable that, when completing the questionnaire in Study 2, parents imagined their own son or daughter when asked questions about the typical boy or girl. That this happened at least on some occasions is indicated by the fact that a couple of subjects refused to respond to the questions about the opposite-sex child when they only had children of the other sex in the family.

The above also provides a possible explanation for the different results obtained from the college students. As the majority of these students did not have children of their own, they may not have had the opportunity to imagine a specific child as they responded to the questionnaires. If parents did so while college students did not, it is not surprising that different results were obtained since the attitude target would then differ between the college students and parents.

Study 4 examined children's television programs as a possible source of the children's stereotypes. Once again, this study provided only a partial basis for the etiology of the stereotypes. In the programs analyzed, males were found to be depicted as angry significantly more often than were females. This finding was present even when corrections were made for the greater presence of males on the programs.

Thus, none of the three studies of possible sources of the children's stereotypes provided conclusive evidence implicating a particular etiology. In fact, the source of the stereotypes is still somewhat unclear. There certainly is ample evidence, at least for daycare children, that their stereotype for anger may result from any or all of the three sources studied. These data suggest that their stereotype for fear may have been acquired from parental attitudes and/or through parental socializing practices. The etiology of the happiness and sadness stereotypes is less clear from the data of the present research. Although no evidence that preschool children acquired their stereotypes from their parents is provided, it is still possible that they acquired them through their parents and other adults, for it is suggested here that the parents of the preschoolers may simply have been unwilling to admit to any sex differences or socialization differences and that they may well contribute to the development of their children's stereotypes. In any case, each of the sources studied probably enters as one variable into the socializing process and plays some role in the development of the children's stereotypes.

This research revealed several interesting problems related to contemporary sex-role research. First, it proved impossible to obtain subjects for research without promising complete anonymity. Even then it was difficult to convince parents, particularly those of the middle class, to complete the surveys. Although the return rate was generally good in both survey studies, such a problem could lead to the collection

of biased data which confirm the existence of stereotypes which may not exist in the general population, as only those parents who believe in such differences may be willing to complete the questionnaire. This is particularly important here as these findings suggest that a more fruitful avenue of research would be correlational, i.e., correlating parental and child attitudes. The need for anonymity in doing such research may well preclude the collection of such data. At this juncture then it is unclear whether preschool parents are free from sex stereotypes in emotionality, and thus, do not contribute to the attitudes expressed by their children, or whether they are simply unwilling to admit to having any preconceived notions as to the presence of these traits in their children. It is conceivable that use of a between-subjects method would eliminate part of this problem as it would be somewhat less evident that the researcher were interested in sex differences. However, the use of such a method may as well be misleading especially if the researcher is interested in relative differences perceived between boys and girls.

A second problem is related to the different results that were obtained with the college students, for it stresses once again the danger of using them as representative of the general population. The fact that an earlier study on stereotypes was aborted because of parent refusal to complete the questionnaire suggests that not only may college students not be representative of the general population, but that as well, it may be next to impossible to obtain the desired information from the other populations of interest.

An additional problem in the interpretation of the results of these studies is related to the manner in which the questions were stated on the questionnaires. In the second study parents were asked questions about expressiveness (e.g., how often does a typical boy or girl show anger), whereas in the third study parents were asked to indicate their reaction to the child's responsiveness (e.g., encourage feeling that emotion in that situation). Although there was some indication by parents that they were considering the expression instead of the experiencing of emotion in the third study, it appears that the questionnaires were asking for information about different aspects of emotionality, thus producing a lack of correspondence between action elements. This point is not as critical here as it might have been since comparable results were obtained in the two studies. However, had different results been obtained, this lack of correspondence would have made them difficult to interpret.

Future research then should concentrate on separating attitudes and socialization practices concerning the experiencing of emotion from those concerning the expression of emotion. There is plentiful evidence that the cultural expectations of society consider the expression of affect to be appropriate for females but not for males. Therefore, it is possible that parents may indeed believe that both sexes should experience different emotions but that there is a difference when it comes to the appropriateness of expression. Since children show evidence of stereotyping, it is entirely possible that their parents

convey, either through their own actions or through direct socialization practices, the attitude that there are differential expectations for the two sexes in emotional expression.

There are several areas which appear to be fruitful for future research. First, a correlational study of parent and child attitudes in relation to sex differences in the expression and experiencing of emotion would seem to be in order, especially in view of Allen and Haccoun's (1976) suggestion that further research be conducted on the various emotions as well as on the various dimensions of emotion.

Second, Brigham (1971) has suggested that there is not enough information concerning the source of children's stereotypes and that one approach to this question would be to ask children "How do you know?" A study in which children are asked for gender-emotion attributions and then are asked to give reasons for their responses might prove to be of interest. Brigham suggests that research asking such questions might provide considerable evidence regarding the source from which stereotypes are learned. Moreover, such an approach is of particular interest in light of the current research on metacognition, which attempts to assess the subject's self-awareness or understanding of the variables that affect cognitive processes. Memory and problem-solving processes have been the primary focus of metacognitive studies, but recently Paris (Note 1) has suggested that this approach be extended beyond these traditional experimental tasks of cognitive psychology. The metacognitive study of sex-role stereotypes would be an application of metacognition in the spirit proposed by Paris.

Third, a developmental study examining changes in children's reasoning for making particular attributions would be of particular value. Inasmuch as this research has employed only preschool children, a developmental study is also needed to determine whether these stereotypes change as a function of age. Since Williams et al. (1975) and Best et al. (1978) have shown that there is an increase in children's knowledge of adult stereotypes until fourth grade, a comparison of stereotypes and metacognitive responses in subjects from kindergarten age to fourth grade would seem to be warranted.

Fourth, since these studies confounded several variables, it is unclear why there were differences in parental attitudes and reactions in the two samples. First of all, the studies used primarily mothers as subjects and since most daycare subjects were from single-parent families, the results obtained could be due to the effects of father absence instead of to those of social class. A study comparing the attitudes of fathers and mothers is then needed. As it has been suggested that the father is the important figure in sex-role development (Johnson, 1963), it would seem pertinent to determine the impact of fathers on the sex-role stereotyping of emotion. If the social class variable were to be considered as well in such a study, it might then be interesting to compare single-parent middle-class mothers and fathers with single-parent working-class mothers and fathers as well as those parents from intact homes. Examination of children's stereotypes in relation to these variables would also be of value.

Finally, it would also be interesting to determine whether the children's stereotypes are global or whether they are situation specific. That is, do the children believe that the appropriateness of emotion expression for a given sex is dependent upon the situation? Research in progress suggests that this may indeed be the case among preschool children although no such evidence was found for parents and college students in this study.

Another issue that must be resolved in this area of research is the matter of differential definition of stereotype. As discussed in the introduction to this dissertation, there are numerous ways of defining and measuring stereotypes, and the results obtained vary with each of them. This makes it extremely difficult to compare studies and to get a general picture of the stereotypes which are held either by individuals or by groups. The measure of stereotype proposed by McCauley and Stitt (1978) appears to hold promise in this respect, for not only does it allow the measure of individual stereotypes, but it also provides for measurement of the negative end of the scale (i.e., less emotional). Stereotypes may, however, in terms of implications be important primarily as a result of general consensus. That is, if a stereotype is held by a large group of people and its social desirability (or undesirability) is well established, the chances that parents will socialize their children in that direction (or away from it) may be increased. If the attitude a parent expresses to his child is held by a large number of people (e.g., "boys don't cry.") then it is likely to be

confirmed in the child's view, and he may then model his behavior in a manner consistent with the stereotype.

The research reported here has provided incomplete information regarding the possible etiologies of the children's stereotypes. It is possible that stereotypes result from an interaction of these and other sources such as observed sex differences. There is for example, evidence of some behavioral sex differences in infants (Moss, 1974) as well as evidence of differential treatment of the sexes in terms of expression of affect. In any case, although the etiology is still somewhat unclear, there is good evidence that preschool-aged children do possess these stereotypes about sex differences in emotionality.

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Paris, S. G. Metacognitive development: Children's regulation of problem-solving skills. Paper presented at the meeting of the Midwestern Psychological Association, Chicago, May, 1978.

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Footnotes

¹Since the research falls into a new area, the researcher was interested in any differences, even if small, between the ratings of males and females. Thus, it had originally been intended to use a forced-choice within-subjects procedure. However, when this was attempted, parents refused to complete the questionnaire. As a result, it was felt that a procedure in which boys and girls were rated on adjacent scales would allow subjects to indicate when they felt no differences existed by checking the same place on each scale, yet would also provide a measure of the intensity and frequency of emotion they perceived and desired to exist. An obtrusive method was employed to provide correspondence with most attitudinal studies of sex-role stereotyping so that comparisons of any results obtained could be more readily compared with those of previous research which has suggested that females are believed to be more emotional than males.

²The reader might wonder at this point why an observational study of possible sex differences in emotional behavior was not undertaken. Such a study was attempted but then aborted after observations revealed that instances of emotional behavior were too infrequent for adequate analysis.

³These particular dimensions of emotion were selected because it has been shown that preschool children are able to understand the meaning of these dimensions. (Borke, 1971, 1973; Gates, 1923).

Appendix A

Pilot Questionnaire

Your Sex: Male Female
 Your Age: Under 30 30-40 over 40
 Number of Children: _____
 List children's ages and circle appropriate sex (e.g., 3 M F; 4 M F)
 M F M F M F M F
 Own Occupation: _____
 Spouse's Occupation: _____
 Level of Education Completed: _____
 Grade School High School University Post-University

On the following two pages, you will be asked a set of questions about sex differences, first among children, then among adults. Please circle the alternative which, based on your experience, is the more appropriate. In some cases it may be difficult to choose between the two alternatives but it is extremely important that you choose only one alternative for each question.

CHILDREN

Who are happy more often, girls or boys?

When happy, who show the greater happiness, girls or boys?

Who are independent more often, boys or girls?

When independent, who show the greater independence, boys or girls?

Who are talkative more often, girls or boys?

When talkative, who show the greater talkativeness, girls or boys?

Who are afraid more often, boys or girls?

When afraid, who show the greater fear, boys or girls?

Who are competitive more often, girls or boys?

When competitive, who show the greater competitiveness, girls or boys?

Who are adventurous more often, boys or girls?

When adventurous, who show the greater adventurousness, boys or girls?

Who are angry more often, girls or boys?

When angry, who show the greater anger, girls or boys?

Who are shy more often, boys or girls?

When shy, who show the greater shyness, boys or girls?

Who are gentle more often, girls or boys?

When gentle, who show the greater gentleness, girls or boys?

Who are sad more often, boys or girls?

When sad, who show the greater sadness, boys or girls?

Who are aggressive more often, girls or boys?

When aggressive, who show the greater aggressiveness, girls or boys?

Who are quiet more often, boys or girls?

When quiet, who show the greater quietness, boys or girls?

Who are emotional more often, girls or boys?

When emotional, who show the greater emotionality, girls or boys?

1

ADULTS

- Who are happy more often, women or men?
When happy, who show the greater happiness, women or men?
- Who are independent more often, men or women?
When independent, who show the greater independence, men or women?
- Who are talkative more often, women or men?
When talkative, who show the greater talkativeness, women or men?
- Who are afraid more often, men or women?
When afraid, who show the greater fear, men or women?
- Who are competitive more often, women or men?
When competitive, who show the greater competitiveness, women or men?
- Who are adventurous more often, men or women?
When adventurous, who show the greater adventurousness, men or women?
- Who are angry more often, women or men?
When angry, who show the greater anger, women or men?
- Who are shy more often, men or women?
When shy, who show the greater shyness, men or women?
- Who are gentle more often, women or men?
When gentle, who show the greater gentleness, women or men?
- Who are sad more often, men or women?
When sad, who show the greater sadness, men or women?
- Who are aggressive more often, women or men?
When aggressive, who show the greater aggressiveness, women or men?
- Who are quiet more often, men or women?
When quiet, who show the greater quietness, men or women?
- Who are emotional more often, women or men?
When emotional, who show the greater emotionality, women or men?

Study 2 Questionnaire

Female

30-40

over 40

Two Parent Family

Number of Children:

List of children's ages and circle appropriate sex (e.g., 3 ♂F; 5 M)

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This survey is part of a research program at Carleton University on the social development of children. As parents you can provide information which will aid us greatly in our attempts to develop a further understanding of social development in children. In this survey we are interested in how often boys and girls show certain emotions and also in how strongly they feel these emotions when they do occur. In the following questionnaire you will be asked 4 questions about each of 4 emotions (anger, happiness, sadness, and fear). In each case, you are asked to check the appropriate alternative first for boys and then girls. For example, if you are asked how often you believe a typical boy or girl shows surprise, you might, based on your experience, feel that boys seldom show surprise. In this case, you would then check the word "seldom" under the heading "BOYS". If, however, the question is "how strongly do you believe a typical boy or girl should show surprise", you might believe that girls should show surprise occasionally. You would then check the word "occasionally" under the heading "GIRLS". The remaining questions should be answered in a similar fashion. Please be sure to answer each of the questions for both boys and girls. You should answer according to what you believe to be true of boys and girls in general. Please do not put your name on the questionnaire as replies are anonymous. Thank you very much for your cooperation.

How often does a typical boy or girl show anger?

BOY		GIRL	
()	()	()	()
Almost Always	Frequently	Frequently	Occasionally
	Occasionally		Seldom
	Seldom		Rarely
			Almost Always

How often do you believe a typical boy or girl should show anger?

BOY		GIRL	
()	()	()	()
Almost	Frequently	Frequently	Frequently
Always	Occasionally	Occasionally	Occasionally
	Seldom	Seldom	Seldom
	Parely	Parely	Parely

How strongly does a typical boy or girl show anger?

[illegible]

How strongly do you believe a typical boy or girl should show anger?

BOY			
()	()	()	()
Very Strong	Strong	Moderate	Mild
			Very Mild
			Very Strong

How often does a typical boy or girl show happiness?

BOY		GIRL	
()	()	()	()
Almost	Frequently	Frequently	Occasionally
Always	Seldom	Seldom	Rarely

How often do you believe a typical boy or girl should show happiness?

BOY		GIRL	
()	()	()	()
Almost	Frequently	Frequently	Occasionally
Always	Seldom	Seldom	Rarely

How strongly does a typical boy or girl show happiness?

BOY		GIRL	
()	()	()	()
Very Strong	Strong	Strong	Mild
	Moderate	Moderate	Very Mild
			Very Strong

How strongly do you believe a typical boy or girl should show happiness?

BOY		GIRL	
()	()	()	()
Very Strong	Strong	Strong	Mild
	Moderate	Moderate	Very Mild
			Very Strong

How often does a typical boy or girl show sadness?

	BOY		GIRL	
()	()	()	()	()
Almost Always	Frequently	Occasionally Seldom	Frequently	Occasionally Seldom
				Rarely

How often do you believe a typical boy or girl should show sadness?

	BOY		GIRL	
()	()	()	()	()
Almost Always	Frequently	Occasionally Seldom	Frequently	Occasionally Seldom
				Rarely

How strongly does a typical boy or girl show sadness?

	BOY		GIRL	
()	()	()	()	()
Very Strong	Strong	Moderate Mild	Strong	Mild
				Very Mild

How strongly do you believe a typical boy or girl should show sadness?

	BOY		GIRL	
()	()	()	()	()
Very Strong	Strong	Moderate Mild	Strong	Mild
				Very Mild

How often does a typical boy or girl show fear?

BOY		GIRL	
()	()	()	()
Almost	Frequently	Frequently	Occasionally
Always	Seldom	Seldom	Rarely

How often do you believe a typical boy or girl should show fear?

BOY		GIRL	
()	()	()	()
Almost	Frequently	Frequently	Occasionally
Always	Seldom	Seldom	Rarely

How strongly does a typical boy or girl show fear?

BOY		GIRL	
()	()	()	()
Very Strong	Strong	Strong	Mild
	Moderate	Moderate	Very Mild

How strongly do you believe a typical boy or girl should show fear?

BOY		GIRL	
()	()	()	()
Very Strong	Strong	Strong	Mild
	Moderate	Moderate	Very Mild

Appendix C

Instructions to College Students for Study 2 Questionnaire

Dear Student,

We are asking you to complete this questionnaire on social development in children which was originally written for parents of preschool children. We need to obtain this requested information from both parents and non-parents who are psychology students. If you are a parent please fill out the information requested about the sex and age of your children. If you are not a parent at this time please complete those sections indicating your age and sex and put a "0" in the place asking for number of children. It is important that you answer each of the questions even if you have not had much experience with children. Please indicate what you believe to be true of boys and girls in general.

Appendix D

Study 3 Questionnaire

Your sex: Male Female

Your Age: Under 30

30-40

Over 40

Family: One Parent Family

Two Parent Family

Number of Children: _____

List children's ages and circle appropriate sex (e.g., 3 ☒ M F 5 M ☒ F)

_____ M F _____ M F _____ M F _____ M F _____ M F _____ M F

This survey is part of a research program at Carleton University on the social development of children. As parents you can provide information which will aid us greatly in our attempts to develop a further understanding of the social development of young children. In this questionnaire we are interested in parents' responses to the emotional behaviour of their children. On the following pages you will find brief descriptions of 16 situations in which a child is made to feel anger, happiness, sadness, or fear. We are asking you to imagine that it is your three-to-six-year-old child in each situation and that you are someplace nearby where you could respond to your child's reaction. For example,

Your child _____ is taking his/her afternoon nap. Suddenly there is a noise _____ underneath the bed. He/She is very scared.

You would now be asked to indicate which of the following responses to the child's reaction in that situation would be most similar to your own:

()	()	()
Encourage feeling afraid	Neither encourage nor discourage feeling afraid	Discourage feeling afraid

In each case please respond as you would to the child (3 to 6 years of age) you have enrolled in the program at this centre.

Thank you for your cooperation.

1. Your child _____ has learned that his/her grandfather is coming for a visit. He/She is very happy.

()	()	()
Encourage feeling happy	Neither encourage nor discourage feeling happy	Discourage feeling happy

2. Your child _____ is taking his/her afternoon nap. Suddenly there is a noise underneath the bed. He/She is very scared.

()	()	()
Encourage feeling afraid	Neither encourage nor discourage feeling afraid	Discourage feeling afraid

3. Your child _____ has just learned that he/she is going on a trip to Disneyland. He/She is very happy.

()	()	()
Encourage feeling happy	Neither encourage nor discourage feeling happy	Discourage feeling happy

4. Your child _____ is swimming in the ocean. Something brushed against his/her foot. _____ is very scared.

()	()	()
Encourage feeling afraid	Neither encourage nor discourage feeling afraid	Discourage feeling afraid

5. Your child _____ is building sand castles at the beach. The tide came in and washed the castle away. He/She is very angry.

()	()	()
Encourage feeling angry	Neither encourage nor discourage feeling angry	Discourage feeling angry

6. Your child _____ is playing with his/her favourite toy when the toy breaks. He/She is very sad.

()	()	()
Encourage feeling sad	Neither encourage nor discourage feeling sad	Discourage feeling sad

7. Your child _____ is playing on the playground on a swing when someone grabs the swing away. He/She is very angry.

()	()	()
Encourage feeling angry	Neither encourage nor discourage feeling angry	Discourage feeling angry

8. One day your child _____ learns that he/she will be moving to a new town far away. He/She will be leaving all his/her friends. He/She is very sad.

()	()	()
Encourage feeling sad	Neither encourage nor discourage feeling sad	Discourage feeling sad

9. Your child _____ is watching his/her favourite program on TV. Right in the middle of the program the channel goes off the air. He/She is very angry.

()	()	()
Encourage feeling angry	Neither encourage nor discourage feeling angry	Discourage feeling angry

10. One day your child _____ learns that he/she and his/her friends are going a picnic. He/She is very happy.

()	()	()
Encourage feeling happy	Neither encourage nor discourage feeling happy	Discourage feeling happy

11. Your child _____ has learned that his/her best friends are going on vacation and he/she will have no one to play with. He/She is very sad.

()	()	()
Encourage feeling sad	Neither encourage nor discourage feeling sad	Discourage feeling sad

12. Your child _____ is eating an ice cream cone when he/she is shoved from behind and he/she drops his/her ice cream. He/She is very angry.

()	()	()
Encourage feeling angry	Neither encourage nor discourage feeling angry	Discourage feeling angry

13. Your child _____ has gone for a walk with a friend when he/she realizes that they have become separated. He/She is very scared.

()	()	()
Encourage feeling afraid	Neither encourage nor discourage feeling afraid	Discourage feeling afraid

14. Your child _____ awakes on his/her birthday to find a present on the bed. He/She is very happy.

()	()	()
Encourage feeling happy	Neither encourage nor discourage feeling happy	Discourage feeling happy

15. Your child _____ is hiding behind a tree during a game of hide-and-seek when he/she steps into a hole and can't get out. He/She is very scared.

()	()	()
Encourage feeling afraid	Neither encourage nor discourage feeling afraid	Discourage feeling afraid

16. Your child _____ is supposed to go to the circus Tuesday afternoon. On Tuesday morning he/she wakes up sick with the flu so now he/she can't go to the circus. He/She is very sad.

()	()	()
Encourage feeling sad	Neither encourage nor discourage feeling sad	Discourage feeling sad

Appendix E

Instructions to College Students for Study 3 Questionnaire

Dear Student,

We are asking you to complete this questionnaire on social development in children which was originally written for parents of preschool children. We need to obtain this requested information from both parents and non-parents who are psychology students. If you are a parent please fill out the information requested about the sex and ages of your children. If you are not a parent at this time please complete those sections indicating your age and sex and put a "0" in the place asking for number of children. Those of you who are parents should imagine that it is your child in each situation to which you are asked to respond. If you have several children you should consider the child of yours who is nearest 3 to 6 years of age. If you are not a parent please imagine that the child in each situation is a 3 to 6 year-old.

Appendix F

Example of TV Coding Sheet

Program _____ Date _____ Rater _____

	Minute																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Anger	M			M																	
Happiness		M, F																			
Sadness			F	M																	
Fear		F																			
Male Present	X	X		X																	
Female Present		X	X	X																	

At least one male, but no females, appeared in minute one, with anger the only emotion portrayed. In minute 2 male and female characters are both present; females expressed happiness and fear while males expressed only happiness. In minute 3, only females appeared and sadness was the only emotion they expressed. Both males and females were present in minute 4 but females expressed none of the 4 emotions, while males expressed sadness and anger.

END

05-12-80

FIN