Gender differences in emotional development: A review of theories and research
Leslie R. Brody, Boston University

Abstract

Theories, data, methodological and conceptual problems concerning the study of gender differences in the development of defenses, emotional expression, recognition, and experiences are reviewed. Data indicate gender differences in several areas of emotional functioning, including nonverbal sensitivity, expressiveness, self-reports of anger, fear, and sadness, the quality of defenses, and cognitive correlates of recognition abilities. Studies suggest that with development, boys increasingly inhibit the expression and attribution of most emotions, whereas girls increasingly inhibit the expression and recognition of socially unacceptable emotions, e.g., anger. These differences may be a function of different socialization processes for males and females, which may be adaptations to innate gender differences in temperament, or adaptations to existing sociocultural pressures.

The present paper argues that emotions motivate and regulate adaptive behaviors, and that researchers must explore gender differences in emotional development as a function of different familial, sociocultural, and interpersonal roles to which males and females must adapt.

Regardless of the relative emphasis placed on the social, cognitive, or biological determinants of emotion, the hypothesis that emotional expression, recognition, and experiences may differ dramatically for the two sexes is implicit in almost every theory of emotional development (cf. Brenner, 1980, Chodorow, 1978, Izard, 1971, 1977, Kemper, 1978a and b, Miller, 1976) This hypothesis has important implications for theories about emotional change (including theories about psychotherapy), for theories about psychopathology, and for more general theories about personality development. For example, most personality theorists view emotions as either subsystems of, or as the primary determinants of, other aspects of personality func-

I would like to thank Ross Buck, Joseph C. Cunningham, Brinton Lykes, Abigail Stewart, Anne Thompson, Kathleen White, and an anonymous reviewer for their thoughtful comments and critiques of this manuscript. I would also especially like to thank Abigail Stewart for her patience and encouragement in waiting for the final version of this manuscript, and Louise True for her perseverance and help in typing the many revisions this manuscript underwent. Requests for reprints should be sent to Leslie R. Brody, Department of Psychology, Boston University, 64 Cummington St., Boston, MA 02215.

Journal of Personality 53 2, June 1985 Copyright © 1985 by Duke University Press CCC 0022-3506/85/$1.50
tioning, including self-concept, motivation, mood, cognitive style
and traits such as extraversion-introversion (cf Epstein, 1979, Kell-
erman, 1983, Tomkins, 1981) Furthermore, abnormal personality
functioning, or psychopathology, is often defined as the inability to
cope with emotions (cf Peters, 1972), and/or as the expression or
experience of inappropriately frequent or intense emotions For
example, flat affect is a diagnostic indicator of depression Thus, if
the two sexes do differ in their emotional development, these differ-
cences may account for or help to explain gender differences in mood,
cognitive style, motivation, self-concept, and the incidence of various
psychopathologies, such as depression (cf Weissman & Klerman,
1977) Gender differences in emotional development would also
argue for different strategies to be used with each sex in psycho-
therapy, since the appropriate labelling and understanding of feel-
ings is an integral part of the psychotherapy process (cf Pierce,
Nichols, & DuBrin, 1983)

Whether or not there are gender differences in emotional devel-
opment is also the subject of a great deal of popular speculation In
the midst of writing this paper, I happened to read letters to the
editor of Time Magazine (June 25, 1984, p 4) concerning readers’
feelings about the possibility of a woman vice president To my
dismay (but not to my surprise) one male reader wrote, “Women are
emotional They are also unaware of the exigencies of life and they
lack objectivity,” while another male reader wrote, “The ambitious
female politician can come about only by an inborn androgyny,
produced by a high level of that male hormone (testosterone) with
its attendant aggressiveness.” The idea that the emotional lives of
women differ from those of men was supported both by a six-year-
old female friend of mine who said to me, “You know why I’m
scared? Because I’m a girl,” and by a fortune cookie I received which
informed me that “A woman either loves or hates, she knows no
medium.” The assumption of gender differences in emotional devel-
opment has thus been used to argue for the kinds of roles women
should and should not play in our culture Given the hypothesized
relationship of emotions to personality, psychopathology, psycho-
therapy, and social roles, it is clear that data concerning gender
differences in emotional development are quite important and have
both theoretical and practical significance

In order to discuss gender in relation to emotional development,
the present paper will be organized as follows First, emotional
development will be conceptualized, followed by a discussion of the
methodological difficulties involved in studying gender differences
Next, theories of emotional development as well as empirical studies
of emotional expression, recognition, experiences, and defenses will be reviewed with reference to their relevance for understanding and/or predicting gender differences. A discussion of the relationship between empirical and theoretical work on gender differences in emotional development will follow. It will be argued that there has been little overlap between research and theory, in that much of the important theoretical work about the interpersonal context in which emotions develop (cf. Chodorow, 1978, Lewis, 1976, 1983, Miller, 1976) has been neglected by researchers, and important data have been ignored by theorists (cf. Tomkins, 1981). Finally, recommendations for future research in this area will be proposed.

Conceptualizing Emotional Development

Emotional development (that is, how emotional functioning varies over the course of the lifespan) is difficult to conceptualize both because of the complexity of the construct “emotion” and because of widespread theoretical disagreements about the functions emotions serve (cf. Buck, 1983, Buechler & Izard, 1983, Plutchik, 1980). Emotions are multidimensional constructs, with physiological-experiential components (e.g., heartbeat), cognitive components (e.g., interpretations of situations, recognition of facial cues), behavioral/expressive components (e.g., facial expressions), attitudinal components (e.g., the values placed on emotional experiences) and regulatory components (e.g., coping or defense mechanisms to minimize, exaggerate, or distort emotions). Each of these components (or the interaction among different components) may have unique developmental etiologies and/or epigenetic timetables. The complexity of emotional functioning makes it difficult to generalize about the nature of emotional development as a unitary construct.

It is also difficult to conceptualize emotional development because theorists disagree about the function of emotions, and about the developmental changes and processes involved in these functions (cf. Buck, 1983, Buechler & Izard, 1983, Plutchik, 1980). Some theorists hypothesize that emotions serve motivating functions (Kellerman, 1983, Tomkins, 1981), the goals of which are interpersonal relationships (Buechler & Izard, 1983), object contacts (Buechler & Izard, 1983), or “the amplification of urgency” to ensure that adaptive behaviors occur, e.g., the feeling of pain causes us to tend to our wounds (Tomkins, 1981). Other functions which have been attributed to emotions include social referencing, that is, emotions help in the cognitive appraisal of ambiguous events (Klinnert, Campos, Sorce, Emde, & Svejda, 1983), and signalling, that is, emotions...
signal the emergence of new cognitive abilities (cf Cicchetti & Hesse, 1983) Disagreements about whether or not emotions are primary motivating systems result in different theories about the nature of the interaction between emotional and cognitive development. For example, the emergence of fear at the end of the first year of life has been viewed as either the consequence or the cause of a new cognitive ability to recognize incongruities (cf Cicchetti & Hesse, 1983) These differing theoretical perspectives on the functions served by emotions add to the complexity of any attempt made to conceptualize and study emotional development.

However, despite theoretical disagreements, theorists tend to concur and data indicate that there are several clear trends in the development of emotional functioning. It is generally agreed that a biological preparedness for emotional expressions (and, presumably, experiences) exists at birth (cf Tomkins, 1981) This preparedness is hypothesized to occur in the form of either general arousal or discrete emotional states (e.g., anger vs. sadness), and plays a critical role in determining the quality and frequency of caretaker-infant interactions, as well as in motivating or interacting with the development of cognitive skills (cf. Buechler & Izard, 1983) With development, the expression and experience of emotions become more differentiated, more stable, and more internally and externally regulated (Cicchetti & Hesse, 1983) The expression of emotions becomes increasingly subject to voluntary controls as children begin to understand that there are culturally specific display rules which regulate the social acceptability of emotional expressions (Brody & Carter, 1982, Saarni, 1979) Although there are few data on the relationships between emotional expressions and the situations which elicit them, it has been hypothesized that with development, each emotion becomes elicited by or associated with, an increasing number of different situations (Piaget, 1981) Thus, for a six-month-old, the feeling of disgust may be limited to an aversive taste or odor, whereas, to a two-year-old, disgust may also include situations in which a standard of cleanliness is violated.

that feelings have internal, intrapsychic components in addition to external, situational components (Carroll & Steward, 1984, Donaldson & Westerman, 1984, Harris, Olthof, & Terwogt, 1981)

Thus, data and theories have indicated the existence of developmental trends in several components of emotions, that is, the expression, recognition, and cognitive understanding of emotions. The evidence for gender differences in these developmental trends is the focus of this paper. Research indicates that by adulthood, there are gender differences in many of the components of emotion previously specified. For example, adult women are more facially expressive of emotions than are men (cf Buck, Baron, & Barrette, 1982, Buck, Miller, & Caul, 1974, Hall, 1979), and are better able to recognize nonverbal emotional cues than are men (cf Hall, 1978, Rosenthal & DePaulo, 1979). Questions for researchers interested in gender differences in emotional development include the etiology of such differences, the ages at which such differences emerge, and the developmental patterns such differences follow. For example, are there gender differences in either the rate or the qualitative processes by which children begin to understand that emotions have both internal and external components? This review is focused on these developmental questions. The theories and empirical studies to be reviewed are limited to those which are helpful in illuminating these developmental issues and which concern nonpathological aspects of emotional development, therefore, theories and studies about, for example, gender differences in depression will not be included.

Methodological Complexities Involved in Studying Gender Differences

Conceptual and methodological difficulties abound in any attempt to study gender differences in emotional development. As previously discussed, emotions are multidimensional constructs, and there may be gender differences in any or all of the components of emotions, for example, in emotional expression but not in emotional experience. Furthermore, whether or not gender differences are manifested in any one component of emotions depends on other variables, such as the quality and intensity of the emotion experienced (e.g., happiness vs. anger/anger vs. irritation), the age of the person studied, the situational context in which the emotion is elicited, and whether emotions are studied with respect to the self or others. Given the multidimensional nature of emotions, it is difficult, if not impossible, to generalize about gender differences in emotional development.

Research on differential emotional development for the two sexes...
has been further constrained by both theoretical and methodological limitations. Despite the fact that theories of emotional development often include explicit and/or implicit predictions about differential emotional development by gender, and about the relationship between emotional development and personality development (cf. Field, 1982, Kemper, 1978 a and b, Lewis, 1976, Lewis & Michaelson, 1983, Miller, 1976), researchers tend to design studies in a theoretical vacuum. Typically, researchers who study gender differences in emotional development decide to explore such differences either because previous researchers found gender differences in the variable of interest, or more commonly, because previous studies were inconsistent in their findings concerning gender differences. When researchers do find gender differences, they briefly attempt to explain their findings on the basis of post hoc theories. The result has been a hodge-podge of theories about gender differences which are never systematically tested.

Furthermore, most of the research designs that have been used to study this question are seriously limited. Often, observers who rate subjects on various measures of emotionality, for example expressiveness or experience, are not blind as to the subjects' sex, which may bias them in their perceptions about sex differences. A highly consistent body of literature indicates that there are strong sex role stereotypes about the quality and intensity of emotions attributed to each sex. Happiness, sadness, fear, and general emotionality are associated with females, and anger with males, by children as young as preschool age (Birnbaum & Chemelski, 1984, Birnbaum, Nosanchuk, & Croll, 1980), and these differential emotional experiences have been found to be attributed to the same child as a function of whether that child is labeled male or female (Condry & Condry, 1976, Cunningham & Shapiro, 1984, Haviland & Malatesta, 1981).

Such stereotypes undoubtedly have powerful effects, not only on experimental investigations of males' and females' emotional development, but on those who socialize males and females (i.e., teachers and parents), and also on children themselves, who may conform to such sex role stereotypes in certain contexts (perhaps when participating in experiments) because of social desirability pressures. In order to draw any conclusions about differential emotional development by sex, studies are needed in which observers are blind as to the sex of the subjects (often possible to do in work with infants and children, cf., Cunningham & Shapiro, 1984), and in which social desirability pressures on subjects are minimized. Recent studies of adults' emotionality have begun to explore within-sex variations in emotion as a function of gender identity (cf. Zuckerman, DeFrank,
This paradigm is one that has been used very infrequently by developmental researchers (some exceptions are Cramer & Carter, 1978, Hall & Halberstadt, 1981), and it is certainly worth pursuing in order to avoid some of the methodological limitations just discussed, for example, observer bias (cf Unger, 1979).

Theories of Emotional Development—What About Gender Differences?

Each theory of emotional development differs in the relative importance placed on cognitive, social, genetic, cultural, and physiological processes as etiological and conceptual variables, and consequently each has different predictions about emotional development for the two sexes (cf Buck, 1982, Greenberg & Mitchell, 1983, Izard, 1971, 1977, Lewis, 1976, Miller, 1976, Plutchik, 1980). In order to discuss these theories with respect to gender differences, they will be categorized into those which emphasize biological-genetic processes and into those which emphasize social, cognitive, and cultural processes. These categories are somewhat arbitrary in that recent theorists have emphasized the role of both social and biological processes in emotional development (cf Buck, 1983).

Biological/Genetic Theories

Perhaps the most widely written about biologically based theories of emotional development are genetic-evolutionary theories (cf Izard, 1971, 1977, Plutchik, 1980), which posit that each emotion has an underlying neural or hormonal substrate with an adaptive social function. The purpose of emotions is to communicate about survival-related approach-withdrawal processes, for example, fear helps to identify potential aggressors. From this theoretical perspective, the important issue relevant to an understanding of gender differences in emotional development is that the two sexes historically differed in their interpersonal survival-related functions. Women were primarily responsible for child-rearing, men, for gathering and hunting food. While hunting required communication among peers who were at relatively similar levels of physical, cognitive, and social development, child-rearing required communication between a developmentally more advanced caretaker (in physical, social, and cognitive skills), and a developmentally immature, nonverbal, and physically vulnerable child (cf Adkins, 1980, Daly & Wilson, 1978). These differences in gender-related interpersonal interactions have implications for two aspects of emotional functioning. Women should be more sensitive to nonverbal cues than are...
men, since nonverbal sensitivity is adaptive for child-rearing, and women should show anger less often than do men, since anger is theorized to be a precursor of aggressive behavior, and is nonadaptive for interactions with children (cf Frodi, Macauley, & Thome, 1977).

Drive-based psychoanalytic theorists also conceptualize a biological basis to emotional development. The function of emotions is to maintain intrapsychic stability in the face of conflicts, often produced by environmental changes which impede or facilitate biological drive satisfaction (Brenner, 1980). Since the biological anatomies of the two sexes differ, both the nature and the resolution of the developmental conflicts they undergo are hypothesized to differ (cf Cramer, 1980, Freud, 1925/1961, 1933/1965). These differences produce more aggression, competition, guilt, and outer-directedness in males, and more passivity, shame, inner-directedness, jealousy, and masochism in females (cf Mitchell, 1974, Strouse, 1974).

Other theories which emphasize a biological conceptualization of emotions lead to less clear predictions about differential emotional development by sex. Neurochemical, hormonal, and neuroelectric processes have been associated with emotional experiences (Ekman & Oster, 1979, Lamandella, 1977, Pribram, 1980), and some researchers suggest that the two cerebral hemispheres may mediate different aspects of emotional functioning. For example, it has been suggested that the right hemisphere mediates facial recognition (cf Ekman & Oster, 1979), as well as the more spontaneous aspects of emotional functioning (Buck, 1982), whereas the left hemisphere mediates more cognitive, analytic aspects of emotional functioning (Buck, 1982). Some researchers suggest that women rely on intuitive, right hemisphere modes for emotional processing, whereas men rely on analytic, left hemisphere modes for emotional processing (Buck, 1982), but there are as yet no clear data to support this hypothesis. Gender differences in most of these biological processes (cerebral lateralization, neurochemical, hormonal, and neuroelectric processes) are not well documented, particularly before puberty, and their meaning is controversial when they are documented (cf McGlone, 1980).

Perhaps the clearest biology-behavior connection relevant to a discussion of gender differences is the well documented relationship between the male hormone androgen and aggression in animals, with aggression defined as an attack on another (cf Daly & Wilson, 1978, Tieger, 1980). Increasing amounts of the hormone are associated with increasing frequency of aggression in many animals (cf Tieger, 1980). However, the relationship between aggression and hormones
in humans is not as clear (Tieger, 1980). Furthermore, the relationship between aggression and emotions is complicated, with many theorists positing that emotions such as anger and frustration precipitate a readiness to act aggressively, but that the experience of affect and aggressive acts do not have a one to one correspondence (cf Frodi et al., 1977). Thus, although human males engage in more frequent aggression than human females do (cf Maccoby & Jacklin, 1980), there is no evidence to suggest the existence of biologically mediated differences in the emotions preceding or accompanying aggressive behaviors. Thus, differential emotional development for the two sexes cannot be easily predicted by theories emphasizing biological concomitants of emotion.

Social/Cognitive Theories

Sociological, social learning, object-relations, and cognitive-developmental theories of emotional development all emphasize the importance of the social context for emotional development (cf Greenberg & Mitchell, 1983, Kemper, 1978 a and b, Lazarus, 1982, Piaget, 1981, Schachter & Singer, 1962, Sroufe, 1979). Social learning theorists (cf Lazarus, 1982, Schachter & Singer, 1962) posit that emotions are learned associations involving cognitive interpretations of physiologically arousing situations. In accordance with this theory, differential emotional development for the two sexes may occur if parents socialize the emotions of their sons and daughters differently (apply different contingencies to their behaviors) or if the behaviors or emotional reactions of adult males and females are observed to differ and children imitate those differences.

Cognitive-developmental theorists (Piaget, 1981, Sroufe, 1979) emphasize that the interaction among the infant’s temperament at birth (which may be genetically determined), the mother’s emotional style, the child’s cognitive capabilities, and the quality of the situational context (which may vary over time) affect the course of children’s abilities to recognize, express, experience, and cope with emotions. Cognitive-developmental theorists also emphasize that the increasing complexity of cognitive skills occurring with development is inextricably tied to greater complexity of emotional experiences (cf Sommers, 1982). Gender differences in rates of cognitive and biological maturation, such as girls’ superior language abilities at an early age, may be related to differential rates of emotional development for the two sexes (cf Waber, 1976). In addition, if any one of the other variables hypothesized to be critical for emotional development differs for the two sexes (e.g., temperament), differences in
the quality of mother-infant interaction will result, which will in turn differentially influence the emotional development of each sex.

Object relations theorists hypothesize that the quality of the mother-child relationship influences the child’s ability to integrate and modulate feelings such as anger and loneliness, to be empathic, and to self-soothe (cf Greenberg & Mitchell, 1983, Stechler & Kaplan, 1980). Recent feminist revisions of psychoanalytic and object relations theories (Chodorow, 1978, Lewis, 1976, 1983, Miller, 1976) emphasize differences in the quality of the mother-child relationship for girls and boys as well as differences in male and female sociocultural status as determining differences in emotional development.

Miller (1976) hypothesizes that women are characterized by greater sensitivity to nonverbal signals, greater envy, as well as greater expressions of vulnerability, self-directed hostility, weakness, and helplessness than are men. She theorizes that these qualities are due to the subordinate position of women which both requires them to please and accommodate men as well as to express for men socially unacceptable emotional experiences, for example, vulnerability and helplessness. Men need to deny such emotional experiences because they are incompatible with the characteristics of male identity, especially achievement.

Both Lewis (1983) and Chodorow (1978) argue that the quality and/or importance of attachment experiences and relationships differ for men and women, producing differences in emotional experiences. According to Chodorow (1978), girls are oriented toward affective, relational issues because they are parented by adults of the same sex (i.e., women), resulting in a lack of separateness in relation to others. In contrast, boys must clearly differentiate from mothers in order to develop separate, masculine sexual identities, producing repression of affective and relational issues.

Lewis (1976, 1983, and this issue) somewhat similarly argues that emotions are based on attachment systems, and that the threat of loss of attachment results in the emotions shame and/or guilt, which aim to restore the attachment. Lewis (1976, 1983, and this issue) further argues that women are more prone toward experiencing shame and men toward experiencing guilt. Her argument includes the following points: (1) Women’s low sociocultural status causes women to feel (realistically) inferior, which predisposes them to experience shame, that is, to experience vicariously others’ negative views of themselves. (2) Because women care more about their relationships with others than do men (i.e., are more affiliative, a characteristic which Lewis [1983] argues may be biologically based),
shame is more easily induced in women than it is in men. In other words, women experience more negative feelings about themselves because of the importance they place on the approval or disapproval of others, and (3) men's greater aggressiveness relative to women's (which again may be biologically based) leads them to experience more guilt. Guilt is aimed at actively making amends to another because of a wrong-doing or because of an injury inflicted on others, and both the initial act of injury and the feeling or act of reparation require aggressive behaviors, wishes, or feelings.

In his sociological theory of emotions, Kemper (1978a and b) posits some ideas which are quite similar to those of feminist thinkers in the importance placed on the lower status, power, and sense of worth women have in relation to men as determining the quality of their emotional experiences. According to Kemper (1978a and b), the function of emotions is to maintain or change social relationships, with the power and status inherent in the relationship determining the quality and intensity of the emotion to be experienced. For example, he theorizes that guilt results from an excessive use of power against others, shame from a sense of being unworthy of status, anxiety from the aversive use of power by others, depression when benefits felt to be deserved are denied. Although Kemper (1978a and b) does not directly posit hypotheses about gender differences in emotional development, implicit in his theory is the prediction that women may experience more shame, anxiety, depression, and less anger than do men because of their low status, power, and sense of unworthiness.

To summarize the predictions about gender differences inherent in the theories reviewed above. Women should experience and express less anger and guilt than do men (according to psychoanalytic, genetic-evolutionary, and sociological theories), experience and express more self-directed hostility, envy, shame, depression, vulnerability, helplessness, and anxiety than do men (according to feminist psychoanalytic, drive-based psychoanalytic, object-relations, and sociological theories), direct feelings internally rather than externally (according to psychoanalytic theories), be more sensitive to nonverbal cues than are men (according to biological-evolutionary theories and feminist psychoanalytic theories), and be more emotionally expressive in general than are men (according to feminist psychoanalytic theories). It is noteworthy that theorists do not predict gender differences in the experience or recognition of fear, since the data to be reviewed below indicate that there are gender differences in the recognition and attribution of fear. From the perspective of cognitive-developmental theorists, predictions about
Gender differences are dependent on data concerning gender differences in the variables theorized to be of importance to emotional functioning: temperament, socialization practices, and cognitive maturation. These data will be reviewed and discussed below.

Interestingly, theorists do not seem to disagree about the direction or quality of gender differences, but rather in the relative emphasis they place on the developmental processes responsible for such differences, that is, biological-evolutionary processes vs. social-cognitive processes. These etiological differences lead to different hypotheses about the developmental timetable with which gender differences in emotions should emerge. Thus, biological-evolutionary theorists might predict the existence of some gender differences in emotional functioning at birth, whereas social-cognitive theorists would predict such differences emerging over the course of development as a function of socialization practices and of cognitive maturity. Object relations theorists would closely explore the development of gender differences during early mother-infant interactions. Drive-based psychoanalytic theorists would focus on Oedipal and adolescent life stages during which anatomical sex differences become critical for determining the nature of developmental conflicts. Theorists subscribing to a sociological view of emotions would explore gender differences in development as a function of power and status within cultural or subcultural groups.

The next sections of the present paper will review the empirical evidence for gender differences in emotional development, and for different emotional socialization practices for each sex. Gender differences in emotional development will be discussed with reference to the major components of emotion: emotional expression, recognition, experience, and defenses. Gender differences in defenses will be reviewed first, since defensive processes may affect the interpretation of gender differences found in any of the other components of emotions.

**Gender Differences in Defenses and Display Rules**

**Defenses**

Defenses are theorized to be processes which involve the distortion of a conflict-laden or socially unacceptable feeling, thought, or wish in order to mediate among impulses, internal and external prohibitions, and reality (A. Freud, 1936/1946, Vaillant, 1971), or in order to present the self in a socially acceptable light (Rogers, 1951). As previously discussed, theorists predict that females should use defenses that direct feelings internally while males should use...
defenses that direct feelings externally (Chodorow, 1978, Freud, 1925/1961, 1933/1965, Miller, 1976) In fact, research has indicated that projection (an outer-directed defense) is stereotyped as a masculine response and self-blame (an inner-directed defense) as a feminine response by fifth and sixth grade boys and girls (Dollinger, Staley, & McGuire, 1981) Contrary to work with adults in which masculine stereotypes are more socially desirable than are feminine stereotypes (Rosenkrantz, Vogel, Bee, Broverman, & Broverman, 1968), self-blame is viewed more favorably than is projection by elementary school children (Dollinger, Staley, & McGuire, 1981) Projective measures of children's defensiveness, including the TAT and The Defense Mechanism Inventory, have tended to yield results consistent with such sex role stereotypes and with psychoanalytic theories Boys use more externalized defenses, involving turning against others or projection, whereas girls use internalized defenses involving turning against themselves or denying or reversing an expected response (Cramer, 1979, 1983a and b) These differences are more apparent in late adolescents, adults, and young children than in latency aged children and early adolescents Cramer (1983b) suggests that the lack of sex differences in defenses during the latency period is consistent with Anna Freud's (1936/1946) hypothesis that the need for defense utilization is reduced during this relatively quiescent psychosexual stage Other measures of children's defensiveness have included self-report measures and tasks requiring children to attribute emotions to stories Explorations of gender differences using these measures have yielded inconsistent results Some studies have shown that girls use less denial and are less defensive than are boys (Brody, Rozek, & Muten, in press, Gilbert, 1969, Hill & Sarason, 1966), and that boys' defensiveness relative to girls' increases with age (Hill & Sarason, 1966) Other studies report no sex differences (Douglas & Rice 1979, Rothenberg, 1970) Brody, Rozek, & Muten (in press) also found no sex differences in mothers' ratings of preschoolers' use of internalization, denial, and stoicism

Display Rules

Display rules are cultural standards about the quality and intensity of emotions that can be expressed in different contexts (cf Saarni, 1979) Display rules thus represent reality prohibitions on emotional expression, and as such, may contribute to the use of and development of defenses Age and sex differences in the understanding and application of these rules are beginning to be explored (Feldman,
Jenkins, & Poopola, 1979, Feldman & White, 1980, Saarni, 1979, Shennum & Bugental, 1982, Yarczower, Kilbride, & Hill, 1979). Children are either interviewed concerning their understanding of display rules, or they are asked to “pretend” to behave in certain ways by the experimenters. Several studies have indicated that with age, both boys and girls increasingly understand that emotional experience and expression do not have a one to one correspondence (Saarni, 1979), and that girls increasingly inhibit negative feelings (Feldman & White, 1980, Shennum & Bugental, 1982) whereas boys become better at neutralizing affects or decreasing overall expressiveness (Buck, 1977, Feldman & White, 1980, Saarni, 1982, Shennum & Bugental, 1982) Feldman, Jenkins, and Poopola (1979) found that both boys and girls had increasing control over emotional expressions with age, although girls had somewhat greater control over facial expressions than did boys and were rated as being better dissemblers in public than in private situations. Saarni (1979) found that girls tended to invoke the need for display rules in order to maintain relationships, whereas boys invoked them in order to maintain norms and rules.

Summary of Research on Defensiveness and Display Rules

The research on display rules and defenses suggests that gender differences in these processes are highly consistent with both cultural sex role stereotypes and theoretical predictions discussed previously. Girls tend to inhibit negative affects, and to turn them against themselves, and boys tend to neutralize the expression of most feelings and to project negative feelings externally. Developmental trends in these processes are inconsistent, with some studies indicating the existence of gender differences in young children and late adolescents, but not in latency aged children (Cramer, 1983b), and other studies indicating increasing gender differences in defensiveness with age (Feldman & White, 1980, Hill & Sarason, 1966, Saarni, 1982).

Further studies on defenses and display rules are needed to thoroughly explore the ways in which rules for the expression of affect vary as a function of age, culture, situational context. Existing research on defensiveness and display rules highlights the need for caution in interpreting the data on emotional expression, recognition, and expression to be discussed below. Since males and females are subject to different display rules and social pressures about the expression of affect, as the data suggest, tendencies to conform to such pressures may confound or influence any interpretations of
the data concerning gender differences in emotional development. For example, the greater emotional expressivity of women relative to men cited in many studies (cf. Hall, 1979) may not mean that women are more emotionally expressive than are men in all situations, but rather that they may be less subject to social constraints or display rules about emotional expression in experimental situations than are men.

**Gender Differences in Emotional Expression**

Theorists predict that women should express more vulnerability, helplessness, shame, anxiety, envy, depression, and less anger and guilt than do men. Furthermore, women should be more emotionally expressive in general than are men (Kemper, 1978a and b, Lewis, 1976, 1983, Miller, 1976, Mitchell, 1974, Strouse, 1974). Emotional expressions have most often been measured in two different ways: Expressions are rated by judges (a) either after having been induced in subjects or (b) during the course of naturalistic observations. In studies of gender differences, there are several methodological problems with both types of measures. Judges are most frequently asked to compare the facial expressions of girls and boys without being blind to the sex of the child. Because of the strong sex role stereotypes concerning emotional expression discussed previously, observers may tend to be biased in their ratings of expressions. Researchers using these methodologies may actually be measuring how judges perceive males and females, rather than what males and females differentially express.

A second problem with this research is the relative lack of emphasis placed on the situational context in which the emotion is being studied. Research on sex differences in adult emotions as well as theories about emotional development suggest that an understanding of the situational context that provokes and maintains emotional expression may be critical for understanding gender differences. For example, very different precipitants have been found to elicit anger in women than in men (Frod, MacCauley, & Thome, 1977). Developmental researchers make a serious mistake whenever they generalize about gender differences in expressiveness after studying only one situation. Although developmental researchers have emphasized the importance of context by interpreting the meaning of an emotional behavior differently depending on the situation that precipitates it (e.g., crying has been considered to be an index of fear when linked to separation- and stranger-anxiety [Kagan, 1978] and an index of anger/frustration when linked to peer interactions [Landreth,
1941), they have failed to manipulate systematically the situational context as one of the predictors of sex differences in emotional expressiveness.

Another conceptual problem not adequately addressed in the emotional expression literature is that the same emotional expression may have a different meaning for each sex. Thus, smiling in adult females may be related to social anxiety and deference, whereas in adult males it may more often be related to sociability and appreciation (cf. Weitz, 1976). Keeping these limitations in mind, the studies on sex differences in emotional expression will be reviewed by dividing them into those using affect induction techniques, naturalistic observations, and other methodologies.

Affect Induction Techniques

The methodology common to these studies is that the emotional expressiveness of children's faces is rated by judges after children have watched slides or videotapes, have listened to stories, or have posed facial expressions according to experimenter's verbal directions. Judges have included parents, other children, or unfamiliar adults who have rated boys and girls on the intensity, appropriateness, and quality of their expressions (Brown & Cunningham, 1981, Buck, 1975, 1977, Feinman & Feldman, 1982, Field & Walden, 1982 a and b, Hamilton, 1973, Masters, 1981, Morency & Krauss, 1982). Most of these researchers have found no sex differences in rated expressivity (Brown & Cunningham, 1981, Buck, 1975, 1977, Field & Walden, 1982 a and b, Hamilton, 1973, Morency & Krauss, 1982). When sex differences do emerge they are often in a direction consistent with sex role stereotypes and theoretical predictions. Females are judged to be better at communicating affect than are males by undergraduate observers (Buck, 1975, Masters, 1981), females' anger is identified significantly less than chance, or is perceived as sadness or happiness (Feinman & Feldman, 1982) and males' expressivity is judged to decrease with age (Buck, 1977).

Felleman, Barden, Carlson, Rosenberg, and Masters (1983) found that among a sample of unfamiliar adults, spontaneous displays of anger by children were more recognizable than posed displays when the expressor was female, whereas the reverse was true when the expressor was male. Girls may pose anger less well than boys because of socialization pressures on the expression of anger by girls. These pressures may produce expressive inhibition when girls are made aware of their emotional expressions, as they would be in the process of posing.
One indication that these studies may be measuring the biases or perceptions of judges instead of providing an objective measure of children's expressiveness is that in some studies, judgments of expressivity have been found to vary depending on the familiarity of the raters with the infants and children (Condry & Condry, 1976, Femman & Feldman, 1982). However, male and female raters from varying age and racial groups have been found to agree on their ratings of facial expressivity (cf. Eiland & Richardson, 1976, Gitter, Mostofsky, & Quincy, 1971). These findings suggest either that gender differences in rated expressivity may not be entirely a function of observer bias, or that the same sex role stereotypes about emotional expressivity are shared by members of different races, age groups, and by both sexes.

Naturalistic Observations

Naturalistic observations of children's emotional expressivity are quite inconsistent in their conclusions concerning gender differences, again possibly due to a failure to study situational context systematically. The context in which emotional expressions have been observed varies widely from study to study. Gender differences in newborn and infant emotional expression have been studied in the presence of siblings and mothers (Jacobs & Moss, 1976, Malatesta & Haviland, 1982, Moss, 1967), in the process of separating from mothers, with and without a barrier (Fiering & Lewis, 1979, Goldberg & Lewis, 1969, Jacklin, Maccoby, & Dick, 1973, Robson, Pederson, & Moss, 1969, Skarin, 1977, Trause, 1977, Van Lieshout, 1975), in the presence of unfamiliar adults (Kagan 1978, Lewis & Weinraub, 1979), and in the absence of any interpersonal or cognitive interactions (Feldman, Brody, & Miller, 1980, Osofsky & O'Connell, 1977, Phillips, King, & Dubois, 1978, Yang & Moss, 1978, Zeskind & Lester, 1978). Gender differences in preschoolers' emotional expressions have been studied in the context of interactions with peers (Camras, 1977, Landreth, 1941) and parents (Golding, 1982). As previously noted, differences in the situational context may help to account for the wide variations in results concerning gender differences in emotional expressiveness. For example, Landreth (1941) found that in an observational study of a preschool, girls cried more frequently as a result of accidental injury than did boys, whereas boys cried more frequently as a result of interactions with objects or conflicts with adults.

Many studies of gender differences in infant emotional expressiveness are studies of temperament, that is, the infants' reactive tend-
Gender and emotional development

Encies to external and internal stimulation. Cognitive developmental theorists hypothesize that gender differences in temperament should influence and be influenced by the quality of mother-infant interactions, which would in turn differentially affect the emotional development of each sex. Some reviews of infant temperament research indicate no evidence for any gender differences (Rothbart & Derryberry, 1981); yet Haviland and Malatesta (1981) review several studies which indicate that at birth, boys are more irritable, more emotionally labile, less consolable, startle more easily, and cry more intensely than do girls. The discrepancy between Haviland and Malatesta's conclusions and the conclusions based on reviews of infant temperament researchers may be partially understandable in that measures of temperament usually include patterns of behavior such as thresholds to stimulation and temporal response patterns which differ from those cited by Haviland and Malatesta (1981).

However, the studies Haviland and Malatesta review should be interpreted cautiously because in only two of the studies (Malatesta & Haviland, 1982, Phillips, King, & Dubois 1978) were observers blind to the sex of the infant. Observer bias may thus have been operating in many of the studies. Haviland and Malatesta (1981) also do not cite some of the neonatal studies that reveal no gender differences in variables related to emotional expressivity or infant temperament (cf. Ashton, 1971, Bell, Weller, & Waldrop, 1971, Caldwell & Leeper 1974).

In a well-designed study, Cunningham and Shapiro (1984) found that even when raters were deceived as to the correct sex of the infant, males were rated as producing more frequent anger, less frequent sadness, and more intense expressions of happiness, anger, sadness, and fear than were females. Malatesta and Haviland (1982) found that infant girls were rated as more frequently interested than infant boys during mother-child interactions. Replications of these studies in which context is varied are needed before it can be concluded that there are gender differences at birth in the intensity and quality of emotional expressiveness. For example, it may be that infant girls display more frequent expressions of interest than boys only when interacting with mothers and not in other social or cognitive interactions, which would certainly modify the conclusion to be drawn from Malatesta and Haviland's (1982) work.

Some studies have indicated no gender differences in the quality and intensity of angry, sad, interested, or happy facial expressions in preschool and young school-aged children (Camras, 1977, Golding, 1982). Lewis and Michaelson (1983) found a tendency for nursery school girls to display more anger, more intense fear, and more
happiness than boys in their social interactions, while Goodenough (1931) also reported angry outbursts more frequently among girls than boys until 2 years of age, at which time girls' angry expressions decreased sharply. Observations of preschool children watching television which at times lost the video portion indicated that boys displayed more anger than did girls and that girls displayed more fear and happiness than did boys (Birnbaum & Croll, 1984). Angry expressions have also been observed by placing a barrier in front of children to prevent them from reaching a toy or a parent. While initial research in this area revealed gender differences in 13-month-olds consisting of more crying by girls and more instrumental action by boys (Goldberg & Lewis, 1969), further research showed no gender differences (Jacklin, Maccoby, & Dick, 1973), or gender differences which varied as a function of age or the type of barrier (Fering & Lewis, 1979, Van Lieshout, 1975) and reversed the direction of gender differences found earlier.

Fearful behaviors have been observed in relation to separation from mothers, anxiety toward strangers, and in dentists' offices. Measures of fear have included crying, withdrawal from or wariness in novel situations. Again, results of these studies for gender differences have been highly inconsistent. Fear exhibited in dentists' offices has not been found to vary in quantity or quality as a function of gender in a large number of studies reviewed by Winer (1982). Lewis and Weinraub (1979) in a review paper, cite a large number of studies indicating that boys are more distressed at maternal separation than are girls of comparable ages, while Kagan (1978) in a paper that summarizes several studies of separation- and stranger-anxiety arrives at conclusions which are somewhat contradictory to those of Lewis and Weinraub. Girls exhibit stranger- and separation-anxiety earlier than boys, and thus within the same age levels they exhibit greater distress than do boys. Kagan (1978) attributes the gender differences in separation-anxiety to earlier cognitive maturations in girls than in boys.

Other Measures of Expressiveness

Other measures of children's expressiveness have included ratings by parents or teachers (Brody, Rozek, & Muten, in press, Buck, 1977, Buss, Iscoe, & Buss, 1979, Gilbert, 1969) and frequency counts of children's affective vocabularies (Bretherton & Beeghly, 1982). With the exception of Buck's (1977) finding that girls were rated higher in expressiveness by teachers than were boys, none of these other studies showed any evidence of sex differences.
Conclusions About Expressiveness

The literature on expressiveness discussed above reveals that theoretical predictions concerning gender differences in the expression of shame, guilt, vulnerability, helplessness, and jealousy have been virtually unexplored. Researchers have explored theoretical predictions about more general emotionality, and less frequent anger expressed by girls than by boys. This research reveals that there are as yet very little convincing data that such gender differences exist in children. Preliminary evidence is accumulating that neonatal boys may be more intensely expressive of affect than are neonatal girls, which suggests the existence of a biological basis underlying gender differences in the intensity of emotional expressions, but in a direction which is opposite to theoretical predictions. Other evidence indicates that boys may become worse at expressing affects with age (Buck 1977, Shennum & Bugental, 1982) perhaps because of socialization pressures that encourage them to neutralize or to mask emotions, as consistent with social-cognitive theories of emotional development. Boys may be taught to mask emotions because the intensity of their emotions is considered to be culturally inappropriate.

Overall, the developmental data on expressiveness do not support any theory about the development of gender differences clearly, but instead suggest that gender differences in emotional expressiveness vary as a function of age, cognitive abilities, quality of emotion, and situational context, in accordance with culturally determined display rules. The failure to confirm theoretical predictions, however, may be due to researchers having neglected to study important theoretical issues, as will be discussed more fully below.

Gender Differences in Emotional Recognition

Many theorists concur that females should be better at nonverbal emotional recognition than are males, and a review by Hall (1978) of studies of adult men and women indicates that this is indeed the case. The studies Hall (1978) reviewed consisted of adult men and women judging emotionally laden face, body, or vocal cues presented in drawings, photographs, films, videotapes, and filtered speech.

A review of the developmental studies in affect recognition indicates that the etiological and developmental processes underlying adult female superiority are far from clear. Gender differences in the development of the ability to decode or recognize affects in others have been studied with respect to the ability to discriminate
affects in emotionally laden situations, in facial expressions, in tone of voice, and in music. Studies generally have been highly consistent in indicating that there are no gender differences in the ability to match affectively laden situations with appropriate facial expressions or with appropriate affective verbal labels (Abramovitch, 1977, Barden, Zelko, Duncan, & Masters, 1980, Borke, 1971, Brody & Harrison, 1984, Gove & Keating, 1979, Hughes, Tingle, & Sawin, 1981, Kurdek & Rogdon, 1975, Mood, Johnson, & Shantz, 1978, Rothenberg, 1970, Weiner, Graham, Stern, & Lawson, 1982) Exceptions are studies by Borke (1973) in which 3- to 6-year-old girls were better at matching appropriate facial expressions to stories than were boys, and by Chandler, Paget, and Koch (1978), in which it was found that girls were better at identifying the defenses implicit in affect-laden stories than were boys.

No gender differences have been found in infants' and children's abilities to discriminate among facial expressions using paired preference and habituation techniques, as well as matching and sorting tasks (Brown & Cunningham, 1981, Daly, Abramovitch, & Pliner, 1980, Eiland & Richardson, 1976, Field & Walden, 1982a, Gitter, Mostofsky, & Quincy, 1971, Hamilton, 1973, LaBarbara, Izard, Vietze, & Parisi, 1976, Morency & Krauss, 1982, Sherrod, 1979, Young-Browne, Rosenfeld, & Horowitz, 1977) One group of researchers did find that within a same race group, children could more appropriately identify the affect expressions displayed by same sex than by opposite sex children (Felleman et al., 1983), perhaps indicating differential attention paid to same sex children at this age. Furthermore, Field and Walden (1982b) found that girls tended to be more accurate than boys in matching their own videotaped expressions to photographs of expressions.

In a recent study involving children's abilities to discriminate the affects elicited by music, Cunningham and Smith (1984) required children to listen to music which had been previously categorized by adults as depicting happy, angry, sad, and fearful feelings. At ages 4, 5, 6, and adulthood, girls were better than boys at identifying sad and happy music, and 4-year-old girls were equivalent to adults and better than any other age group of children at identifying fear.

Rosenthal and his colleagues (Rosenthal, Archer, Hall, DiMatteo, & Rogers, 1979a, Rosenthal, Hall, DiMatteo, Rogers, & Archer, 1979b) did a series of studies on sensitivity to nonverbal cues using a measure called the Profile of Nonverbal Sensitivity (PONS). The test consists of twenty affect laden situations portrayed by an American woman in which channels of communication are varied in visual and auditory cues. In recent studies (Rosenthal et al., 1979b) a man
has also been used to convey emotions. Subjects were asked to label these situations affectively, given multiple choice cues. Rosenthal et al. (1979b) report that as early as third grade, relative to males, females showed superior recognition skills, were better at judging negative emotions, and profited more from the presence of body cues. For high school, junior high school, and children's groups, males tended to exhibit more variability in their PONS scores than did females. Furthermore, in third through fifth grades, younger boys performed relatively better in comparison to younger girls than did older boys in comparison to older girls.

In a study of 9- to 15-year-olds, high school, and college students, Blanck, Rosenthal, Snodgrass, DePaulo, and Zuckerman (1981) found that relative to males, females became increasingly better with age in decoding nonverbal cues from controllable sources, such as the face, but less good at decoding nonverbal cues from "leaky," less controllable sources, such as bodily cues. The authors suggest that with development, females may become increasingly sensitive to the social consequences which may ensue from decoding cues which the communicator does not intentionally wish to convey. However, because the data were analyzed using the superiority of females relative to males as the dependent variable, it is not clear whether the results are due to developmental changes in females' nonverbal recognition skills, males' nonverbal recognition skills, or both.

Rosenthal et al. (1979b) also found that the relationship between PONS scores and verbal SAT scores was higher for males than for females. They suggest that analytic skills may be less related to nonverbal affect recognition skills in females than in males. This suggestion is consistent with biologically based theories of emotional development, which predict that emotional development in males is mediated by analytically oriented left hemisphere functioning, whereas emotional development in females is mediated by more intuitive right hemisphere functioning (Buck, 1982). This suggestion is also consistent with feminist psychoanalytic theories (cf. Chodorow, 1978) about the greater value placed on emotional processes for women than for men. Because of the importance placed on emotional sensitivity for females, female emotional recognition skills may be independent of cognitive ability level, whereas the de-emphasis on emotional sensitivity in males may ensure that only males with better developed cognitive skills learn to recognize emotional cues. Rosenthal et al. (1979b) also hypothesize that females' superiority in nonverbal affect recognition may be due to greater eye contact made by females relative to males. However, when the
amount of eye contact was paritalled out, female superiority in nonverbal recognition skills was still evident.

In other developmental studies using the PONS, Hall and Halberstadt (1981) explored the relationship between gender identity (using 4 different gender identity measures) and nonverbal decoding skills. Contrary to predictions, they found that with increasing age, the ability to decode cues was increasingly positively correlated with masculine gender identity, and negatively correlated with feminine gender identity. However, neither masculine nor feminine gender identity scores significantly accounted for female superiority in decoding nonverbal cues. The authors suggest that female superiority in decoding cues may have less to do with traditionally assessed aspects of gender identity (e.g., passivity and dependence vs. activity and independence) than with the amount of attention paid to nonverbal cues. Another interesting finding was that the attitude toward female roles interacted with the ability to decode nonverbal cues. Nontraditional attitudes about women correlated with the ability to decode cues from women's voices, whereas traditional attitudes about women tended to correlate with the ability to decode cues from men's voices. These findings suggest that values and attitudes can significantly influence emotional recognition skills.

Discussion About Affect Recognition Studies

Most of the developmental studies concerning gender differences in affect discrimination or recognition indicate that there are no clear or consistent gender differences. As noted previously, this is surprising in light of the very clear gender differences found in adults' nonverbal recognition abilities (Hall, 1978). Hall and Halberstadt (1981, Rosenthal et al., 1979b) that younger boys do less badly relative to younger girls than do older boys relative to older girls in nonverbal recognition skills, and by Blanck et al.'s (1981) finding that with development, females become less superior to males in their ability to decode nonintentional cues which the communicator does not wish to convey. However, studies tend to be limited in the range of affects tested and often require children to discriminate or recognize obviously differentiable emotional cues. The few studies which do show female superiority in affect recognition may be testing subtle affect recognition skills not assessed by other studies (Blanck et al., 1981, Chandler et al., 1978, Cunningham & Smith, 1984, Hall & Halberstadt, 1981, Rosenthal et al.,
1979a and b) It is also possible that the studies showing female superiority in affect recognition require various cognitive skills in addition to affect recognition, for example, concept formation. These cognitive skills may mature at different rates for girls vs. boys, thus affecting gender differences in affect recognition.

The developmental processes involved in gender differences in emotional recognition skills thus remain unclear. Developmental researchers need to explore the development of gender differences in the nonverbal recognition of a wide range of audio and visual emotional cues, using a variety of measures. Such measures might include increased use of videotaped or filmed interactions as well as more frequent use of naturalistic observations. Furthermore, theoretical predictions about the relationships among emotional recognition abilities and social and interpersonal issues, such as power and status, values, such as the importance males and females attribute to knowing how other people feel, and cognitive processing strategies, such as analytic vs. intuitive strategies, need to be systematically explored. All of these relationships have important implications for the development of gender differences in emotional recognition abilities. The relationship between gender identity and emotional recognition abilities is also clearly important. Hall and Halberstadt's (1981) work suggests that traditionally assessed aspects of gender identity, such as dependence vs. independence, are not related to nonverbal recognition skills, but some theories suggest that other aspects of gender identity may be related, for example, sense of self-worth and low status and power (Miller, 1976).

A final word of caution about the interpretation of the affect recognition studies reviewed above is that they may be measuring the child's own affective experiences. Work on projective testing has indicated that the quality of the feelings preschoolers project into ambiguous story characters relates to the quality of their emotional behaviors as rated by their mothers (Brody et al., in press). Thus, it is possible that the feelings children attribute to music, to story situations, or to facial expressions, may partially reflect the quality of their own affective experiences. This issue may be especially problematic when children are cognitively egocentric and are incapable of distinguishing self from other.

Gender Differences in Affect Experience

Theories predict that girls should experience less anger and guilt, and more vulnerability, shame, helplessness, envy, and self-directed hostility than do boys. Affective experience is perhaps the most
difficult dimension of affect to measure. It has been assessed using physiological techniques, such as skin conductance, self-report measures, including interviews, and projective measures, such as story completion tasks. These measures are all somewhat limited in assessing the quality of emotional experience. Physiological arousal may not have a one-to-one correspondence with emotional experience, for example, it may vary inversely with facial expressiveness (cf. Buck, Miller, & Caul, 1974, Field, 1982). Interview and self-report techniques are undoubtedly subject to censorship in that children may monitor what they report in accordance with display rules and sex role stereotypes. Brody and Carter (1982) found that children attributed socially undesirable feelings (intense, negative feelings) more frequently to stories when the story protagonists were ambiguous characters than when the story protagonists were the children themselves, that is, "you." This work indicates that children will censor socially unacceptable feelings when asked directly about the quality of their emotional experiences. Projective measures are perhaps the least subject to social desirability constraints, but because they tend to have low face or content validity, they require extensive studies of their concurrent and criterion validity in order to be meaningfully interpreted. Studies using all of these measures will be reviewed below. In addition, studies of empathy (vicarious emotional arousal in response to another person's emotional state) will be reviewed separately in this section.

Physiological Measures

Physiological measures have rarely been used to study affective development. Buck (1977) measured skin conductance in 4- to 6-year-old children who were watching affect-laden slides, and asked mothers to rate the type of slide children had viewed (familiar vs unfamiliar people, unpleasant, unusual), as well as the pleasantness of the child's emotional expression. He found that in boys, high ratings of facial expressivity related to few skin conductance responses, but this was not true for girls. However, there were no significant gender differences in the skin conductance measure. In contrast, Buck, Miller, and Caul (1974) found that adult males tended to internalize (to be facially nonexpressive and physiologically aroused), whereas adult females tended to externalize (to be facially expressive without physiological arousal). Field (1982) also reports an inverse relationship between the frequency of facial expressions and cardiac responsivity in infants, but she does not indicate whether she analyzed for gender differences.
Gender and emotional development

Self-Report Measures

Studies using self-report, interview, or self-attribution measures to assess the nature of emotional experiences, find that relative to boys, girls report greater sensitivity to feelings (Mackie, 1980), are more willing to acknowledge affect states (Gilbert, 1969), including self-control problems (Karoly & Ruehlman, 1982), and can better discuss the experience of affect (Demos, 1975, Lutz, 1980). Brody et al. (in press) found that 4-year-old boys attributed less intense emotions to themselves than did girls, while Brody (1984) found that 7- to 11-year-old girls attributed sadness and fear more frequently and anger less frequently to themselves than did same age boys. As previously discussed, these self-report measures may be subject to censorship in that children may feel compelled to conform to emotional sex role stereotypes or display rules.

Projective Measures

Projective measures of children's emotional experiences have included story completion and story telling techniques (Brody & Carter, 1982, Hoffman, 1975, Rosenzweig, 1960) and emotional attribution tasks (cf. Brody & Carter 1982, Feshbach & Roe, 1968). The use of projective story telling techniques has indicated that males attribute less fear (Feshbach & Roe, 1968) and less intense fear to stories than do girls (Brody & Carter, 1982), perhaps due to social pressures on the expression of fear. In a contradiction of psychoanalytic theory, Hoffman (1975) found that girls were more likely to attribute guilt to same sex story characters than were boys. He also found that these gender differences were greater in adults than in 5th and 7th graders, suggesting that females developed a relatively greater tendency toward guilt with age. Using the children's Frustration–Aggression Measure, in which children are asked to report on what story protagonists would say in frustrating situations, Rosenzweig (1960) reports no consistent gender differences. However, he does report a study in which nine-year-old girls were found to show more angry and aggressive responses toward other children than toward adults, whereas boys were found to project angry and aggressive responses when in conflict with both other children and adults.

Empathy

Empathy has been defined as a vicarious affective experience in response to the affect of another. The developmental study of em-
Empathy is quite complex, in that some researchers have theorized that empathy requires several sophisticated cognitive skills: a self-concept, including the ability to differentiate self from others, the ability to take the role of another, and the ability to understand situation-emotion relationships (Deutsch & Madle, 1975, Shantz, 1975). None of these skills is characteristic of very young children and some may develop at different rates for boys and girls. Other work on empathy implies that there may be an innate biological preparedness for empathy, and that cognitive processes may actually interfere with the experience of vicarious affect (Buck, 1984, Sagi & Hoffman, 1976). In any case, the importance of cognitive skills in the measures used to study empathy complicates interpretations of the data to be reviewed below.

Although it is frequently reported that girls are more empathic than are boys (Feshbach, 1982, Hoffman, 1977, Hoffman & Levine, 1976) the evidence for sex differences in empathy is far from conclusive. Eisenberg and Lennon (1983), in their thoughtful review of gender differences in empathy, argue that sex differences in empathy are largely a function of the measures used to assess empathy. Self-report measures show the largest sex differences in favor of females, whereas studies using physiological or observational measures show little evidence of sex differences. Eisenberg and Lennon (1983) note the problems inherent in the use of several measures of empathy to study sex differences. Two of the most frequently used measures, the Feshbach and Roe Affective Situations Test for Empathy (FASTE), and measures of reflexive crying in infancy, will be reviewed here. The FASTE was developed by Feshbach and Roe in 1968, and was recently revised by Feshbach in 1982. It requires children to report about their own feelings after hearing affect-laden stories about other children. This task may not be measuring gender differences in the quality of vicarious affective experiences as is commonly assumed, but instead may be measuring either gender differences in children’s tendencies to admit to and express their feelings or in children’s cognitive abilities to understand the stories. As was previously discussed, children’s expression of or admission to feelings may be subject to social desirability pressures or display rules, and may not accurately reflect the nature of their underlying affective experience. The hypothesis that these tasks reflect social desirability pressures is consistent with data indicating that boys are more empathic when the story protagonist in affect-laden stories is male, not female (Deutsch, 1975, Feshbach & Roe, 1968). These data suggest that boys’ performance on empathic tasks may vary as a function of whether or not they feel they have
permission to admit to affects (which the presence of a male model might encourage) Eisenberg and Lennon (1983) also summarize data which indicate that gender differences in the FASTE may vary as a function of the sex of the experimenter, with children tested by a same-sex experimenter scoring as more empathic than children tested by an opposite-sex experimenter. A further problem with using the Feshbach and Roe task to explore gender differences in empathy is that males and females may express affect via different modalities (e.g., physiologically vs. facially; cf. Buck, Miller, & Caul, 1974) which this task fails to assess. Also, the importance of verbal skills in successfully completing this task neglects nonverbal empathy, which may be more characteristic of very young children (cf. Eisenberg & Lennon, 1983).

Other studies which have frequently been cited to support gender differences in empathy are studies of newborns’ spontaneous cries in response to the cries of another infant (cf. Sagi & Hoffman, 1976, Simner, 1971). The fact that female newborns cry responsively for longer periods of time than male newborns has been viewed as evidence for gender differences in empathy at birth. Eisenberg and Lennon (1983) discuss the problems with this conclusion. First, other interpretations can be made about the meaning of these data. For example, perhaps female neonates sustain attention to a task longer than do males, or perhaps they are better at imitation. Second, both male and female neonates were exposed to the cry of a female infant. The implications of this are particularly striking when it is noted that newborn’s capacities to differentiate cries are sufficiently well developed that they can differentiate their own cry from that of another neonate (Martin & Clark, 1982). A recent study (Martin & Clark, 1982) using a male newborn cry as a stimulus, found no significant sex differences in responsive cry duration, although females still tended to cry longer than males. Interpretations about gender differences in empathy seem to have gone far beyond what the data can support.

Feshbach (1982) explored correlates of boys’ and girls’ empathic skills using an updated version of the Feshbach and Roe empathy measure. She found that for boys empathy was primarily a cognitive measure, correlating with vocabulary and reading skills, whereas for girls empathy was correlated with social skills, including prosocial behavior. Although affect labelling and not empathy or affect experience may be being measured, this work is intriguing and suggests different functions or etiologies of affect labelling for boys and girls. These results are consistent with the findings of Rosenthal et al. (1979a and b) discussed previously, as well as with various sugges-
tions in the literature that affect is a more integral part of relationships for females than for males (Mackie, 1980, Saarni, 1979). These differences are also consistent with the idea that males rely on left hemisphere strategies and that females rely on right hemisphere strategies to process emotions. Further exploration of patterns in affective development, as opposed to exploration of single variables, may help to further our understanding of sex differences in emotional development.

**Discussion of Affect Experience Studies**

What emerges clearly from this literature is that there is very little research that explores major theoretical predictions about gender differences in affective experiences. The theoretical predictions that girls experience more vulnerability, shame, helplessness, envy, and self-directed hostility than do boys are virtually untested. The data do indicate that girls report themselves to be more emotional and more articulate in discussing emotions than are boys (Demos, 1975, Gilbert, 1969, Lutz, 1980, Mackie, 1980). How well these self-reports reflect the nature of underlying experience rather than conformity to social desirability pressures is an unanswered question. These self-reports vary as a function of the quality of the affect, with girls attributing more sadness and fear to themselves and boys attributing more anger to themselves (Brody, 1984). Similar self-ratings have been made by adult males and females (Allen & Haccoun, 1976). These data are in accordance with theoretical predictions that girls should experience less anger than boys. However, Rosenzweig's report (1960) that girls direct more hostility to peers than to adults, whereas boys direct hostility to both adults and peers, qualifies the conclusion that girls experience less anger than do boys, and suggests that affective experiences may be situationally specific.

Clearly, further work on gender differences in affective experiences as predicted by theories is needed. Hoffman's finding (1975) that girls attribute more guilt to stories than do boys contradicts drive-based psychoanalytic theories and Lewis' (1976, 1983) theoretical predictions. It is not clear, however, whether Hoffman (1975) wrote stories which clearly differentiated feelings of guilt from shame. Feshbach's (1982) finding that empathic skills correlate with social skills in girls and cognitive skills in boys supports feminist psychoanalytic ideas that girls' emotionality is related to the value girls place on relationships. However, Feshbach's work (1982) leads to many unanswered and important questions, including the devel-
opmental etiology of such gender differences and other cognitive correlates of such differences.

Both behavioral measures and physiological measures indicate that there are developmental changes in gender differences in affective experience. Buck and his colleagues' work (1974, 1977) indicates that an internalized pattern of physiological arousal and lack of facial expressiveness is found in adult males, but not as clearly in preschool boys. The opposite pattern is found in adult females, but not in preschool girls. Hoffman's (1975) work suggests a developmental progression in females toward an increasing sense of guilt relative to males. Many of the age trends in gender differences suggest the influence of socialization processes, which will be discussed next.

**Gender Differences in the Socialization of Emotion**

Many theories of emotional development indicate that affect develops within an interpersonal context (cf. Greenberg & Mitchell, 1983, Lewis, 1976, 1978, Miller, 1976), and that gender differences in emotional development result partially from qualitatively different caretaker-child affective exchanges. There is a rapidly accumulating body of literature which supports the idea that mothers and fathers, teachers and peers do interact differently with each sex around affective exchanges. Some of this work suggests that these differential interactions are in directions consistent with emotional sex role stereotypes and theoretical predictions.

Block's (1973) work indicates that parents encourage their sons to be aggressive but unemotional, and their daughters to be emotional but unaggressive. Mothers are more consistent in their responses to their 8- to 14-month-old sons' aggressive behaviors than to their same aged daughters' aggressive behaviors (Kendrick & Dunn, 1983), and show more contingent responding to sons' than to daughters' emotional expressions, responding more frequently to their sons' expressions with imitative expressions (Malatesta & Haviland, 1982). Mothers tend to emphasize anger more frequently when generating stories for preschool sons than daughters, and fathers emphasize affect words more frequently overall when generating stories for preschool daughters than for sons (Greif, Alvarez, & Ulman, 1981). In a more recent study, both mothers and fathers generate affect words more frequently when telling stories to 3- to 5- and 9- to 11-year-old girls than when telling stories to same age boys, but more frequently when telling stories to 6- to 8-year-old boys than to same age girls (Greif, 1984). Greif (1984) speculates that there is a developmental lag in the socialization of affect for
boys relative to girls. Very similar patterns are noted by Birnbaum and Croll (1984), who find that parents report greater acceptance of anger in boys than in girls and greater acceptance of fear in girls than in boys. In a retrospective study involving college students, daughters report that their parents discuss feelings more with them and show them more affection than sons report (Barnett, Howard, King, & Dino, 1980).

Three studies indicate that the relationships between parental emotions, parental child rearing practices, and children's emotional and empathic behaviors differ for sons and daughters. Feshbach (1982) reports a study showing that empathy in girls is related to positive mother-daughter relationships, whereas empathy in boys is inversely related to fathers' encouragement of competition. Eisenberg-Berg and Mussen (1978) report a relationship between maternal qualities of being affectionate, egalitarian, nonrestrictive, non-punitive and sons' empathy, but no relationship between these same maternal qualities and daughters' empathy. (The authors suggest that the lack of a relationship between mothers' and daughters' empathy may be due to a ceiling effect on the daughters' empathy scores.) Bringle and Williams (1979) report a relationship between parental sensitivity to environmental cues and reported jealousy of college-aged daughters, but not of sons.

The influence of sibling interactions on the socialization of emotions has not been studied extensively, but the importance of these interactions is suggested by a study indicating that same sex sibling pairs are more similar in nonverbal decoding abilities than opposite sex sibling pairs (Blanck, Zuckerman, DePaulo, & Rosenthal, 1980).

The effect of teacher-student interaction on emotional development may also be quite dramatic, as suggested by studies on learned helplessness in classroom interactions (Dweck, Davidson, Nelson, & Enna, 1978, Dweck, Goetz, & Strauss, 1980). Although not directly related to the socialization of emotion, the findings that teachers praise girls more for intellectually irrelevant aspects of their behavior (Dweck et al., 1978, 1980), and reprimand them less frequently than boys (Serbin, O'Leary, Kent, & Tonick, 1973), suggests that it would be worthwhile to explore whether or not teachers also reinforce the expression of different emotions by males and females.

Peers and television programs may also be powerful socialization agents in emotional development. Lever (1976) finds that peer group quarrels do not disrupt boys' games but do disrupt girls' games, and she suggests that girls' preference to play in small intimate groups is a training ground for sociocultural skills. Birnbaum and Croll (1984) rated the frequency of anger, happiness, fear, and sadness displayed...
by characters on children’s television shows and report that male characters display significantly more anger than female characters.

Although the research on teacher and peer socialization processes is not directly related to the development of affect, it suggests that the two sexes have different socialization experiences which may lead to differences in affect experience, expression, and recognition. For example, if boys receive loud reprimands more frequently from teachers than do girls (Serbin et al., 1973), they may learn either to attend to or to model angry or aggressive behaviors more than girls do. More research is clearly needed in this area to understand the effects of peer, teacher, sibling, and parental socialization practices on the emotional development of each sex. Block (1976) also notes that socialization practices vary as a function of the child’s developmental stage, parental role concepts, and social-cultural pressures, all of which change over time. Research does not yet reflect the changing qualities of emotional socialization practices over time.

Conclusions

Developmental Changes in Gender Differences

Emotional development theories suggest that relative to males, females should be more sensitive to nonverbal cues, more emotionally expressive, less angry and guilty, more shameful, masochistic, anxious, envious, vulnerable, helpless, and direct their feelings internally rather than externally. Furthermore, many theorists hypothesize that the origins of these gender differences lie partially in the socialization process. The research reviewed in the present paper indicates that there are suggestive data to support some of these hypotheses. However, the developmental processes involved in such differences and the developmental timetable within which such differences manifest themselves remain unclear. Furthermore, many of the theoretical predictions remain untested.

What is the evidence that gender differences do indeed exist in the emotional functioning of infants, children, and adolescents, independent of the question of the developmental timetable or etiology of such differences? The most consistent data about gender differences in emotional functioning come from studies about emotional sex role stereotypes as well as self-report, interview, and self-attribution studies. These studies indicate that females are both stereotyped to be and report themselves to be more sad, more scared, less angry, and more emotionally expressive than males. In general, females are more articulate about discussing emotions than are males. They also attribute more guilt to story characters than do males. At
a very young age, both boys and girls seem to think about their emotional lives in accordance with culturally prescribed standards, or at the very least, they conform to such standards when an audience is present.

Other areas of emotional functioning in which there are indications that gender differences exist include nonverbal recognition skills (with females having superior skills), the quality of emotional defenses (females use internally oriented defenses, males use externally oriented defenses), and the correlates of the ability to label and recognize affects (males' abilities correlate with cognitive skills, females' do not).

Are there developmental changes in the nature and extent of gender differences in these areas of emotional functioning? A review of the research in these areas sheds surprisingly little light on developmental processes. Only a few studies indicate developmental changes. In adults, there are clear gender differences in emotional styles of internalization vs. externalization, whereas such gender differences are not as clear in preschoolers (Buck, 1977, Buck et al., 1974). Gender differences in patterns of internal vs. external defenses and experiences are clearer in adults and late adolescents than in latency aged children (Cramer, 1983 a and b). Boys' defensiveness in the form of denial increases relative to girls' defensiveness during the elementary school years (Hill & Sarason, 1966). Similarly, studies of expressiveness and display rules indicate that boys' overall expressiveness decreases with age, and that girls show fewer negative affects with age (Buck, 1977, Feldman & White, 1980, Saarni, 1982, Shennum & Bugental, 1982). Gender differences increase with age in the intensity of guilt attributed to story characters (i.e., adult women attribute more intense guilt to story characters than do adult men, whereas these gender differences are not as clear in 5th and 7th graders [Hoffman, 1975]). With age, females become more superior to males in decoding overt nonverbal cues, but less superior to males in decoding nonintentional nonverbal cues. These few studies suggest that with development, boys increasingly inhibit the expression and attribution of all emotions, whereas girls increasingly inhibit the expression and recognition of socially unacceptable emotions such as anger. These developmental trends suggest both the influence of socialization processes on gender differences, as predicted by object relations and social learning theorists, and the interaction between cognitive-psychosexual stages and emotional experiences, as predicted by psychoanalytic and cognitive-developmental theorists.
Etiology of Gender Differences Temperament and Socialization

The clearest data on the variables that influence the development of gender differences in emotional development emerge from studies of the socialization of emotion. Parents have been found to socialize the emotional development of their infant sons and their daughters differently (cf. Malatesta & Haviland, 1982). Parental behaviors such as deemphasizing affects when communicating with preschool sons (Birnbaum & Croll, 1984, Greif, Alvarez, & Ulman, 1981, Greif, 1984) undoubtedly contribute to gender differences in self-report, self-attribute, and sex role stereotyping studies (Birnbaum et al., 1980, Brody, 1984), which are evident by early school age. Differential socialization practices for each gender may be adaptations to innate (genetic or biological) gender differences in temperament, if indeed infant boys are more intensely emotionally expressive than are infant girls (cf. Cunningham & Shapiro, 1984, Malatesta & Haviland, 1982). For example, parents may encourage boys to minimize or mask their affects because their affects are perceived to be, or may in fact be, overly intense. Alternatively, differential socialization practices may simply be attempts to conform to existing social and cultural pressures.

Socialization practices may also influence the cognitive processing strategies used by boys and girls in their emotional experiences and behaviors. Research has indicated that the cognitive abilities of boys, but not girls, correlate with their affect labelling and decoding skills (Feshbach, 1982, Rosenthal et al., 1979 a and b). It may be that boys are encouraged to think analytically about feelings, possibly relying on left hemisphere cognitive strategies, whereas girls are encouraged to think intuitively about feelings, relying on right hemisphere cognitive strategies. Alternatively, innate biological differences may account for these gender differences in the cognitive correlates of emotional development. Another possible explanation is that cognitively mature boys are more developmentally advanced in their emotional abilities than are cognitively immature boys, whereas girls' emotional abilities are independent of their level of cognitive maturity, since all girls are encouraged and socialized to value emotions (cf. Chodorow, 1978).

Thus, although data strongly suggest that socialization practices account for some of the developmental processes involved in gender differences in emotional development, more data are needed which explore the contributions of socialization practices and innate bio-
logical predispositions to emotional functioning, as well as changes in these processes over time

Methodological and Conceptual Problems with the Literature

It is difficult to regard the conclusions of the studies reviewed in the present paper as anything other than suggestive, because as previously discussed, many of the studies do not test theoretical predictions directly and are plagued with methodological problems, including observer bias, stimuli that have been presented by only one sex (usually female), and reliance on self-report measures to assess emotional experience or expressiveness which are subject to social desirability constraints. Another serious limitation to this research is that emotional behaviors are commonly sampled in only one situation at only one point in time. Most personality theorists, including those subscribing to interactional models (Magnusson & Endler, 1977), situational models (Mischel, 1979), or trait models (cf. Epstein, 1979) agree that an individual's behavior may not be consistent across all situations. In fact, work by Weitz (1976) indicates that the quality of adult female nonverbal expressivity varies as a function of the personality traits of the men with whom they interact. Women become more nonverbally submissive with more dominant male partners, and more nonverbally dominant with more submissive male partners. Epstein (1979) cogently argues that an individual's emotions or behaviors need to be studied across multiple situations over an extended period of time in order to yield consistent individual differences. Recent work by Diener and his colleagues (Diener & Larsen, 1984, Diener, Larsen, & Emmons, 1984) has begun to explore these issues, and indicates consistent levels of intraperson affect across situations, with continuity in affect being stronger than continuity in behaviors. In addition to cross-situational studies, studies of gender differences in emotional development as a function of cultural context are needed. There are clear indications that sex role stereotypes vary as a function of ethnicity and social class (Lutz, 1980, Romer & Cherry, 1980) and undoubtedly, emotional development does, too.

The failure of emotional development researchers to sample emotional behaviors from more than one situation or from more than one cultural context is only one example of the many discontinuities between theories of emotional development and theories of personality development. There is a striking lack of overlap between research papers published in the two fields, despite the fact that
moœ personality theorists view emotions as integral to personality functioning. Personality constructs such as self-concept, cognitive style, and traits such as introversion vs. extraversion are often defined as enduring and consistent patterns of emotional behaviors. Gender differences in the relationships among emotional expressiveness, recognition, experience, and other aspects of personality functioning have been largely neglected by emotional development researchers and need to be more fully explored.

Theoretical Speculations About Gender Differences in Emotional Development

In order to be meaningful, research on gender differences in emotional development needs to be conducted within a larger theoretical framework. What most theories about emotional development share is the hypothesis that emotions partially serve an inter-personal communication or signalling function. It follows from this hypothesis that an emotional event (e.g., an expression or experience) is most likely to occur when there is either an internal or external stimulus which is perceived to be worth communicating about, and when there is a person available to communicate to. There may be both biological (e.g., temperament) and learned patterns in the quality and intensity of the internal and external states experienced and interpreted as worth communicating about, as well as standards for determining when and with whom emotional communication can occur. Males and females may differ in the ways in which emotions became activated, either because of innate differences in emotional functioning, learned differences, or because of the interaction between the two.

Some of the data and theories reviewed in the present paper provide clues as to the differential nature of these processes for boys and girls. For example, Malatesta and Haviland (1982) report that mothers respond more contingently to sons than to daughters—that is, mothers are more attuned to responding to boys' emotional expressions than to girls'. In a related vein, Jacobs and Moss (1976) find that mothers interact less frequently with second-born daughters than with second-born sons or first-born sons and daughters. These data suggest that boys may not have to learn to express or recognize emotions as clearly as do girls because they have less need to. In other words, in order to receive the same level of emotional stimulation and response from mothers, girls may have to work harder than do boys. Boys' emotional functioning may not become as highly activated as girls' because they do not have as great a need to "amplify urgency", which Tomkins (1981) suggests is the primary
motivating function of affects. Why do mothers respond more contingently to sons than to daughters? Perhaps, as previously mentioned, because boys' emotional expressions are more intense than are girls' (Cunningham & Shapiro, 1984), and therefore more compelling. These very speculative ideas would help to explain the superior emotional recognition and expressive abilities of females relative to males and differential parental socialization practices by gender.

However, an even broader theoretical context is necessary in order to understand gender differences in emotional development. Most importantly, an understanding of the function of emotions must be incorporated into relevant theories and research. Many theorists agree that emotions are adaptive. Emotions motivate or regulate interpersonal relationships, object contacts, and possibly self-concepts, personality traits, and cognitive skills as well (Buechler & Izard, 1983, Buck, 1983, Kellerman, 1983, Plutchik, 1980, Tomkins, 1981). Emotions are thus an integral part of personality, which can also be viewed as an adaptive process—an adaptation to or a compromise among needs, impulses, drives, constitutional traits, and sociocultural demands and supports. The significant question for researchers interested in gender differences in emotional development then becomes: Are different personality patterns adaptive for men and for women? And if so, what kinds of emotional functioning would ensure that those differing adaptive patterns occur?

According to many of the theories reviewed at the beginning of the present paper, including both biological-evolutionary theories and feminist psychoanalytic theories, it is indeed the case that different personality and emotional patterns are adaptive for men vs. women (cf. Lewis, 1976, 1983, Miller, 1976), partially because of differential roles in current social functioning. The emotional functioning of women should help them to adapt to the social role of child-caretaker and to their lower status and power relative to men. The qualities of emotional functioning which would help women to adapt to these social processes were discussed at the beginning of the present paper, and include nonverbal sensitivity, the minimization of anger, and the emotional expression of vulnerability and weakness. There are certainly data which support the existence of gender differences in the first two processes (cf. Brody, 1984, Greif et al., 1981, Hall, 1978, Rosenthal et al., 1979a and b).

In addition to having to adapt to low status, power, and a child-oriented social role, women also have to adapt to an interpersonal and physical world in which men are more aggressive than they are from a very young age (cf. Maccoby & Jacklin, 1980, Tieger, 1980).
Needs for safety may be primary personality motives (Maslow 1968), and in order to be safe, females may need to avoid being the object of male aggression. Emotional processes such as self-blame, the use of internally directed defenses, the expression of sadness rather than anger, and the sensitivity to nonverbal cues may not only be adaptive for child-rearing, but may also protect women from aggression and ensure their safety. The studies indicating that girls attribute more frequent and intense fear to stories and tend to express more intense fear than do boys (Brody, 1984, Brody & Carter, 1982, Feshbach & Roe, 1968, Lewis & Michaelson, 1983) may also reflect female responsivity to male aggression, that is, fear may be an adaptive and appropriate emotional response which girls learn. Similarly, the importance females place on relationships (cf Chodorow 1978, Mackie, 1980) may also be viewed as adaptive. It is safer to be part of a group, or even a dyad (particularly a male-female dyad) than to be alone. This highly speculative argument does not necessarily imply that sex differences in aggression are biologically based (cf the debate between Maccoby & Jacklin, 1980, and Tieger, 1980), but does imply that the emotional functioning of females may develop so as to protect them from the well-documented greater aggressiveness of males (cf Maccoby & Jacklin, 1980), whether innate or learned. It would be quite interesting to explore the types of emotional and personality variables in children that are related to being the object of aggressive behaviors, since much research has indicated that aggression is context specific (cf Maccoby & Jacklin, 1980). If the present argument is correct, emotional strategies such as greater sensitivity to feelings, less expression of anger, and greater use of internally oriented defenses, would be related to being the object of fewer aggressive attacks from others than the use of the reverse emotional strategies.

Studies related to this argument involve comparisons of the personality characteristics of wives who are abused with the characteristics of those who are not. The majority of studies indicate that there are no personality differences between wives who are the object of abuse and those who are not. It is the personalities of abusive vs. nonabusive husbands which have been found to differ (Walker & Browne, this issue). However, Walker and Browne suggest that abused wives may be less skilled at self-protective strategies than are nonabused wives. The argument in the present paper suggests that abused wives may differ from nonabused wives in their use of nonadaptive emotional strategies, for example, they may minimize their anger in contexts in which it is self-destructive to do so.
It is thus important to note that although emotional strategies such as nonverbal sensitivity and the minimization of anger may be adaptive for women in some contexts (e.g., while walking alone at night on a deserted city street), they may become nonadaptive and even self-destructive when used across all contexts in inflexible ways. For example, the minimization of anger once an attack has occurred may be clearly nonadaptive. It may be the situational flexibility with which such strategies are used that determines their ultimate usefulness and value. This point again highlights the need for researchers to explore situational context as a variable in understanding gender differences in emotional development.

The emotional functioning of males can also be viewed as motivating or regulating personality processes which are adaptive to their social and interpersonal worlds. Male social roles have traditionally included the processes of achievement and competition (cf. Miller, 1976). In order to maximize achievement, it may be adaptive for males to be less sensitive to nonverbal cues, to use externally oriented defenses, and to be more expressive of anger but less expressive of other emotions. For example, being sensitive to the feelings of others might prevent males from competing, since winning a competition may entail causing hurt feelings on the part of the person who loses and guilt on the part of the person who wins. Related arguments have been advanced by feminist psychoanalytic writers (Lewis, 1976, Miller, 1976). The relationships among achievement orientation, aggression, fear of aggression, and patterns of emotional functioning would not be difficult for researchers to explore, and would make a valuable theoretical contribution to our understanding of emotional development.

Exploring gender differences in emotional development with the hypothesis that emotions motivate or regulate adaptive behaviors and personality patterns (cf. Tomkins, 1981) thus requires a consideration of the complex multitude of sociocultural and interpersonal processes to which males and females need to adapt. Social roles, power, status, and aggression, which this discussion has focused on, include only one of these processes. Others may be as numerous and as complex as the theory of personality to which one subscribes, and may include needs, drives, impulses, and traits in both the self and in significant others (such as parents), as well as sociocultural and familial values, roles, demands, and supports.

One of the most powerful transmitters of sociocultural values and roles is the family. The data reviewed in the present paper have argued strongly that parents socialize the emotional development of boys and girls differently (cf. Greif, 1984, Greif et al., 1981, Mal-
testa & Haviland, 1982), thus contributing to differences in males’ and females’ emotional functioning. Researchers need to explore more fully gender differences in the familial processes associated with emotional development, such as familial values, the quality of relationships between parents’ and children’s emotional styles, and assigned familial roles. Several studies have demonstrated both similar and complementary relationships between parents’ and children’s emotional functioning (cf. Barnett et al., 1980, Brody & Landau, 1984, Cummings, Zahn-Waxler, & Radke-Yarrow, 1981, Daly et al., 1980), suggesting that emotional development partially reflects a process of accommodation among the emotional styles of all family members. For example, growing up with a depressed parent is likely to produce a very different pattern of emotional functioning than growing up with an overly intrusive parent. The existence of gender differences in these familial relationships seems likely, but is at present only suggested by data (cf. Bringle & Williams, 1979). Data are also needed on gender differences in assigned familial roles and on the relationships among these roles and emotional development. How often have we heard the maxim, “A daughter is a daughter all her life, a son is a son until he takes a wife”? This expression implies that females are expected to maintain familial relationships and to take care of elderly parents in ways that males are not (cf. Chodorow, 1978). This is yet another social and familial role of females which may require adaptive types of emotional functioning such as nonverbal sensitivity. Comparisons of emotional development in boys and girls growing up in families with traditional vs. nontraditional sex role patterns would be especially illuminating in understanding the relationships among familial values, roles, interaction patterns, and emotional development (cf. Hall & Halberstadt, 1981).

The theories and research reviewed in the present paper thus argue for the study of gender differences in emotional development in the context of personality, familial, social, and cultural variables. Emotions are adaptive processes (Tomkins, 1981), and cannot be studied independently of the sociocultural and familial variables to which males and females need to adapt. More theoretically based research and more data-informed theories cannot but help to advance our understanding of the differences and similarities between males and females in emotional development.

References


Buck, R (1984, October 30) Personal communication


responses to expressions of anger and affection by others in the family. *Child Development, 52,* 1274–1282


Deutsch, F. (1975) Effects of sex of subject and story character on preschoolers' perceptions of affective responses and interpersonal behavior in story sequences. *Developmental Psychology, 11(1),* 112–113


Hall, J. A. (1979). Gender, gender roles, and nonverbal communication skills. In R.


Lamandella, J. T. (1977) The limbic system in human communication. In H. Whitaker...
Gender and emotional development


Landreth, C (1941) Factors associated with crying in young children in the nursery school and the home Child Development, 12, 81-97

Lazarus, R S (1982) Thoughts on the relations between emotions and cognition American Psychologist, 37, 1019-1024


Lewis, M & Weinraub, M (1979) Origins of early sex role development Sex Roles 5(2), 135-153

Lewis, W C, Wolman, R N, & King, M (1972) The development of the language of emotions III Type of anxiety in the experience of affect Journal of Genetic Psychology 120, 325-342


Magnusson, D & Endler, S (1977) Interactional psychological present status and future prospects In D Magnusson & N S Endler (Eds) Personality at the crossroads Current issues in interactional psychology (pp 3-31) Hillsdale, NJ Erlbaum


Maslow, A (1968) Toward a psychology of being (2nd ed) New York Van Nostrand Reinhold

Masters, J (1981) Adults emotional states and the recognition of emotion in young children Unpublished manuscript Vanderbilt University, Nashville, Tennessee


Miller, J B (1976) Toward a new psychology of women Boston Beacon Press

Mischel, W (1979) On the interface of cognition and personality American Psychologist, 34(9), 740-754


Mood, D W, Johnson, J E., & Shantz, C (1978) Social comprehension and affect-matching in young children Merrill-Palmer Quarterly, 24(1), 63-68


Moss, H A (1967) Sex, age, and state as determinants of mother-infant interaction Merrill-Palmer Quarterly, 13, 19-36


Peters, R S (1972) The education of the emotions In R Dearden, P Hirst, & R Peters (Eds), Education and the development of reason (pp 446-483) London Routledge & Kegan


Waber, D. P. (1976). Sex differences in mental abilities, hemispheric lateralization, and rate of physical growth at adolescence. Developmental Psychology, 12, 276-82.


This document is a scanned copy of a printed document. No warranty is given about the accuracy of the copy. Users should refer to the original published version of the material.