

1-1-1989

A study of psychosocial status, childbearing attitudes and maternal functioning in a group of adolescent mothers : a developmental approach.

Stephanie Schamess

University of Massachusetts Amherst

Follow this and additional works at: https://scholarworks.umass.edu/dissertations_1

Recommended Citation

Schamess, Stephanie, "A study of psychosocial status, childbearing attitudes and maternal functioning in a group of adolescent mothers : a developmental approach." (1989). *Doctoral Dissertations 1896 - February 2014*. 4489.

https://scholarworks.umass.edu/dissertations_1/4489

This Open Access Dissertation is brought to you for free and open access by ScholarWorks@UMass Amherst. It has been accepted for inclusion in Doctoral Dissertations 1896 - February 2014 by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.

A STUDY OF PSYCHOSOCIAL STATUS, CHILDRearing ATTITUDES AND
MATERNAL FUNCTIONING IN A GROUP OF ADOLESCENT MOTHERS: A
DEVELOPMENTAL APPROACH

A Dissertation Presented

by

STEPHANIE SCHAMESS

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

DOCTOR OF EDUCATION

February, 1989

School of Education

© Copyright by Stephanie Schamess 1989

All Rights Reserved

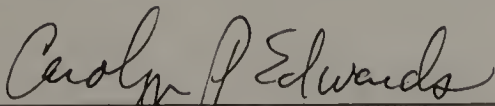
A STUDY OF PSYCHOSOCIAL STATUS,
CHILDREARING ATTITUDES AND MATERNAL
FUNCTIONING IN A GROUP OF ADOLESCENT
MOTHERS: A DEVELOPMENTAL APPROACH

A Dissertation Presented

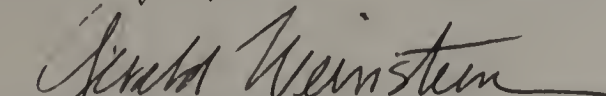
by

STEPHANIE SCHAMESS

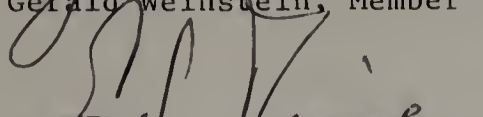
Approved as to style and content by:



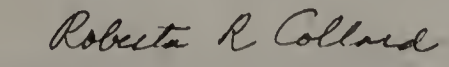
Carolyn P. Edwards, Chairperson of Committee



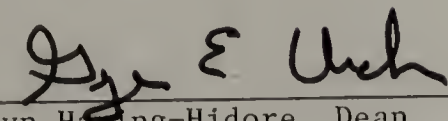
Gerald Weinstein, Member



Edward Z. Tronick, Member



Roberta Collard, Member



Marilyn Haring-Hidore, Dean
School of Education

This dissertation is dedicated to
my grandmother,
Sarah Wohl Krasnow

ACKNOWLEDGMENTS

A dissertation is the end product of a long and sometimes difficult journey, one I could not have made without the encouragement and assistance of many people.

I would like first to thank Carolyn Edwards, who as chairperson of my committee, was consistently available and provided both intellectual guidance and emotional support. (Or, to put it in terms used in this dissertation, she receives a very high rating in both warmth and facilitation!)

I feel most fortunate in having had Roberta Collard, Edward Tronick and Gerald Weinstein as committee members. Roberta Collard has served as a wonderful mentor and editor throughout the entire process. Edward Tronick's extensive knowledge and stimulating questions, and Gerald Weinstein's perceptive and probing comments influenced the direction of the study, clarified my thinking and provided me with the opportunity for many interesting discussions of the topic.

I am very grateful to Jon Ploof and Christine Jutres for their invaluable assistance in coding the videotapes and the interviews and for their insightful comments.

Many thanks go to Hyman Edelman for spending hours with me at the computer, unravelling the mysteries of word

processing, solving problems, and doing the computer graphics.

I owe a special debt of gratitude to Claire Higgins of Sojourn, Inc., Carol Johnson of the Teen Mothers' Program at the Greenfield Drop-In Center, Nancy Webb and Paula Verson of Children's Aid and Family Service, and Rita Devlin, Cynthia Banfield-Weir and Laureen Beadle of Valley Human Services for their assistance with the recruitment of subjects.

I greatly appreciate the willingness of the mothers and children who participated in the study to allow me to intrude into their lives. I share their hope that their participation will benefit other young mothers.

Finally, I want to thank my family for offering encouragement, tolerating dinners of thrice-cooked leftovers, and accepting with calm good humor the ups and downs of my life as a student. I am grateful to my son Gil for helping me grapple with my course in statistics, and to my son Andrew for his thought-provoking comments on my work. For Natalie Sarrazin, I have a special "thank you." I'm sure that when she became engaged to Andrew, she didn't anticipate being put to work on her future mother-in-law's dissertation. She has organized the data into tables and graphs, and typed the final version of the dissertation with her usual competence and efficiency.

Most of all, to my husband Gerry, for his help, nurturance, patience and his ability to grow with me throughout this journey, I express my deepest appreciation.

ABSTRACT

A STUDY OF PSYCHOSOCIAL STATUS, CHILDREARING ATTITUDES AND
MATERNAL FUNCTIONING IN A GROUP OF ADOLESCENT MOTHERS: A
DEVELOPMENTAL APPROACH

FEBRUARY 1989

STEPHANIE SCHAMESS, B.A., SARAH LAWRENCE COLLEGE

M.S. Ed., BANK STREET COLLEGE OF EDUCATION

Ed.D., UNIVERSITY OF MASSACHUSETTS

Directed by: Professor Carolyn P. Edwards

This study examined developmental/psychosocial status, childrearing attitudes, and mother/child interaction in a group of nine unwed adolescent mothers and their toddler-aged children.

Developmental status was evaluated from the subjects' scores on Loevinger's Scale of Ego Development and the Newberger Cognitive/Developmental Parental Awareness Interview. Quality of mother/child interaction in video-taped play sessions was rated in five categories of maternal behaviors and three categories of child behaviors.

Ego stage scores for five mothers were congruent with expectations for older adolescents. Four mothers scored at lower stages. All mothers were in the lowest two of the four stages in Newberger's Parental Awareness hierarchy. No association was found between maternal Ego stage and level of Parental Awareness. There was a correspondence

between the age of the child and the mother's Ego stage, with mothers of the youngest children being at the lowest Ego stages.

Qualitative analysis of responses on the Ego scale and the interview protocol indicated that the psychosocial functioning of the mothers was problematic in the following areas: relationships with their own mothers, with dependence on their mothers for help with child care in conflict with the adolescents' striving for autonomy; unstable relationships with men; low sense of efficacy; and concern with control of the child as a major focus of childrearing.

Mothers' behaviors during the interaction included intrusiveness, relating to the child as a peer/playmate, and in some cases, emotional unavailability. Maternal warmth had a greater impact on child behaviors than any other category of maternal behavior, with children of mothers rated highly in warmth scoring high in pleasure affects, and children of emotionally distant mothers having low pleasure affect scores.

Although the exploratory nature of the study and small sample size limit generalizability, the delineation of areas in which adolescent mothers are at developmental risk has implications for services for this population. Recommendations are made for service planning, and topics for future research are suggested.

TABLE OF CONTENTS

	<u>Page</u>
ACKNOWLEDGMENTS	v
ABSTRACTviii
LIST OF TABLESxiii
LIST OF FIGURESxiii
 Chapter	
1. INTRODUCTION	1
Statement of Problem	1
Focus of Study	8
Primary Question	8
2. REVIEW OF THE LITERATURE	12
Sociodemographic Characteristics of Adolescent Parenthood	12
Psychological Correlates of Teenage Fertility	18
Maternal Behavior in Adolescents	26
Long-range Outcomes for the Children	29
3. THEORETICAL FRAMEWORK	37
Developmental Issues in Adolescence	37
Assumptions about Adequate Parenting	49
4. METHOD	59
Subjects	59
Recruitment of Subjects	59
Demographic Characteristics of the Subjects	62
Instruments	69
Procedures	73
Coding and Scoring the Data	75
Analysis of the Data	78
Hypotheses	79

Chapter	<u>Page</u>
5. RESULTS	87
Hypotheses Outcomes	88
Outcomes for Hypothesis I	88
Outcomes for Hypothesis II	90
Outcomes for Hypothesis III	92
Outcomes for Hypothesis IV	94
Outcomes for Hypothesis V	95
Findings from Qualitative Data	101
Psychosocial Issues in the Ego Scale and the Parental Awareness Interviews	103
Subjects' Relationships with their own Mothers	103
Attitudes about Men	111
Transition to Parenthood and Childrearing Attitudes	115
Pregnancy, Childbirth and Preparation for Parenthood	115
Fragmentation of Experience	118
Helplessness and Low Sense of Efficacy in Childrearing Attitudes	120
Issues of Control in Childrearing Attitudes	124
Capacities for Higher Level Thinking	126
Patterns of Interaction in Videotaped Play Sessions	130
Mother as Playmate	131
Mother as Teacher	139
Unavailable Mothers	144
Adequate Mothering	155
Summary of Results	157
Summary of Hypotheses Outcomes	157
Summary of Qualitative Data Analysis	159
Summary of Interactive Patterns	161

Chapter	<u>Page</u>
6. CONCLUSIONS	164
Discussion of Findings	164
Relationship between Age of Child and Mother's Ego Stage	164
Differences in Scores on Personal and Hypothetical Sections of the Interview	170
Relationship between Mother's Warmth and Child's Pleasure Affects	174
Developmental Issues in Subjects' Relationships with their Mothers	177
Capacity for Intimacy: Relationships with Men	182
Limitations of the Study	185
Recommendations for Program Planning.	188
Summary	194
 APPENDICES	
A. Sentence Completion Form	200
B. Parental Awareness Interview	201
C. Scoring Guide for Maternal Behaviors	204
D. Scoring Guide for Child Behaviors	208
 BIBLIOGRAPHY	 211

LIST OF TABLES

1. Demographic Background of Subjects	68
2. Stages of Ego Development	70
3. Subjects' Scores on Ego Scale and Parental Awareness Interview	93

LIST OF FIGURES

1. Relationship between Maternal Warmth,
Facilitation and Child Pleasure 96

2. Relationship between Maternal Responsivity,
Facilitation and Child's Use of Mother as
a Resource 98

Statement of Problem

In the last two decades, adolescent childbearing has been seen as a major social problem; considerable media attention has been given to the "epidemic" of teen pregnancy, and a great deal of research has been devoted to examining the causes, social ecology, consequences and implications of the problem. The "problem," moreover, is often defined in broad terms such as "children raising children" or "teen pregnancy." A more precise examination of the demographic information indicates that there has, in fact, been a decline over the last 25 years in the fertility rates for adolescents (Brooks-Gunn and Furstenberg, 1986a.) An increase in the absolute number of adolescents in the population combined with a decline in the fertility rate of older women, however, has resulted in a larger proportion of births occurring to teenage mothers. For example, in 1978, 31% of all first children were born to females under age twenty, compared to 20% in 1950 (Moore, Hofferth, Wertheimer, Waite, and Caldwell, 1981).

A combination of several other demographic factors serves to perpetuate the popularly held view of the problem as one of an "epidemic;" even if this conceptualization is

dismissed as demographically somewhat inaccurate, a close look at these factors enables us to define why teen child-bearing is, in fact, a matter for realistic social concern. First, although birth rates for adolescents have declined in the older (18 to 19) age range, there has not been any decline for younger (15 to 17) adolescents. The younger the teenage childbearer, the more likely it is that she and her child will suffer negative consequences such as morbidity and mortality risk to the infant, higher school drop-out rate, and prolonged economic dependence. Secondly, the rate of out-of-wedlock births among adolescents has risen; in 1979, 44% of all out-of-wedlock births were to adolescents (Brooks-Gunn and Furstenberg, 1986a). This factor has economic implications since a large percentage of unmarried mothers are on Aid for Families with Dependent Children. It also has implications for the psychological and social well-being of the mothers and children; research has shown that the presence of a supportive partner (either the biological father or a father substitute) is correlated with better maternal functioning (Unger and Wandersman, 1985; Crockenberg, 1987). Thirdly, there is an enormous increase in the number of teenagers who are keeping and raising their children; as many as 600,000 young women are carrying their pregnancies to term and of these, 93% are choosing to keep their babies (Baldwin, 1983). In short, there are several interrelated, but discrete, aspects to

the problem of teen pregnancy. There is the issue of early adolescent sexual activity, which at least some of the time results in conception; this issue raises the questions of how best to identify those teens at risk for sexually active, non-contracepting behavior and what sort of intervention might best prevent pregnancy. Another aspect is the pregnancy itself. Practical ramifications of this aspect include counseling around the choices available to the teenager (i.e., termination of the pregnancy, adoption, or keeping the child); making good prenatal care available to teenagers who choose to bring the pregnancy to term, and educating them to seek and make use of it; using the prenatal period to put into place good support systems for those teens who plan to keep and raise their children; and counseling to help the adolescent become better prepared to make the transition to parenthood. Another issue is the teenager as mother. In this category, concerns would include maternal functioning; availability and continuation of support systems; child health and welfare; provision of opportunities for continuing education for the mother; development of skills in independent living, and training which can lead to economic self-sufficiency. Another important but rarely addressed concern is how best to insure that the psychosocial development of both mother and child will proceed in an optimal manner, through programs which are developmentally

and clinically based and which offer services oriented to the mother and child as a dyad.

This study, which focuses on the relationship between the psychosocial status of a group of nine adolescent mothers and their interactions with their toddler-aged children, has been undertaken to address that concern: it is hoped that both the questions raised and the findings of the study will shed some light on adolescent mothers' psychosocial development and the ways in which these developmental issues impact on their conception of parenting and on their behaviors with their children.

A considerable amount of research has centered on the role of age in adolescent child-rearing, but the results of such research have been equivocal. Age as a sole variable does not adequately account for problems and outcomes. Age per se is not necessarily correlated with poor or good parenting. Clearly, greater chronological age does not guarantee optimal parenting; many situational and psychological factors contribute to a woman's maternal functioning, and the findings that poverty, divorce, low educational status, and ethnic differences play a major role in affecting outcomes for children regardless of the mother's age are not surprising. There is a particular aspect to adolescent parenting that has been infrequently considered, however, and that is developmental stage. A major difference between childbearing in one's teens, as

opposed to one's twenties, lies not in the age per se, but in the fact that a sixteen-year-old is at a different point in her development, and will perceive herself, her child and her circumstances differently from a young woman in her twenties. She is also at a different point in her life span; the timing of a first birth at an early age isolates the adolescent from the mainstream life events which, in this society, characterize and mark adolescent passage into adulthood, and diminish the possibilities of her participation in the social, educational and vocational institutions which might promote her maturation and development.

Very little research has been done which addresses the problem from the broader perspective of the developmental level of the adolescent's thinking and functioning. The level of the mother's psychological and social maturity would seem to be a key factor in how accurately she perceives her child's needs and how well she interacts with the child in ways that will promote the child's best development; it would also indicate with what developmental tasks of her own the mother may need help in order to function more adequately in her parental role. The adolescent mother's competency in child-rearing is certainly affected by the level of stress produced by socioeconomic factors and by how much support is given by family and other social institutions, but influencing

a teenager's mothering behaviors through education and counseling requires knowledge of her ego strengths and weaknesses and the developmental level of her concept of her role as parent. Knowledge gained from research on how the adolescent mother perceives herself and her child and specific knowledge of how she interacts with her child would be valuable for workers in programs designed to help teenage mothers.

Another area addressed in this study involves the age of the children (and, by implication, the stage of parenthood) under investigation. A sizable body of research has looked at adolescent mothering of infants, and there are some studies which have looked at child outcomes for the preschool, schoolage, and adolescent children of teen mothers. The proportion of research investigating toddler-aged children of teen mothers is relatively small. Yet this can be a difficult stage of childhood (often referred to, colloquially, as "the terrible twos") and it can be a critical stage for the teen mother; the novelty of motherhood may have worn off, while the child is still too young to be in school and thus out of the house for several hours. In addition, from a developmental standpoint, toddlers and teenagers are facing similar tasks, albeit from different perspectives. Issues of autonomy, identity, learning the social rules and expectations of the larger world, learning to delay gratification in the service of

future gains are all issues which are played out during toddlerhood and repeated later, in different forms, in adolescence. Thus it is a stage of childhood and a stage of parenthood which makes particular and perhaps more critical demands on young mothers than earlier and later stages.

Lastly, the subjects in this study are Caucasian adolescents from small town/semi-rural communities. This is also an under-studied population; the problem of teenage, out-of-wedlock birth is perceived to be greatest among the urban, poor, black community and a large majority of studies use this population as subjects. As Brooks-Gunn and Furstenberg (1986) note,

This state of affairs is a reflection of policy makers' and service providers' concern about this particular group. . . Not only does the focus limit our knowledge about other groups of teenage mothers (rural blacks, whites, Hispanics), but it serves to reinforce the stereotype of the modal teenage mother (black, urban, poor, unmarried). (p. 225).

In fact, the birth rate for white adolescents under the age of 16 has increased, as has the percentage of births to unwed teens among whites (Baldwin, 1983). The social mores, support systems, and the cultural meaning of unwed, adolescent motherhood are different among various subcultures, and the results of studies in which the subjects are all from a particular subculture may not be

generalizable to other groups. Thus there is a need for more studies in which the subjects are representative of various subgroups.

In summary, this study will examine the relationships between adolescent mothers' psychosocial developmental levels, their attitudes regarding parenting, and their interactions with their children, using as subjects Caucasian mothers and toddler-aged children. The method used is a combination of quantifiable measures and qualitative analysis, and the study is conceived as an exploratory investigation into a dimension of teen-aged childbearing which is underrepresented in the research literature, both in terms of topic and subjects.

Focus of Study

Primary Question

Lancaster and Hamburg (1986), in a paraphrase of the ethologist Tinbergen, comment that in studying human behavior which is related to reproduction and parenthood, it is important to address

any or all of four equally legitimate 'why' questions: questions about ultimate function (survival and reproductive value), questions about causation (internal and external proximate factors), questions about ontogenetic development (personal and social history), and questions about evolutionary history (genetics and phylogeny) (p. 12).

I have chosen in this study to ask a question about ontogenetic development, formulating it as a "what" rather than a "why" question. The basic question underlying this study is: what are some of the developmental issues which characterize teen mothers in their own ego development, and how do these issues impact on their conception of the parental role and their interactions with their children?

More specifically, the following questions are raised regarding the developmental status of the adolescent mothers.

1. What is the level of ego functioning of the mother? Is there a relationship between the age and/or substage of the mother (early, middle and late adolescence) and her level of ego functioning?

2. How does the mother conceptualize her parental role and how does she perceive her child? Is there a relationship between her cognition of parenting and her level of ego functioning?

3. What are the primary characteristics of the mothers' interactions with their children in an open-ended, free play situation? Are these characteristics ones which would have been predicted from the maternal scores on the ego and parenting measures?

4. In addition to information gained by the quantitative scores of the parenting and ego measures, are there themes which emerge in the content of these measures

which would illuminate some of the psychosocial issues that are prominent in the mothers' development at this time? Are these themes (e.g., autonomy, impulse control, relationship with own mother) manifested either overtly or in symbolic form in the mothers' attitudes as parents and their behaviors with their children?

5. What is the nature of the children's response to maternal input: do they use their mothers as sources of support, such that they can explore and enjoy the environment, or do they have to invest energy in assuring themselves of the mothers' availability? If the mothers' behavior is problematic, what kinds of strategies do the children use to cope with it? Are there particular types of maternal behavior which lead to particular types of child responses or strategies?

The specific hypotheses of this study are listed in Chapter 4. Briefly stated, however, it has been hypothesized that 1) all of the mothers will be at the lower stages in Loevinger's Scale of Ego Development and in the lower two levels of Newberger's Cognitive/Developmental Parental Awareness stages; 2) that the stage of ego development of the mother will correspond to her level of parental awareness; 3) that in ratings of videotapes mother/child interaction, the mothers with the lowest scores on the above two measures will have low scores in critical dimensions of interacting, such as

Facilitation; Support of the Child's Initiatives and Autonomy; Contingent Responsivity; and Warmth, whereas mothers with higher ego and parental awareness levels are expected to have scores indicative of better parental functioning in these dimensions; and 4) the child's scores on dimensions of Use of Mother as a Resource; Seeking and Maintaining Contact; and Pleasurable Affects are expected to relate to the mother's scores on the maternal dimensions. (See Chapter 4 for description of instruments and interaction categories).

An approach to the data using a combination of quantitative, qualitative and descriptive analyses is expected to provide answers to some of these questions and to generate hypotheses for further research.

CHAPTER 2

REVIEW OF THE LITERATURE

Sociodemographic Characteristics of Adolescent Parenthood

As noted, the statistics regarding adolescent parenthood are more complicated than the simplistic label of "epidemic" would indicate. The most striking change in the last few decades involves the number of adolescents who choose to keep and raise their children. In 1971, 86% of unmarried women aged 15 to 19 who had borne a child were raising the child; by 1976, this already high number had risen to 93%, an increase which to a great extent reflected the rise in numbers of white adolescents who had chosen to keep their babies (Baldwin, 1983). Fewer teenagers who become pregnant are marrying before the delivery; the proportion of out-of-wedlock births to adolescents in the 15 to 17 age group increased from 43% in 1970 to 62% in 1980 (Ventura and Hendershot, 1984).

The growing number of investigations on adolescent childbearing have been largely focused on the demographic and social consequences of teenage motherhood. Research on the effects of early childbearing on the children has tended to be concentrated on obstetric and neonatal outcomes. In these studies, the effects of maternal age are often confounded by the effects of socioeconomic status and ethnicity, making it difficult to attribute

negative effects of teenage pregnancy to age alone (Phipps-Yonas, 1980).

Adolescent childbearers have high levels of neonatal mortality, prematurity and low birth weight infants (Menken, 1980). However, this high obstetric risk has been found to be linked to poverty, poor nutrition, inadequate prenatal care, and further complicating factors such as prepregnancy drug abuse, alcohol use, and smoking; chronological age does not seem to be the critical factor (Hollingsworth, Kotchen and Felice, 1983). Carey, McCann-Sanford, and Davidson, Jr. (1983) found that the factors associated with premature birth in adolescent patients included low prepregnancy weight, ethnic origin, (i.e., higher incidence among blacks), low socioeconomic status, being unmarried (particularly among white adolescents), poor prenatal care and narcotic use. In a review of studies of medical data on this topic, Lawrence and Merritt conclude that in fact, the "ideal time to give birth, from a medical perspective, appears to be between the ages of 16 and 19 years, provided the mother is given adequate prenatal care and rears the child in a stable environment" (1983, p. 166). An age-related risk may be greater for mothers under the age of 16, however; if the mother herself has not achieved her full growth, the competition between her nutritional needs and those of the fetus may place the health of both in jeopardy (Zuckerman,

Walker, Frank, Chase and Hamburg, 1984). Even this conclusion is subject to other considerations, though, since the achievement of full growth is linked not to age per se, but to physiologic processes such as production of sexual hormones. The timing of the onset of a pubertal growth spurt and the point at which it reaches completion with the closing of the epiphyses can vary considerably (Carey, McCann-Sanford, and Davidson, Jr. 1983).

Interestingly, the risk of infants dying of sudden infant death syndrome is significantly higher in second or third infants born to mothers who are under 20 years of age. Reasons for this remain obscure; as in other studies, age per se does not seem to be implicated, but no other factor has emerged which would explain this phenomenon (Lawrence and Merritt, 1983.)

In summary, the current thinking is that age is not the primary causal factor in the high risk of neonatal morbidity and mortality in adolescent parenthood. It should be noted, however, that although the situational/social factors which are more strongly associated with poor neonatal outcomes are theoretically amenable to intervention, in reality the risk remains high since many of these factors are present prior to pregnancy, and not all adolescent mothers are willing or able to make use of intervention programs during pregnancy. Age cannot be

discounted as an indirect factor in so far as adolescents are prone to certain behaviors (such as poor nutritional habits, denial of the pregnancy, or delay in seeking prenatal care due to fear of parental anger, etc.) which contribute to their status as a high risk obstetric group.

A number of negative social/situational factors continue to characterize the adolescent mother's life after the birth of her child. Many adolescent child-bearers, by virtue of age, have not completed high school at the time of their infant's birth; this educational disadvantage continues for many of them into adulthood. Teenage mothers are more likely than older mothers to drop out of school, less likely to enter the work force, and their educational and vocational status remains lower than nonmothers in the same cohort (Furstenberg, 1976; Moore et al, 1981; Phipps-Yonas, 1980; Presser, 1980). Garcia Coll, Hoffman and Oh (1987), in their study of social ecology and early parenting among white adolescent mothers in Rhode Island, report that they had difficulty in finding a control group of older mothers who matched the adolescents on sociodemographic characteristics, since most older women who delivered at the same hospital during the same 20-month period had completed high school (and in some cases, had at least a year of college); their mean socioeconomic status was 7.7 points higher on the Holling-head scale than the adolescent mothers.

Adolescent marriages have a high rate of disruption and divorce (Chilman, 1980), and for the adolescent who is also a mother, the ramifications of marital conflict and divorce are likely to be highly stressful for mother and child. Many adolescent mothers remain unwed for several years. Preser found that, of the unmarried fathers paired with the teenagers in her study, 51% were not high school graduates, and their low economic and educational status made marriage undesirable and unfeasible. She notes that, "Unencumbered by a child, more unmarried women might have found a husband who could provide the kind of emotional and financial security they sought" (1980, p. 263). In a study of the social support of (primarily black) adolescent mothers, Unger and Wandersman (1985) found that support from the baby's father with child care was one of the variables which was positively correlated with good maternal postpartum adjustment and more infant responsiveness at one month. At eight months, however, child care by the father was not related to measures of maternal adequacy and satisfaction; the researchers note that "This may have been due to the unstable nature of the relationship between the teen mother and father. For instance, by eight months postpartum many of the mothers (47%) responded that they were not in love, or if they were in love, it was with someone other than the baby's father" (p. 36). Garcia Coll,

Hoffman and Oh (1987) found that, compared with older mothers, adolescents relied more for support on their own mother and on teenaged friends than on their male partner. In Crockenberg's (1987) study, rejection of the adolescent during her childhood by her own mother, when coupled with low support by her (current) male partner, was highly correlated with angry and punitive behavior toward her child two years postpartum. Mothers who were rejected by their own mothers but were receiving high partner support, were significantly less angry and punitive. However, mothers who had suffered early rejection were also somewhat less likely to have good partner support.

In brief, the partner relationship (with the biological father or another male partner) can clearly be a positive factor in the adolescent mother's life postpartum, but the statistics indicate that this source of support is, for a variety of reasons, not available to many adolescent mothers.

Given that the "encumberance" of a first child may make it difficult for the teenage mother to find a husband or enter a stable relationship with a supportive partner, the demography of adolescent fertility makes the picture seem even more bleak. The younger the mother at time of first birth, the greater the likelihood that she will bear more children (Moore et al., 1981; Trusell and Manken, 1978). In Miller's (1984) longitudinal study of 12-

to 16 year old mothers, 75% were using a birth control method immediately following the birth of their first child, but at the time of the second interview 18 months later, the percentage had already dropped to 67%, and 19% of the mothers were pregnant again.

To sum up, the social consequences of an early, unplanned birth are likely to include attenuated educational and vocational opportunities, disruption of the marital or partner relationship, and increased fertility.

Psychological Correlates of Teenage Fertility

The results of studies seeking psychological explanations of teenage childbearing are inconsistent (Quay, 1982). Like much of the research on this topic, the ethnic and regional differences in populations studied, the diversity of research methods used, and the confounding variables of socioeconomic status make it difficult to arrive at a cohesive psychological or personality profile which would be predictive of which teenagers are likely to become pregnant. Models emphasizing psychopathology as a causal agent (e.g., Fisher, 1984; Sugar, 1976) may have clinical validity in terms of particular individuals or subgroups within the larger population, but they do not serve as explanatory models for the phenomenon in general. Furthermore, since the fact of unanticipated

pregnancy itself produces a high level of stress, it is difficult to know whether the psychological variables observed are a cause or effect of the pregnancy.

An exception is the consistent finding by several researchers that poor use of contraception is associated with non-acknowledgement of one's own sexuality. Girls whose self concept includes acceptance of their sexual activity are more apt to take responsibility for contraception, whereas poor contraceptors tend to think of their sexuality as something that "happened to them" (Dreyer, 1982; Furstenberg, 1976; Phipps-Yonas, 1980). Furstenberg found that girls from strict homes where sex was never discussed openly were less able to incorporate their sexual activity into their self-image, and therefore less able to take responsibility for its consequences. Poor contraception has also been associated with "dissocial" trait responses on attitudinal measures, implying low levels of impulse control (Cvetkovich and Grote, 1980). Genuine lack of knowledge coupled with the developmentally typical "it can't happen to me" attitude of many adolescents is another factor which leads to poor or non-use of contraception.

Kreipe (1983) notes that adolescents who become pregnant fall into several categories. One is the adolescent who becomes pregnant intentionally, as a "solution" or, more appropriately, an escape from problems

at home and/or school. Intentionality does not imply that the baby is wanted or even that the adolescent has a clear idea of the long-range implications of pregnancy and motherhood, but rather that becoming pregnant is seen, at least at the time of conception, as a way out of an unhappy or untenable situation. A second category includes those teens who get pregnant "accidentally." This does not imply true contraceptive failure, but rather participation in sexual behavior as risk-taking, or with little conscious awareness of its possible consequences. A third group includes those teenagers who are misinformed or uninformed about contraception. Kreipe notes that programs of sex education in schools and communities have not been highly effective in their impact on misinformed youth. Whether this is a failure of program design or a function of adolescents' inability to apply what they may have grasped cognitively to their own personal behavior is not clear.

Another system of categorizing subsets of adolescent mothers is formulated by Hamburg (1986). The "problem-prone" adolescent is the teenager who engages in sexual activity and/or becomes pregnant for one or a combination of the following reasons: (1) as a way of coping with frustration, failure or rejection; (2) as a mode of opposing societal conventions; (3) as a way of conforming to peer pressure; or (4) as a "negotiation for develop-

mental transition" (p. 119). Hamburg posits that teens who comprise this category are at higher risk for negative sequelae in both obstetric mortality and morbidity and mothering capacity.

A second subset includes teens for whom early child-bearing is an alternative life course which does not necessarily have negative consequences. An example of this subgroup is the young, urban, poor black adolescent. Citing demographic and ethnographic studies of this community, Hamburg concludes that early childbearing gives the mother "time off" from a labor market in which unemployment for black youth is very high, while enabling the mother to consolidate a kin network for social and economic support. When, at a later time, the mother does enter the labor force, her children will be older and she will also have a network in place to help with child care and similar assistance. In the urban black community, early fertility may be an adaptive strategy with (potentially) more positive long-range socioeconomic consequences than those that occur for other groups of teen-age mothers. A third subset described by Hamburg is based on clinical observations of a link between depressive symptomatology in adolescents and the use of sexual activity to assuage loneliness and depression. If the sexual activity results in pregnancy, the initial experience of mothering

may serve to provide a positive and gratifying experience for these young women, but Hamburg notes that clinicians have found that these positive effects disappear as the infant becomes a toddler.

A profile of some cohesive psychological dimensions emerges from other research of the already-pregnant teenager who plans to keep the baby, as opposed to those who have abortions or give the baby up for adoption. This profile is similar to the findings regarding poor contraceptors. The theme of passivity or denial has been found in studies of aborters versus non-aborters. Steinhoff (1978) found that in her sample of premaritally pregnant women, the majority of nonaborters in their early and mid teens were characterized by a passive compliance. They had often acquiesced to sex to please boyfriends, they perceived pregnancy as an "external event that happened" (p. 262), and had a shorter time perspective in terms of ability to plan for the future. In an investigation of factors which influenced pregnant adolescents' decisions to keep their babies, Leynes (1980) found that those girls who had been rated at the lower level of functioning in a psychiatric evaluation were the ones who chose to keep their babies rather than place them for adoption.

Lowered sense of personal worth, and higher levels of self-criticism, conflict and defensiveness character-

ized the self-concept of a group of pregnant teens who had decided to keep their babies, as compared with a control group of non-pregnant teens (Zongker, 1977).

In short, there are many steps along the route to adolescent motherhood: social activity which culminates in sexual intercourse; use or non-use of contraception; and, in the event of conception, a decision to abort, place for adoption, or keep the baby. At every step there are many factors which influence a girl's behavioral choices, including ethnicity, degree of religiosity, socioeconomic, educational and vocational status of the girl and her family, and the psychological make-up of the girl. None of these variables taken singly can account for or predict which choice will be made at each step; it is also possible that for certain subgroups of adolescents, the choices may prove ultimately adaptive as life-span strategies. Much of the research, however, indicates that the teenager who becomes pregnant and keeps the baby is at risk for entering her new role as mother with a number of social and psychological disadvantages.

Findings of research on the long-range psychological sequelae of early childbearing are mixed; some researchers present a more optimistic picture, while others have more negative findings.

Colletta (1983) found adolescent mothers to be at risk for depression. MacLaughlin and Micklin (1983) found a decline in perceived personal efficacy of young mothers upon readministration of the measure three years after the initial test. In a longitudinal study spanning ten years, Brown, Adams and Kellam (1981) found high levels of continued and recurrent feelings of distress in the younger mothers in their sample. They note that "the number of children appears to influence the distress of mothers who began childbearing between 18 and 19 years of age more than the other mothers, and the early teenage mothers have the highest risk irrespective of numbers of children" (p. 200).

On the other hand, for some adolescent mothers, the birth of a baby may bring about a closer and more positive relationship with the mother's family. This "honeymoon" is often short-lived, however, and may be followed by disillusionment (Progress Report of the Center for Population Research, 1983). In other cases, having a baby may produce a closer bond between the girl and her mother as they share a more equal status and common concerns (Wise, 1981), although if the girl is dependent on her mother for help in child care, some competition may develop between them (Wise, 1980).

In a study of married versus unmarried young mothers (14-25 years old), Grow (1979) found that many of the

disadvantages accruing to out-of-wedlock births had diminished or disappeared after three years. The mothers' age at the time of the baby's birth was not found to be a significant variable on any of Grow's measures; the proportion of mothers exhibiting psychiatric symptoms of distress, lack of contentment with childrearing and poor health was no different for the adolescents in her sample than for the older mothers.

In Miller's (1983) investigation of childrearing among (largely black) 12- to 15-year-olds, she found that following the birth of the baby, her subjects' ratings on self-esteem were generally positive, and their general level of happiness was high. Nearly one-third of the mothers reported feeling happier than they had in the past. It should be noted, however, that the primary reasons given by Miller's subjects for their increased happiness since the birth of the baby were that "having the baby gave the mother a sense of purpose in life, and had taken her away from her undesirable activities (i.e., being out on the streets, fighting, drugs), and that her relationship with close family members had improved" (p. 26). Clearly, the perceived post-natal psychological status of adolescent mothers is relative to their levels of emotional well-being prior to the pregnancy.

Incorporating the typologies of adolescent mothers described by Kreipe (1983) and Hamburg (1986) into research on early childbearing would be helpful in evaluating results. Just as much of the demographic research indicates that age per se cannot be regarded as a primary causal agent of teen parenthood outcomes, so it would appear that further variables must be teased out including the socioemotional status of the teenager prior to the pregnancy and/or birth, her status in her kin network, and the life-span timing of events which are the norms for her ethnic group.

Maternal Behavior in Adolescents

The maternal behavior of teenagers with their infants has been found by many researchers to differ from that of older mothers in a number of ways. Younger mothers talk less to their infants, show less positive affect, hold the infants in ventral contact less frequently, and demonstrate less frequent mutual gazing (Baldwin and Cain, 1980; Jones, Green and Krauss, 1980; Levine, Garcia-Coll and Oh, 1985; Ragozin, Basham, Crinic, Greenberg and Robinson, 1982). McAnarney and her colleagues (Elster, McAnarney and Lamb, 1983) found that the younger the mother, "the less she demonstrated behaviors such as touching, the use of the high-pitched voice, synchronous movements, and closeness to the

infant" (p. 496). Inappropriate aggressive behaviors such as poking and pinching their babies were noted among adolescent mothers aged 15 to 16 (Lawrence, 1983). The instances of these aggressive behaviors were higher in frequency for white and Spanish-speaking teens, and lower for blacks. Adolescent mothers, and younger ones in particular, have also been noted to appear to value physical and motor attributes and to respond to these types of stimuli from their infants more than affective or visual and auditory cues (Wise, 1980). Adolescent mothers were found by Garcia Coll, Hoffman and Oh (1987) to provide less optimal home environments, score lower on verbal and emotional responsiveness and maternal involvement, and have a less positive emotional style of communicating with their infants than a control group of mothers over 21 years of age. Although Schilmoeller and Baranowski (1985) found no difference between adolescent and older mothers' knowledge of developmental milestones and their positive attitudes toward child-rearing, they did find that adolescent mothers provided significantly less stimulation for their children and were more restrictive and punitive than older mothers. Although it is likely that social class, ethnic background and other demographic variables influence the adolescent's perception of and response to her infant, the maternal behaviors noted above have been found to

correlate most highly with the age of the mother. It should be noted that these age-related differences in nurturing behaviors of young mothers do not constitute grossly deviant caregiving and are not necessarily indicative of a pathological mother/infant relationship. Nonetheless, they demonstrate some serious limitations in the mother's capacity for reciprocity, contingent responsiveness and positive social stimulation; these are limitations which could have a negative impact on the child's development.

Factors other than age play a role in the mother's parenting skills and style. As noted previously, partner and/or family support is related to the adolescent's postpartum adjustment and her ability to parent (Unger and Wandersman, 1985), and low partner support is coupled with patterns of angry and punitive parenting by adolescents two years postpartum (Crockenberg, 1987). Stressful life events can also contribute to parenting inadequacy; Garcia-Coll et al. (1987) found that although the number of stressful life events reported by the adolescents in their study was not higher than the number of events reported by an SES-matched subset of older mothers, the teenage mothers "rated the overall stressfulness of these events as being significantly higher than did nonadolescent mothers" (p. 958). Most interestingly, what the adolescent mothers

defined as stressful differed from the older mothers. Teen-ages mothers reported events such as family arguments and fights with boyfriends, whereas the older mothers were concerned with issues related to the care of their infants.

Although maternal age does seem to be a primary factor in some aspects of adolescent parenting, it is clear that a number of other factors can either exacerbate or diminish the potential risk of parental inadequacy.

Long-range Outcomes for the Children

Much of the literature on the long-range effects on the children of teen-age parents indicates that the sociodemographic correlates of early motherhood are more highly associated with outcomes than maternal age per se. Some studies have found that children reared in households with more than one adult fared better on cognitive measures (Furstenberg, 1976) and had better health (Chilman, 1980), whereas being raised in single-parent homes had more adverse effects. (The likelihood is great, unfortunately, that many children of teen-age parents will spend at least some of their early years in a one-adult household.) Children whose mothers attended school or worked outside the home had higher scores on the Preschool Inventory (Furstenberg, 1976), which could be attributed to either the positive influence of

contact with substitute caregivers, or to the fact that these mothers were economically and educationally better off than the non-working, non-student mother.

In Miller's (1983) study, the developmental status of the toddler-aged children of young (12-50-15-year-old) mothers was assessed on Alpern and Boll's Developmental Profile; two-thirds of the children were found to be advanced for their age in physical, self-help, social, academic and communication areas. (These findings should be interpreted with caution, however, as the profile consists of reports from the mothers, who may not always be the most objective or accurate judges of their children's behaviors.)

The findings of other investigators are less encouraging. Cognitive and social deficits have been observed in preschool-aged children born to mothers under twenty (Furstenberg, 1976) and in elementary school-aged children of young mothers (Card, 1977, cited in Baldwin and Cain, 1980; Hardy, Welcher, Stanley and Dallas, 1978; Oppel and Royston, 1971). In Oppel and Royston's study, although there was no difference in the number of psychiatrically disturbed children in the younger versus the older mothers' group, the type of disturbance differed significantly. The children of mothers older than 18 were more frequently found to have low self-esteem, but the children of

mothers under 17 were more often classified as infantile and acting out, and were found to be more distractible and dependent. Children of teenage mothers have lower reading achievement scores, are more likely to repeat a grade, and have school adjustment problems which increase over time (Chilman, 1980). Although some studies have found that negative effects of teen-age childrearing on child IQ are mediated by factors such as maternal education, family size and presence or absence of a father, others have found social and cognitive deficits in the children even after controlling for sociodemographic factors (Brooks-Gunn and Furstenberg, 1986).

Male children seem to suffer more from cognitive and behavioral deficits (Baldwin and Cain, 1980; Chilman, 1980; Brooks-Gunn and Furstenberg, 1986). The effects on the female children are less evident in their early years, but ultimately are equally distressing. Girls born to adolescent mothers are highly likely to become teenage mothers themselves (Baldwin and Cain, 1980; Fisher, 1984; and Presser, 1978). Presser found that, for the white adolescents in her sample, having a mother who had given birth as an adolescent was the greatest predictor of early pregnancy for the subject. Fisher notes that, of the pregnant teens whose mothers had been pregnant as

adolescents, "...the prime difference between mothers and daughters is that the younger group become pregnant two years before their mothers did" (p. 55).

The instability of adolescent childrearing is reflected in Broman's (1981) extensive and long range study of 23,000 women who were enrolled during pregnancy in the Collaborative Perinatal Project of the National Institute of Neurological Disorders and Stroke. The age range of the sample was 12 to 29, with 20% of the women below the age of 20. Broman found that by the time the children of the study population were age seven, 32% of those born to the 12- to 15-year-olds had been placed for adoption or foster care, compared to 17% of those born to 16- and 17-year-olds, and 7% born to adults.

In an analysis of demographic data gathered for a national project which surveyed 375,000 youth who were in grades 9-12 in 1960, and resurveyed them at 1, 5 and 11 years out of high school, Card (1981) found a number of differences between those children who had been born to adolescent parents and those whose parents had been older. The sample of children of adolescent parents was further subdivided into a cohort whose parents had been less than 19 when they were born (with a control group of children whose parents had been 20 years or more), and a cohort whose parents had been

17 years or less, with the control group having parents of 18 or more. Findings for both cohorts showed that

"Proportionately more CAPSs [children of adolescent parents] were black. Proportionately more CAPs were living in households headed by adults other than a mother-father combination. Families headed by a mother-stepfather combination and by grandparents, aunts and/or uncles were especially prevalent for the CAP group. CAPs also tended to come from poorer families and to have earlier birth order than their classmates" (p. 146).

CAPs also scored lower than their classmates on all the cognitive measures used; the CAPs from the cohort whose parents were less than 19 at first birth had lower high school grades, but this was not true for the cohort whose parents had been less than 17 when they were born. Socially, in both cohorts, the CAPs were found to be "less sociable, less tidy, less cultured, and less mature than their classmates" (p. 146). They also had lower educational expectations. Measurements of educational, occupational, marital and childbearing status when they were 29 to 30 years of age (at the last survey point) indicates that the CAPs had a lower educational level, had married at an earlier age, and had been married a greater number of times than their non-CAP classmates. However, when the antecedent and mediating variables were controlled, the number and

magnitude of long range differences between the samples were diminished. The main consequences which remained as significant were the unstable marital history and the higher fertility status of the CAPs. Cognitive differences, for example, were indirect, mediated as they were by head-of-household status in families of origin, and lowered aptitude in high school of the CAPs. Family of origin head-of-household status also had a significant impact on future occupational attainment of the CAPs. Race and SES were significant antecedents of adolescent parentage.

This study is of particular significance because the sample was so large, and because, as a longitudinal study, it followed the children of adolescent parents into their own adult lives. It is also significant because it clearly demonstrates the problems of delineating the effects of teenage parentage on the children and separating these from antecedent and mediating variables. The results of this study, and others like it, raise the question of how useful it is, from a clinical, programmatic and/or policy perspective, to continue to focus on the distinctions between age versus other variables as primary causal agents of the negative effects on the children. If, as much research indicates, the children of adolescent parents continue to perpetuate the pattern of early childbearing, marital

instability, and lowered educational and occupational attainment, the antecedent variables and indirect effects will continue to be woven into the pattern and will lead to the same negative outcomes for their children.

The picture presented by the research is well characterized by the phrase "the transmission of social disadvantage" used by Glen Elder, Jr. in his introduction to Furstenberg's book on teenage childbearing (1976, p. xiv). The "social disadvantage" of adolescent parenting does, indeed, seem to be transmitted to the offspring. As Phipps-Yonas (1980) states, there is

convincing evidence that a significant number of teenage mothers are emotionally and intellectually ill-prepared for their maternal role and fare poorly in that regard...It is difficult to determine the extent to which the negative outcomes reflect pre-existing individual differences between girls who give birth at an early age and those who delay childbearing, rather than the lifelong consequences early motherhood reaps for the former group (p. 416).

It would appear, however, that there is a high probability that the "lifelong consequences" for the mother can become lifelong consequences for her children.

In brief, an early, unplanned birth is predictive of social and psychological sequelae which affect the adolescents' capacity for adequate mothering, and places their children at risk for growing up in circumstances

which are unfortunately conducive to a replication of the pattern in their own adult lives.

CHAPTER 3

THEORETICAL FRAMEWORK

Developmental Issues in Adolescence

The period of adolescence involves numerous changes in biological, cognitive and psychosocial development. Maturation in each of these areas often proceeds at an uneven pace. As Lancaster and Hamburg comment, "It appears that developmental asynchrony is a normative experience for adolescents and that it is not until the age of 18 to 19 that the various systems of the body and brain all appear to reach an adult state of development" (1986, p. 11).

When a teenager gives birth, the transition to the maternal role has often occurred when some or all of these developmental and maturational tasks are incompletely resolved. Rogel and Peterson (1984) point out that the psychosocial developmental issues of adolescence, "cognitive growth, identity formation and movement toward the establishment of intimate relationships," (p. 92) are particularly stressed by the demands of pregnancy with its rapid changes in body image and the need to form an attachment to the fetus as a potentially real -- and ultimately separate -- person. By the same token, the completion or resolution of some of these developmental tasks may be jeopardized by the biological,

social and emotional impact of early childbearing. The biological consequences have already been noted for the infants of mothers under the age of 16, in terms of fetal competition for nutrition with a mother-to-be who has not yet achieved her own full growth. While they express some doubts about this latter view, Garn, Pesick and Petzold did find that the tendency of younger mothers to give birth to lower-weight infants was a true "teenage effect," related to the "smaller mass of the teenage mothers" (1986, p. 88). In their analysis of data from the National Collaborative Perinatal Project, they also found that although the younger teenage mothers showed a much greater weight gain during pregnancy than older mothers, this was not transformed into increased neonate weight; whatever the weight gain, the neonates were smaller than those of older mothers with comparable weight gain during pregnancy. Although it seems that the greater risk here is to the infant, and not to the mother, Garn et al. note that the mothers' greater weight gain "will surely be retained as fat...and, therefore, a step toward adult obesity" (p. 92). Thus the early childbearing may lead to unwanted physiological outcomes for the mother, as well as risks to the infant. For a teenaged girl, who is likely to feel self-conscious about her body image, the changes both during pregnancy

and post-partum can be upsetting and confusing. Whatever feelings she may have had about her sexuality will now be confounded by the very different body image resulting from pregnancy and childbearing.

Psychosocial developmental tasks are highly affected by the impact of motherhood. Girls who live in the parental home and share the care of the child with their own mothers, for example, may perceive themselves to be "more equal" with their mothers, but in reality they are extending and prolonging their period of dependence on their families. Sahler (1983) comments that the issue of personal freedom (to attend social events, participate in peer activities, etc.) can be complicated for the teen mother living with her family. In addition to whatever conflicts about this issue existed prior to the pregnancy, the teenager must now negotiate with her family "how much freedom she can have based on how easily the infant can be accommodated within the household schedule of other family members" (p. 226). She also notes that mother-daughter conflicts around autonomy and separation, typical of early and middle adolescence, will be confounded by the shared "mothering" of the daughter's child. Citing her own experience in a clinic for parenting teens as well as other studies, Sahler says that many teenagers who shared child-rearing with their mothers felt inadequate because they took a

secondary role in caring for the child. They were also concerned that this would be confusing to the baby.

The teenager who remains unmarried but moves out of the home may achieve a measure of independence which is preferable to remaining in the home, particularly if there were conflicts within the family prior to, or around the issue of the pregnancy. But living as a single parent can be very lonely and isolating, and carries with it the risk that the young mother will become involved in transient or undesirable relationships with men as a way of assuaging her loneliness. From a developmental perspective, forced premature independence can leave the adolescent with a number of unresolved feelings about her own unmet needs and place great stress on her ability to function in a genuinely autonomous capacity. She may not yet have developed "the ego resources that other adolescents can get from the peer group structure," explored vocational or career options, or developed "skills and hobbies that further enhance autonomous ego functions [and] provide strength for disciplined tasks and the capacity for aloneness" (Fisher, 1984, p. 61).

As has been noted, a very high proportion of teenaged mothers are choosing to raise their children as single parents. Getting married and/or moving in with the child's father (or another viable partner) is another option, but as the statistics on teenage marriage indicate, these

marriages (or partner relationships) tend to be very unstable. The capacities to be intimate and to share successfully the tasks of childrearing, and daily living with another person require an awareness of one's own needs, sensitivity to the other person's needs, and an ability to articulate and negotiate these needs in the service of mutual support. Although the high divorce rate in this country would indicate that the lack of these capacities are not limited to teenagers, one of the developmental tasks of adolescence is to give up what Elkind (1981) calls "the personal fable" and move toward a higher level of social cognition and mutuality. In Elkind's concept of the personal fable, the combination of preoccupation with self and the cognitive limitations of the adolescent leads to an assumption that one's feelings are "unique when they are common to everyone," and, conversely, that "the adolescents' own personal evaluation of themselves is automatically shared by everyone" (p. 176). Experience over time with "friendships in which intimacies are shared" (p. 173) help the adolescent discover that his or her thoughts and feelings are shared by others, and modify the feeling of apartness and sense of loneliness which accompany the personal fable. These intimacies also help the adolescent gain some understanding of the feelings and perceptions of others, thus enhancing his/her social

cognitions. If childbearing has isolated the teen mother from her peer culture, she has fewer opportunities to engage in mutually validating relationships which will broaden her social perspectives and her self-evaluation. If she is involved with a man, the normative range of activities which might accompany a dating relationship are attenuated as the young couple struggle with demands of childrearing and, often, the need to achieve economic self-sufficiency.

The self-preoccupation which makes true mutuality difficult in peer relations can also affect parenting. Elster, McAnarney and Lamb (1983) point out that no research has been done which specifically investigates "the relationship between social cognitive abilities and parental behavior in adolescent mothers". They further note that

the relative cognitive immaturity of adolescent parents inhibits or retards the development of realistic expectations and attitudes regarding child rearing. Many of the adolescent mothers... do not seem to appreciate that parenting requires intense, prolonged, sensitive interaction... the cognitive immaturity of adolescents produces a self-centeredness which may prevent them from placing their infants' needs ahead of their own desires (p. 498).

Erikson, (1981) while acknowledging that identity formation is a life-long task, notes that the adolescent

period

can be viewed as a psychosocial moratorium during which the individual through free role experimentation may find a niche in some section of his society, a niche which is firmly defined and yet seems to be uniquely for him. In finding it, the young adult gains an assured sense of inner continuity and social sameness which will bridge what he was as a child and what he is about to become, and will reconcile his conception of himself and his community's recognition of him (p. 190).

The teenager who becomes a mother at an early age is denied the opportunities for role experimentation within the larger community, the experiences of shared intimacies with peers, and the chance to invest herself fully in activities which can stretch her cognitive and social horizons. From a life-span perspective, early motherhood has put the adolescent on a different life course track, and cut her off from all or some of the social/institutional structures which ordinarily, in our society, guide the adolescent passage toward adulthood. A preoccupation with self and a cognitive structure which is still rooted in the concreteness of direct experience are normative characteristics of adolescent development; such traits only seem negative or "immature" when circumstances (such as parenting) require more mature behavior.

Lerner and Shea (1982) remark that

...all theorists agree that the person must attain those skills requisite for survival in his/her society. Yet it is clear that the demands placed on the person are not constant across life. Although society may expect certain behaviors of its adult members, similar expectations are not maintained for infants, children, and in some societies, adolescents (p. 507).

Fisher (1984) maintains that non-western cultures with traditions of early childbearing incorporate preparation for pregnancy and childrearing into social structures which implicitly recognize and compensate for the stresses of early motherhood. These include "models of nurturance who nurture young mothers while showing them how to nurture their own babies, ...[and] models of admonition, rule givers who...become models of limit setting for the young" (p. 61). Similarly, Edwards (1986) has noted that in many parts of the world parents "routinely recruit their children to help with child care" (p. 96). In such settings, children acquire competence in caregiving and nurturing from an early age, having as models not only adults but older children who are performing these tasks. In our society, which is considered by some social scientists to be deficient in providing preparation for parenting in general (Rossi, 1968), a teenage mother is particularly vulnerable when

her developmental limitations render her poorly equipped for the adult role of mother, and when she is isolated from those institutions which might have promoted more optimal maturation throughout adolescence.

As most parents of young children know, female adolescents often make excellent baby-sitters, but their investment in practicing this maternal role tends to wane when there is a more compelling activity such as a date, a rock concert, or the need to study for an exam. For the young mother who has to find a sitter for her own baby if she wants to go out, the conflict between gratifying her own age-appropriate wishes and behaving in a responsible manner in her maternal role can be very stressful. One of the subjects for this study, with whom I have had continuing, although occasional, contact, provides an excellent example of the stress involved in trying to "complete" one's adolescence while mothering a child. Over a period of almost two years, she has received her high school degree (through GED classes at night); has broken up, reconciled, planned marriage to and broken up again with the child's father; has gotten a driver's license; moved twice; found employment twice and quit each job after several weeks because she had no time to "hang out" with her friends, care for her child, and work; and has learned how to budget a little better so that her welfare check lasts her through most

of the month. The child is in day care all day, five days a week; the mother often requests that the day care teachers bathe the child, or make his lunch, or drive her and the child to a doctor's appointment because she has been unable to manage these things herself. Although she has attained some of the stage-appropriate milestones (high school degree, driver's license), she achieved these milestones two years later than her peers. She accomplishes other role demands (budgeting, child care) with difficulty and requires considerable support from adults such as day care staff and social caseworker.

The issue here is that developmental "tasks" are not simply internal emotional states. The needs, wishes, strivings and feelings which are part of the maturational and developmental processes of adolescence manifest themselves in concrete actions and are played out in the context of events which occur at certain points in the life span. While it may be "normal" and, in fact, serve to promote maturation to break up, reconcile, and break up again with one's boyfriend, it is a different matter to do this with the father of one's child. Under the latter circumstance, the pressure to marry, the presence of the child in the household, and the anxiety about being alone if the boyfriend should leave are likely to cause considerably more stress and anguish than the kind of fights

which might ordinarily occur between an adolescent and her current boyfriend. The findings of Garcia-Coll et al. (1987) that teenage mothers reported as stressful events family arguments and fights with boyfriends, (as opposed to the worries about their infants reported by older mothers) clearly demonstrates the different developmental/life stage concerns of adolescents.

From a developmental standpoint, then, the teenage mother assumes a role which may seriously limit her opportunities to have the sort of experiences she needs for her own continued development. Her attempts to continue to engage in these experiences may create conflict with the demands of her maternal role, a role which requires of her a level of cognitive, social and emotional functioning which she is not likely to have achieved. For some teenage mothers, this tension may lead to a kind of pseudomaturity in which the mother takes on the external functions and behaviors of her newly-acquired role, but remains adolescent in her emotional needs and perception.

It is important, however, to consider that for some teenagers, pregnancy and motherhood can have more beneficial effects. As noted above, some investigators have concluded that for black, urban, poor teens, motherhood is an adaptive life-span strategy (Lancaster and Hamburg, 1986). It is also possible that for those teens who have opted

for pregnancy and childrearing "intentionally" (Kreipe, 1983) or as a "negotiation for developmental transition" (Hamburg, 1986), motherhood may indeed have a positive impact on their psychosocial development. Although Hamburg conjectures that the teen who becomes a mother as a way of coping with problems or solving developmental impasses is more likely to be at risk for negative sequelae, this may not be the case if the pregnancy serves to mobilize support for the young mother, either from her family and kin network or from a social agency with a good program for teen parents. In the last four or five years, research on teen parenthood has increasingly looked for those factors which might discriminate between those adolescents who are at high risk, and those for whom the proximate and/or long-range outcomes seem to be more positive. More discrete differentiation of developmental stages, such as early, middle and late adolescence have been considered (Hatcher, 1973), and factors such as ego strength (Wise, 1980), family history and early relationships (Crockenberg, 1987), and support systems and the "social ecology" of teen parenthood (Garcia-Coll et al., 1987) affect outcomes, some of which are positive, for both parents and children. As Lancaster and Hamburg (1986) point out,

The tradition of viewing adolescent pregnancy and parenthood as a social problem has fostered the

tendency to search for negative outcomes and to accept information more readily that appears to confirm poor biological and social outcomes. Much of this data comes from clinicians and agencies that serve troubled adolescents. In addition, medical and psychiatric research has a long tradition of emphasis on studying pathology...It is encouraging that across several behavioral science disciplines there is active research related to stress and coping responses to a range of challenges across the life span in which serious attention is being paid to studying good outcomes under condition of adversity and seeking to understand the personal and socioenvironmental forces that can explain these good outcomes. This body of work has immediate relevance for studies of adolescent pregnancy and parenthood (pp. 9-10).

Assumptions about Adequate Parenting

An underlying assumption of the present study is that there are features of adequate parenting which are likely to be difficult, conflictual or absent in the parenting repertoire of teenagers. Although it is not within the scope of this study to review the vast body of literature on parenting, I shall briefly discuss those issues which have guided my analysis of the data and evaluation of the findings..

Givclber (1983) has characterized the features of adequate mothering as including "separateness," which refers to "the parent's ability to differentiate a

child's needs and feelings from his own and to acknowledge and support the child as a separate person;" "anxiety mastery," which is "the parent's capacity to teach the child that anxiety can be tolerated;" and "promotion of growth and maturation," which is "the parent's efforts to guide the child toward an increasingly realistic sense of himself and the world" (p. 64). Another feature of adequate parenting is maternal sensitivity to the child's cues and signals. Ainsworth (1973) found this maternal characteristic to be related to the formation of a secure attachment. Erickson (1950) and Benedek (1938) have both stressed the acquisition of basic trust and confidence in infancy as a foundation for healthy development. As Erikson (1950) has observed, what is necessary is

mutual regulation with a mother who will permit [the infant] to develop and coordinate his means of getting as she develops and coordinates her means of giving...when this fails, the situation falls apart into a variety of attempts at control by duress of fantasy rather than by reciprocity (p. 71).

As the child becomes a toddler and greatly increases his repertoire for acting on his environment, the demands of parenting become more complex. Mahler, Pine and Bergman (1975) have documented the developmental phase of separation-individuation which peaks in the second and third year of the child's life; at this time, as the child practices his independence and explores his environment,

maternal availability affects the child's ability to invest in his/her surroundings and activities. In a setting where mothers remained nearby while their toddler-aged children played in a playroom, Mahler et al. observed that

Maternal unavailability made the practicing and exploratory period of such children rather brief and subdued. Never certain of their mother's availability and thus preoccupied with it, they found it difficult to invest libido in their surroundings and in their own functioning (p. 81).

Often, when positive attempts to engage the mother failed, the children would resort to tantrums, falling down, or spilling something. Ainsworth (1973) too has noted that the security of the child's attachment and the emotional availability and sensitivity of the mother affect the child's capacity for exploration.

However, this availability must be balanced by a willingness to let the child try out his independence and become a separate individual. At this point in the child's development, the mother must be able to set effective limits, and structure the environment to help the child gain a sense of mastery and tolerate the frustrations and anxieties which inevitably accompany his moves toward independence and separateness.

There is a growing body of literature in the field of child development which has examined the myriad subtle

affective communications which structure the everyday, ongoing transactions between mother and child. Two decades ago, Spitz (1965) observed what he termed a "coenesthetic" mode of communication between mothers and infants; this term described the "nonverbal, non-directed, expressive signals" which include rhythm, muscular tension, pitch, and other non-semantic affective indicators (pp. 134-35). Spitz posited that as this affective communication goes on uninterruptedly between mother and child, the "cumulative results of iterative expression and stimuli" shape the infant's psyche. Contrary to most psychoanalytic thinking of his time, he felt that traumatic events played a small role in the formation of neuroses; rather, it was the "cumulative experiences which [are] responsible" for pathological outcomes (p. 139). More recently, a number of researchers (Brazelton, Koslowski, Main, 1974; Brazelton, Tronick, Adamson, Als and Wise, 1975; Emde and Sorce, 1983; Tronick, Ricks and Cohen, 1982; and Stern, 1977) have documented the young infant's sensitivity to maternal affect and the centrality of mutual affective cueing in mother/child communication.

In an exploratory study of affective transactions between mothers and their toddler-aged children, Demos (1982) showed the ways in which the mother's affect

served to facilitate or inhibit the child's ability to sustain interest in an activity. Demos says that "...affects determine the organism's disposition toward the environment -- the liking or disliking and the related goals of approach, avoidance or attack. Affective expressive behaviors, then, may represent motivated states, that dispose the organism to act in a particular way" (p. 82). The "socialization of affect," she avers, is the process by which the infant's affective behaviors are "modified and shaped in the context of transaction with the human experience" (p. 83). Using the example of a child displaying interest and curiosity in reaching for a scissors, Demos points out that the mother's response conveys a message to the child, not just about the danger of scissors, but about his/her affect: a mother who substitutes another less dangerous object is acknowledging the merit of the child's interest, if not his action, whereas the mother who punished the child is discouraging the interest as well as the behavior.

A mother's responses to her child's affective expressions and his behaviors are based on the mother's conceptions and interpretations of those expressions and actions. For example, a mother who perceives her child as having an internal emotional life which motivates his external actions is more likely to take note of the child's interest in the scissors and separate that from his act

of reaching for it. A mother who interprets her child's external behavior in terms of preconceived or stereotypical ideas, ("good," "naughty," "spoiled," etc.) is likely to respond to the action in those terms without acknowledging the child's affect or perspective; she will impose her own construction of the meaning of the event rather than validating the child's meaning.

As noted previously, adolescent mothers have been found to talk less to their infants, do less mutual gazing and touching, demonstrate fewer synchronous movements, and respond less to the child's visual and auditory cues. The significance of these findings may lie in their implications regarding the adolescent's inability to attend to, be attuned to, and learn to "read" the infant's non-verbal affective signals and incorporate these into her perceptions and interpretations of her child's behavior. To some extent, this may be a function of developmental level; an adolescent who is still at a concrete operational level is more likely to use obvious external cues such as motor behavior, or unambiguous signals such as crying as indicators of the child's state.

Very few studies have investigated the relationship between maternal affective behaviors and long-range outcomes for the child. Research on the contemporaneous effects, however, has shown that infants and toddlers are

very responsive to maternal affective signals. In Demos' (1982) study, for example, the data demonstrate that the attention span, verbal output and task production of the children were highly related to the degree of positive affective communications on the mother's part. Emde and Source have been studying the infant's "developing capacity to make use of the mother's emotional signals to guide exploration and learning" (1983, p. 24). Their studies indicate that beginning in late infancy and continuing into toddlerhood, children confronted with ambiguous situations "reference" the mother for affective signals which are then used by the child to guide his/her behavior. Emde posits that "our affective core guarantees our continuity of experience across development in spite of the many ways we change" (1983, p. 165). He feels that the affective transactions between mother and child are central to the child's developing sense of self.

A number of features appear to comprise the affective direction of mother/child interactions. Maternal intent to control behavior, rather than facilitate mutual communication, for example, is reflected in the extent to which her linguistic behaviors include a predominance of directives and imperatives as opposed to questions, suggestions and declaratives (McDonald and Pien, 1982). Maternal emotional availability is conveyed through gaze behavior and subtle body language (Main and Weston, 1982).

I would broaden the concept of affective communication to include the many ways in which mothers cue their children as to what, in the environment, is salient. Although this shall be discussed in more detail later, it is worth noting here that the mothers in this study, in a free play situation with their children, gave many such cues to their children (often at odds with what the children seemed to consider interesting.) For example, one mother comments frequently on the mess the child is making, and cleans up after the child constantly. She is certainly conveying to the child that she values cleanliness more than she values what the child is interested in, even though her affect while doing so is pleasant and non-punitive.

Non-acknowledgment of an event can also give it salience: in one play situation, the child (quite obviously, from her facial and body contortions) made a bowel movement in her diaper. As she was partly toilet trained, she was very conscious of what she had done; looking into the video camera, she covers her face in obvious embarrassment. Although the mother had not noticed this, the child tried to tell the mother what had happened, asking her mother to "go home and get tissues," a request which the mother ignores. It is possible that the mother doesn't understand what the

child is saying, but since the child's communication has been perfectly clear to several other people who have seen the videotape it seems reasonable to assume that the mother's non-acknowledgment of the event and of the child's request is related to her own embarrassment about the child's "soiling." In any case, her response to the child's request is to suggest that the child get the toy broom and sweep the floor. In the next few minutes of play, both mother and child become very involved in "pretend" activities such as sweeping, emptying trash, and washing dishes, in which cleanliness is a prominent theme. The affective "message" of her non-acknowledgment served to confirm and exacerbate the child's sense of shame about her bodily functions; the pretend "clean-up" play which follows seems to further affirm in a symbolic form the need to be clean and the "badness" of being dirty, although it also seems to give the child the opportunity to make restitution for her soiling by participating with her mother in "cleaning up."

Affective "messages," therefore, would seem to involve not only the actual affect itself, but the context and content; i.e., what is attended to, what is ignored, and what themes emerge in disguised as well as in overt form. Of course, if the affect is at extreme odds with the content, the message is "mixed" and ambivalent. Such "mixed" messages and ambiguous inter-

action were found to characterize mother/child interactions in home movies made of families in which the child was subsequently diagnosed as psychotic (Massie, 1978). In these cases, the dysynchrony and dysmutuality seemed to leave the child little room for constructing any coherent meaning from the messages. Under less extreme circumstances, however, the affective messages conveyed from mother to child serve to structure the meaning and salience of events for the child, and thus have an effect on the child's construction of the meaning of both his internal and external experiences.

The messages which a mother conveys to the child about the meaning of experience are rooted in her own perceptions of the world, in the meanings she attributes to her child's behaviors, in her capacity to see the child as a separate person, and in her level of awareness of the cumulative effects of her actions on the child's development over time, as well as within the immediate situation.

These assumptions about parenting have framed the approach of this study, and I shall examine the ways in which adolescent mothers' developmental/psychosocial issues impact on their conceptions of their parental role and their perceptions and interpretations of their children's actions as well as their actual functioning as parents.

CHAPTER 4

METHOD

Subjects

Recruitment of Subjects

Subjects for this investigation were recruited through social agencies serving adolescent mothers, and day care centers in which children of adolescent mothers were receiving care, in three semi-rural towns in New England. The purposes of the study and the requirements for participation (such as age range for mothers and children) were explained to the caseworkers or day care teachers who then made the initial contact with those mothers who met the requirements. One mother was referred by another mother who had completed her participation in the study. If a mother expressed interest, I followed up with a phone call and an appointment was made for the videotape session. Mothers were told that the purpose of the study was to find out more about how adolescent mothers think about motherhood, and to see how their children respond in a playroom situation. They were informed of the procedures involved, including the videotaping, the interview, and the sentence completion (Loevinger Ego Scale) test. Mothers were also informed at this point that they would receive \$20 for their time and effort in participating, that they could have a copy

of the videotape, and that the child would get a present of a toy. They were assured of confidentiality and it was explained that the videotapes would be viewed by persons other than the investigator only if they chose to sign a release form to that effect.

Of the 15 mothers contacted by agency or day care center personnel, one mother declined to participate, giving no reasons, and two mothers who agreed initially were subsequently discovered to be ineligible as they did not meet all the requirements. Of the 12 mothers who made appointments for the videotaping, two mothers were not at home when I arrived to pick them up for the appointment; a third mother cancelled two appointments and ultimately called to say she did not want to participate; and a fourth mother cancelled her appointment with the explanation that her child "was being awful, giving me a hard time, and has a broken collarbone." The two mothers who were not home said, in a follow-through telephone conversation, that they were very "busy" and would call back if they decided they could participate; neither mother called. The caseworker of the mother who cancelled two appointments called to tell me that the Department of Social Services has removed the mother's child into temporary foster care due to charges of neglect. Although no follow through took place with the fourth mother, her explanation of why she

did not want to participate "at this time" indicated some possibility that she was abusing her child; a broken collarbone is the type of injury often resulting from child abuse, and the report of the injury was coupled with a rather lengthy complaint of the difficulties she was having with the child.

Thus, out of the total number of subjects contacted, nine mothers participated. The sample consists of eight mothers who are receiving some kind of agency or institutional support, and only one who is not. (The mother who was referred by another mother is not connected with any social agency or day care program.) It is known that two of the cancellations were due to problems in mothering; the reasons that one mother refused to participate and the other two did not show up for their appointments are not known but the possibility exists that these mothers were also having problems in parenting.

The issue of paying the mothers does not seem to have affected participation versus non-participation. All the mothers who initially expressed interest in participating did so without knowing that they would receive any money; the offer to pay them for their time was made when the appointment for the videotaping was arranged. Mothers who followed through on their participation versus mothers who did not had the same information regarding conditions of participation.

It would seem likely then, that this sample is comprised largely of mothers who perceive themselves as adequate parents, and who are making constructive use of available social supports for help with parenting skills, furthering their education, provision of child care, and so forth. None of the mothers was involved (at least at the time of the study) with the types of programs or day care slots which are mandated by the state in reported cases of abuse or neglect; their participation in institutional support systems was of a voluntary nature. In that sense, they would appear to be better-functioning than mothers who are involved in social support systems on a mandated basis.

Demographic Characteristics of the Subjects

The age range of the mothers at the time of the child's birth was 15.8 to 19.1, with a mean of 17.9. The range of their ages at the time of the study was 17.6 to 21.2, with a mean of 19.6. The children ranged in age from 15 months to 29 months, with a mean of 22.6 months. There were four male and five female children.

All of the mothers were single, and all were receiving Aid to Families with Dependent Children (AFDC) as their primary source of income. Three mothers received a small amount of financial support from the child's father in addition to the AFDC, but all listed their

incomes as falling between \$500 and \$700 per month. This did not necessarily reflect actual living conditions for all the mothers, as some of the young women lived with their families or with roommates, and thus lived in better circumstances than an AFDC income would ordinarily permit. One mother lived with her middle-class parents in a large ranch house in a rural/suburban area; another mother lived with her mother in a newly built public housing project, and a third mother shared a pleasant two-bedroom apartment in a moderate-income housing development with a male roommate. Five of the mothers lived in apartments in two or three family dwellings; all of these apartments tended to be in rather run-down houses and in states of some disrepair. Of these five, one was living with her mother and her current boyfriend, one lived with the father of her first child, one with a male roommate, and the other two lived alone with their children. One mother lived in a shelter for the homeless, while looking for an apartment of adequate size for herself and her two children which would meet the rental requirements of the Department of Welfare.

The socioeconomic status of the subjects' families of origin was difficult to determine. One young woman refused to give an information about her parents' income or occupations; since her home was the ranch house in a suburban area it is assumed that she comes from a middle-

to-upper-middle-class background. Many of the other young women said they did not know what their parents' incomes were; they were either genuinely unable to give even an estimate, or their dealings with the Welfare Department had made them suspicious of answering any questions related to income. Two of the women did say that their fathers (who were divorced from their mothers) were "very rich;" when asked what that meant in terms of income, one said, "Probably 30 or 40 thousand dollars," and the other said, "About \$20,000, maybe more." It appeared that neither of these fathers had contributed much income to the families after the divorce, however.

Five of the subjects' mothers worked at white collar jobs; two were at the level of unskilled labor; and two were homemakers. Their fathers' occupations included mechanic, janitor, truck driver, oil rigger, and business manager. One father was deceased. Since seven of the nine subjects' parents were divorced, it is likely that the socioeconomic status of the subjects' families of origin has varied over time depending on the amount and reliability of child support from the father, number of children in the family, and various other factors. It appears, however, that with the exception of one subject whose home clearly indicated a middle-to-upper-middle SES, the subjects come from lower-middle to working-class backgrounds.

As noted, only two of the subjects come from two-parent families. None of the subjects was the oldest child in her family of origin with the exception of one who was an only child. Five of the subjects' mothers were less than 20 years old when they became pregnant with their first child (the subjects' oldest sibling), with three of them having given birth to their first child as teenagers.

Three of the subjects had experienced the loss through death of a family member; two had lost a sibling, and the father of one had died right after divorcing her mother. The mother of one subject had several miscarriages prior to and following the birth of the subject. Only one subject came from a home in which there was neither divorce nor death.

The subjects had known the fathers of their children from four months to three years prior to becoming pregnant, with the mean time of dating or involvement being 14 years. Five of the subjects had considered marrying the child's father, but in four of these cases the father had been unwilling to get married. Three of these subjects had continued to see the father, however, for at least several months after delivery and still had some contact when the father visited the child. In the fourth case, the relationship was ongoing, with marriage still

being discussed, but the relationship was under great stress. A sixth mother was currently living with the child's father after two years of having had no contact. Three subjects had had no contact with the child's father following the child's birth and/or early infancy. The children of the latter subjects had essentially never seen their fathers; three children saw their fathers three or four times a week or more; two saw their fathers "occasionally," and in the one case the father lived with the family.

All subjects listed themselves as the person having primary responsibility for the child. Six subjects gave day care as their source of regular part-time child care, and three said their mothers babysat for them on a regular basis. Five of the subjects who used day care said they received additional babysitting help from their mothers ranging from one who took her grandchild every weekend to others who babysat occasionally for an evening. All but one subject lived within at least driving distance of their mothers; in the one case, the subject's geographically closest relative was an aunt.

Seven of the mothers had only one child, while two had a second child within one year after the birth of the first. One mother became pregnant with the second child by the father of the first, and the other had her second child with a different man.

The educational level of the subjects ranged from completion of ninth grade in school to completion of one year at a community college. Five subjects were attending General Education classes (GED's) to get their high school degrees. Of the four who had completed high school, one was enrolled as a degree student at a community college, two were part time students taking community college courses in word processing, and one was planning to enroll in a job training program. When asked about their plans for the future, only the three young women who were at the community college had realistic job goals related to their actual current educational status. Of the other mothers, two expressed more long-range aspirations; one wanted to be a model, and the other a social worker. The other four subjects responded to this question with more immediate concerns, such as "finding an apartment," "passing my GED math exam," and "getting my car fixed so I can get to the Job Training Center for my interview."

A summary of the demographic information is presented in Table 1. The factors which most characterize the sample of mothers as a whole are the following: Birth order as second or later child; disruption through divorce or death in their families of origin; unplanned, out-of-wedlock pregnancy and birth followed by unsatisfactory or stressful relationships with the father of

TABLE 1

Demographic Background of Subjects

<u>Subjects' Name</u>	<u>Age at Study</u>	<u>Age at Deliv.</u>	<u>Ch.'s Age (mos.)</u>	<u>Last Yr. Compl. in Sch.</u>	<u>Fa's Occup.</u>	<u>Mo's Occup.</u>	<u>Parent's Marital Status</u>
A: Terri	18:2	16:7	19	10th*	mechanic	secretary	div.
B: Sally	21:1	19:1	24	10th*	unknown	laundress	div.
C: Connie	19:5	18:2	15	11th*	truck driver	secretary	div.
D: Cindy	20:0	17:7	29	12th**	(deceased)	human serv.	div.
E: Kathy	20:11	18:6	29	12th**	oil rigger	secretary	div.
F: Lucy	17:6	15:8	22	9th	business manager	crafts assistant	div.
G: Tina	19:1	17:0	25	12th	mechanic	housekeeper in hospital	married
H: Melissa	20:1	18:9	16	12th**	unknown	homemaker	married
I: Dottie	20:5	18:4	25	10th*	janitor	homemaker	div.

*Enrolled in GED classes

**Attending Community College

their child and subsequent single parenthood; and reliance on AFDC as their primary source of income. All of the children are first-born, (with only two having younger siblings), born full-term, (with birth weights ranging from 5 lbs./10 oz. to over 8 lbs. and no complications at delivery), and characterized by a normal developmental history.

Instruments

The specific hypotheses which have been formulated for this study are based on Ego stage scores, measured by the Loevinger Scale of Ego Development (see Appendix A); developmental level of parenting, measured with the Newberger Parental Awareness Interview (see Appendix B), and the ratings of maternal and child behaviors as scored from a videotape of mother/child interaction in a play session (see Appendices C and D).

The Loevinger Sentence Completion Test contains 36 sentence stems which the subject is requested to complete in any way she wishes. Ego levels range from I-1 (presocial/symbiotic), which is the lowest level of ego functioning, to I-6, the highest level, at which the individual has achieved and integrated her sense of identity and autonomy, and reconciled inner conflicts (see Table 2).

TABLE 2

Stages of Ego Development

<u>Stage</u>	<u>Code</u>	<u>Description</u>
Presocial Symbiotic	I-1	
Impulsive	I-2	Poor impulse control, concern with bodily feelings, particularly sexual and aggressive
Self-protective	Delta	Wary, externalizes blame, concerned with advantage and control
	Delta/3	Transitional stage between Delta and I-3
Conformist	I-3	Conforms to external roles, concerned with appearance, feelings expressed as banal cliches
	I 3/4	Transitional level between I-3 and I-4
Conscientious	I-4	Evaluates self, has long-term goals and ideals, differentiates feelings, concerned with achievements, self-respect
Autonomous	I-5	I-4 qualities, plus higher integration of different causalities, more complex role conceptions, tolerance for ambiguity, respect for autonomy
Integrated	I-6	I-4 and I-5 qualities, plus reconciles inner conflicts, values individuality, has strong sense of own identity

(Adapted from Loevinger, 1970, Measuring Ego Development, Vol. 1. San Francisco: Jossey-Bass).

The Newberger Parental Awareness Interview is a semi-structured interview protocol. The first section probes the subject's attitudes regarding her own child-rearing practices, while the second section elicits her views of two hypothetical situations involving a mother and a child. Newberger (1984) conceptualizes four levels of parental awareness. At the first level, the parent sees the child's development either "as a product of the child's passive reaction to environmental forces... or biologically predetermined" (p. 173). The child's actions rather than his intentions define who the child is. The parent defines her role in terms of her own actions, and in terms of what works to reduce parental discomfort. At the second level, the child is seen as having an internal mental life, but is not yet seen as "influencing the environment" (p. 173). The parent's conception of intent is based on a generalized notion of what is "normal" according to the parent's tradition and values. The parent's understanding of her child derives from conventional concepts which the child either fits or doesn't fit, rather than from a sense of the child as a unique individual. The parent-child relationship is seen as a "two-way exchange of roles and the fulfilling of externally defined role responsibilities" (p. 174). The parent thinks, not in terms of what works, but rather what is the "right" thing to do, again based on a global

concept derived from the parent's own tradition. At the third level, the parent sees the child more as a unique individual, with the relationship as a mutual emotional one with shared feelings. The internal life of both mother and child are considered by the mother to play a part in parenting. At the fourth level of parental awareness, the child "is understood as a psychological self-system, where deeper levels of psychological experience are differentiated from more accessible levels" (p. 175), and growth and change over time in both parent and child are assumed to be part of the relationship.

The interview is scored on the basis of issues which emerge in the subject's answers: these issues include Influences on Development and Behavior; Subjectivity; Personality; Communication and Trust; Resolving Conflict; Discipline and Authority; Meeting Needs; and Learning and Evaluating Parenting. When an issue is defined as being expressed in a subject's answer, it is given a level score, or a major level score with a minor level score in parentheses; the latter seems most accurately and clearly to reflect the subject's parental awareness level and is the scoring expression used in this study.

Mother/child interaction was videotaped in a 40 minute session. The videotape was scored for six categories of maternal behavior and three for child behavior. Maternal behavior categories were: Involvement;

Availability; Warmth; Contingent Responsivity; Facilitation; and Support of Autonomy. The child categories were: Pleasure; Seeking/Maintaining Contact with Mother; and Use of Mother as a Resource. The tapes were scored on each dimension on a scale of one to seven, with scores being given at two minute segments for the duration of the tape. The final score for each dimension was the mean of the scores for all segments scored in that dimension. (Category definitions are described in more detail below: See Appendices C and D for scoring instructions.)

Procedures

The initial appointment was for the videotaping. Since none of the young women had her own transportation, I picked each mother and child up and drove them to and from the session. This provided an opportunity for both mother and child to become acquainted with me so that they would feel more at ease in the session.

A playroom was set up in an unused room in my home. The room was L-shaped, with the short leg of the L curtained off; the useable area of the room was approximately 14 by 20 feet. A large lounging chair was placed at one end of the room, next to which was a small dining-height table with snack food, juice, tissues, paper towels, and magazines. Play equipment included a "housekeeping" area (with toy stove, a table on which there were dishes and

two unopened cans of playdough, a doll with bottle and cardboard "crib," a telephone, a toy broom and dustpan), paints, crayons, puzzles, manipulative materials (such as Lego blocks,) a large riding firetruck, a toy lawnmower, small cars and trucks, a toy train, a toy horn, four or five children's books, and a bin with water and toys for water play. There was also a single-bed sized mattress covered with a bedspread, on which there were three puppets; one was a monster and the other two were Sesame Street puppets.

The mothers were told that the purpose of the videotape was to see "what children would do and how they would play in this kind of a playroom setting." Mothers were informed that the only limit I had was that the child could not go into the curtained-off area, but that "since mothers all have their own ideas about what children should and shouldn't do," they should feel free to act with the child just as they would in their own homes. I also stipulated that while I was doing the videotaping I could not converse with the mothers during the session as I had to concentrate. The taping was done with a Zenith Camcorder, in the room with mother and child. Every attempt was made to do the filming from one corner of the room in an unobtrusive manner, but on occasion it was necessary for me to move around the room to achieve certain shots.

Following the videotaping, the mother was asked to complete the Loevinger Ego Scale, while I supervised the child, (who was usually quite happy to continue playing with all the toys.) A second appointment was made for the interview: I arranged to come to the subject's house at a convenient time. The interview was tape recorded. Although I suggested that the interview be conducted when the child was at day care or a babysitter, this did not always occur, and some of the interviews were held while the child was in the room; this resulted in some interruptions but, since I had brought a toy as a present for the child, the new toy usually occupied the child for a major portion of the interview session.

At the end of the interview, the mother was paid \$20 and given a copy of the videotape.

Coding and Scoring the Data

As noted, the videotape was scored for six categories of maternal behavior and three for child behavior: Maternal Involvement; Availability; Warmth; Contingent Responsivity; Facilitation; and Support of Autonomy; Child Pleasure Affects; Seeking/Maintaining Contact with Mother; and Use of Mother as a Resource. The decision to use categories of this type was arrived at through discussion with Carolyn Edwards, Director of the dissertation. The specific categories used were derived from viewing of the

tapes; they were selected because they seemed to best characterize the salient features of the interactions.

I chose to score these dimensions on a rating scale of one to seven (rather than use frequency counts of specific behaviors) as this seemed a better way of measuring the quality of the affective transactions in the interaction. The use of a rating scale of this type is supported by Bakeman and Brown, who state:

...we think it may be more fruitful to think of characteristics of early interaction, like responsiveness, not as frequencies or sequences of particular acts but rather as a disposition which permeates all of the mother's and/or all of the baby's interactive behavior. And in that case, global rating scales, and not sequential recording of minute particular behaviors followed by various microanalyses, might be the method of choice (1980, p. 445).

This appeared to be the case in these videotapes, in which patterns of interaction were better captured by a global rating scale than by frequencies of behaviors.

I coded four of the tapes and four were scored by another coder. I trained the coder using tapes which had been made for pre-research trial sessions. Reliability was established by having the ninth tape scored by both coders and using the formula of $2x \text{ Agrees} \text{ over Total Agrees} + \text{ Total Disagrees}$. Two behavioral

categories (Ambiguity of Communication and Child Ignoring/Attending to Mother) failed to reach a level of .60 reliability and were eliminated from the data analysis; reliability levels of .90 were reached for all categories included in the data analysis except Seeking/Maintaining Contact, which reached .80, and Use of Mother as a Resource, which reached .85.

In order to avoid the halo effect (Kidder, 1981), a third coder scored the Parental Awareness interviews of the subjects whose videotapes I had coded, and I scored the interviews of the subjects whose videotapes had been scored by the second coder. (The interviews were transcribed from the audiotapes.) The interview coder had one training session with me and used Newberger's scoring manual for further reference. One of this coder's scored interviews was then scored by me; the same major/minor global level was arrived at by both coders.

Both coders had extensive background in early childhood education and were knowledgeable about both the stage of childhood being observed and parenting skills and issues.

In scoring the Loevinger Sentence Completion test, I used Loevinger's scoring manual. More than three-quarters of the subjects' answers were so stereotypical that they fit, almost word for word, the answers listed by Loevinger as "typical" of the particular ego level.

Very little judgment was necessary in determining these scores, making it unnecessary to have an outside coder do the scoring.

Analysis of the Data

Since the sample was too small for standard statistical analysis, the quantitative data were analysed for patterns which would be suggestive of relationships between scores on different measures, and, within the videotape scores, patterns suggestive of relationships between maternal and child behaviors. The videotape scores were graphed to look for clusters of scores, and to explore individual dyadic patterns as well as group trends. Comparisons were made between different aspects of the mothers' backgrounds, including age, education, and parental socioeconomic status, and their scores on the various measures.

Qualitative analysis included the use of responses in the Parental Awareness interview, the Loevinger Sentence Completion test, and notes made from the videotapes revealing bouts of interaction or behaviors which seemed to illuminate some aspect of the mother/child style of interaction.

Since this is an exploratory study, considerable emphasis is given to the analysis of the qualitative data. The quantitative data provide a framework for

looking at relationships among different aspects of the mothers' developmental status and their conceptions of parenting, and for clarifying interactive patterns observed in the videotapes. The qualitative data, on the other hand, permit a case analysis approach, which lends itself to more in-depth exploration of themes, issues and concerns which characterize individuals as well as the group as a whole. In keeping with the exploratory nature of this study, the findings are expected to generate questions for further research and to raise issues for clinical consideration and for program planning for this population.

Hypotheses

The following hypotheses were tested:

I. Maternal scores on the Loevinger Scale of Ego-Development will be within the lower half of the Stage levels, ranging from Stage I-2 (Impulsive) to Stage I-3 (Conformist).

In preliminary studies of this measure, Loevinger found "no increase in I-level between ages 20 and 50... [however, there were] consistent and appreciable increases in ego level during adolescence" (1970, p. 122). Although at the time of the study, five of my nine subjects were more than 20 years of age, I hypothesize that for all subjects, the early childbearing has limited

the range of social experiences and educational and vocational opportunities which might have promoted more optimal ego development, and that this will be reflected in low level scores. Loevinger does not give any statistics regarding average or modal level scores for large populations against which it would be possible to compare the scores of the subjects of this study; ego level scores in and of themselves, therefore, must be viewed as only one factor in a number of measures which contribute to a profile of the developmental status of the subjects, rather than an indication of the subjects' "normality" in their ego development.

II. Maternal scores on the Parental Awareness Measure will be either at Level 1 (Egoistic) or Level 2 (Conventional).

In keeping with the assumption that early child-bearing forces the adolescent into the "pseudomaturity" of a role for which she is not really developmentally equipped, it is predicted that her conception of the role will be at the lower levels of the developmental stages posited by Newberger.

III. Maternal scores on the Loevinger Scale of Ego Development will be predictive of their level of Parental Awareness.

A. Subjects who are at the Impulsive or Delta Ego stages will be at the Egoistic level of Parental Awareness.

B. Subjects who are at the Conformist stage of Ego Development will be at the Conventional level of Parental Awareness.

Subjects at the Impulsive level of Ego Development are described by Loevinger as the following: dependent; concerned about sexual and aggressive bodily feelings; lacking awareness of mutuality; perceiving people as "sources of supply" and affects as "bodily states or impulses rather than inner differentiated feelings" (1970, pp. 57-58); and coping with problems by avoidance, retaliatory fantasies, or seeking solace from others. At the Delta level, which follows the Impulsive, the subjects are hedonistic, wary, gratification-seeking, self-protective and manipulative, and tend to see others in terms of dichotomies of power. At the next level of Loevinger's scale, which she labels Conformist, the subject perceives people and events in terms of formulas which define what is or what should be. Behavior for the Conformist is rule-governed, and social "norms" are accepted unquestioningly and without personal evaluation. Subjects at this stage value social approval, are concerned with physical appearances, and describe interpersonal reaction in terms of behavior rather than feelings or traits. The Conformist level subject identifies people "in terms of superficial, often demographic characteristics" (Loevinger, 1970, p. 70).

The characteristics of the Impulsive and/or Delta stages of Ego development correspond to the parenting aspects of the Egoistic Parental Awareness level, and those of the Conformist stage of Ego development to the Conventional level of Parental Awareness. It is therefore predicted that the subject's level of Ego development will correspond to her score on the Parental Awareness interview.

IV. Maternal scores on both the Ego and Parental Awareness Measures will be related to the scores of maternal behavior in the videotaped play session.

Mothers whose levels of ego development are in the I-2 or Delta levels, and who are at the Egoistic level of parental awareness are expected to score in the lowest ranges of the following dimensions of maternal behavior: Facilitation, Support of the Child's Initiatives and Autonomy, Contingent Responsivity and Warmth. Facilitation is conceptualized as the mother's ability to support the child's exploration of the environment, of objects and of materials; her encouragement of problem-solving, and her capacity to let the child try things out at his/her own pace and level of interest. In brief, this dimension rates the mother's "teaching" style. A mother who is either overly directive, concerned with the "right way" to do things, or who offers no support or structure would be low in Facilitation. Support of the Child's Initiatives and Autonomy measures the mother's capacity to

allow the child to make choices, her ability to set necessary limits without being arbitrary or punitive, allow the child some degree of space and freedom to pursue his/her own interests, and have some initiative in controlling the "agenda" or direction of the interaction. Contingent Responsivity measures the mother's responses to the child's social and play initiations, her attentiveness to the child's needs and requests, her capacity to respond to non-verbal cues, and her apparent understanding of the meaning of the child's cues and needs. The dimension of Warmth includes the element of nurturance, and measures demonstration of affection, the degree to which the mother expresses pleasure which is directly related to what the child is doing, her timing and style of handling physical needs such as grooming or offering food, and her general affect (in a range from warm to neutral to cool and distant.) The dimensions of Involvement and Availability are based on the amount of time in any interval that the mother is directly involved with the child, or supervising the child either at a distance from the child or close to where the child is playing. The dimension of Involvement is not expected to be directly related to ego and parental awareness levels, but rather, is indirectly related since the mother may be heavily involved with the child, but in an intrusive or non-facilitative manner.

It is posited that mothers whose Ego and Parental Level scores characterized them as self-referential and unable to perceive the child as having an internal life (which includes intention as separate from actions) will have low scores in Facilitation, Support of Initiative, and Contingent Responsivity. A low score in Warmth and Nurturance is also hypothesized in the expectation that the interaction will be generally problematic, leading to some tensions and diminished positive affects in the mother.

Mothers at the Conformist ego level and the Conventional level of Parental Awareness are expected to score in the mid-to-mid-high ranges of the following dimensions of maternal behavior: Facilitation, Support of the Child's Initiatives and Autonomy, Contingent Responsivity, Availability and Warmth. It is posited that these mothers will be somewhat directive in their teaching styles with the children, and will tend to respond in a rather global way to the child's cues, actions, and so forth. But it is anticipated that they will be more consistently involved with and available to their children in a more constructive manner, will have a somewhat greater repertoire of behaviors and responses to the child's actions and will respond more contingently, with some acknowledgment of the child's intent as well as his actions. It is also

anticipated that they will demonstrate more warmth and nurturance toward the child as the interaction will be less problematic and more enjoyable for both.

V. Children whose mothers have low scores in Facilitation and Support of Autonomy are expected to have low scores in the dimension of Use of Mother as Resource.
Children whose mothers have low scores in Involvement and/or Availability are expected to have high scores in Seeks and Maintains Contact and low scores in Pleasure Affects.
Children whose mothers have high scores in Contingent Responsivity and/or Warmth are expected to have high scores in Pleasure Affects and lower scores in Seeking and Maintaining Contact.

If the mother is essentially supportive and responsive to the child, the child is expected to be more likely to turn to the mother for information, help, and cues as to how to behave (Use of Mother as Resource). If the mother is uninvolved and unavailable, the child would need to invest energy in assuring him/herself of the mother's availability (Seeks and Maintains Contact). The child's level of pleasure is expected to be related to the degree to which the mothers are responsive (Contingent Responsivity) and available.

Following Bell (1968), a number of studies have investigated the ways in which the child affects his caregiver. Mother/child interaction has increasingly

been seen as a two-way process, with microanalytic studies demonstrating the mutual cueing which occurs in the dyad. However, as Demos (1982) points out, there is a process of "socialization" of affect which takes place as the caregiver responds to, structures, and provides meaning to the child's affective behaviors. The finding by Emde and Sorce (1983) that in an ambiguous situation, toddlers "referenced" their mothers for cues as to how to behave, indicates that the mother is an important source for the child in interpreting the environment and the meaning of events in that environment.

It was assumed in using the dimensions listed above, and in defining them for scoring, that the mother's behaviors would "set the stage," so to speak, for the child's actions and behaviors in the play situation. Given the fact that the situation (a strange place, a researcher with a camera, and [deliberately] unclear limits) had elements of stress and ambiguity for the child, it seemed likely that the child would be more dependent on mother's cues, availability and support than in a more "naturalistic" setting such as his/her own home. Therefore, Hypothesis V is biased toward the child's behaviors as reactive to the mother's actions, rather than a truly two-way interactive process.

CHAPTER 5

RESULTS

The primary purpose of this study has been to investigate the relationships between the mother's stage of ego development, level of parental awareness, and mother/child interaction for a group of adolescent mothers and their toddler-aged children. It has been hypothesized that 1) all of the mothers would be at the lower stages of the scale of ego development and in the lower two levels of parental awareness; 2) that the stage of ego development of the mother would correspond to her level of parental awareness; 3) that the mother/child interactions of the mothers with the lowest scores on the above two measures would be indicative of less-than-adequate parenting, with the mothers having low scores in critical dimensions of interacting such as Facilitation, Support of the Child's Initiatives and Autonomy, Contingent Responsivity and Warmth. Mothers with higher ego and parental awareness levels were expected to have scores indicative of better parental functioning in these dimensions; and 4) the child's scores on the dimensions of Use of Mother as a Resource, Seeking and Maintaining Contact, and Pleasurable Affects were expected to relate to the mother's scores on the maternal dimensions.

In addition to the analysis of the hypotheses based on quantitative scores, it was hypothesized that developmental issues and themes of concern would emerge from the mothers' responses in the interview and from the content of their sentence completions in the Ego scale. Through descriptive and qualitative analysis of the data from these measures and the videotapes, a more in-depth, hypotheses-generating investigation of adolescent motherhood would be possible.

Hypotheses Outcomes

Outcomes for Hypothesis I

It was predicted that all of the mothers would score in the lower stages of Ego development.

All of the mothers scored at either the Delta/3 level or the I-3/4 stage on the Loevinger Scale, with one mother achieving an I-3/4 stage but with a borderline score at Delta/3.

Three mothers were at the Delta/3 level, which is the transition between Delta (Self-Protective, Manipulative) and I-3 (Conformist.) According to Loevinger, the Delta/3 subject is concerned with "concrete aspects of traditional sex roles" and "obedience and conformity to social norms [as] simple and absolute rules" (1983, p. 64). The subject at this level perceives emotions as "quasi-physiological, and is also concerned with cleanliness and

physical appearance. A fourth mother, who scored at the I 3/4 level (transitional between Conformist and I-4, Conscientious) was given a borderline score at the Delta/3 level in keeping with Loevinger's scoring system as she was just one response short of the number of responses which would have given her a Delta/3 score. The rest of the mothers scored at the I-3/4 stage.

The finding that five of the mothers scored at the I-3/4 stage was unexpected; this stage is considered transitional, with elements of the characteristics of the I-3 Conformist stage, but including aspects of Stage 4 (Conscientious), and was therefore a slightly higher stage level than had been predicted. The subject at Stage I-3/4 is described by Loevinger as better able to see "multiple possibilities and alternatives in situations," and more able to "think about..what is right for the time and the place and the situation" (1983, pp. 70-71), as opposed to the more global and simplistic views of the I-3 subject.

There was no relationship between the age of the mother, either at the time of the child's birth or her current age, and her score on the Loevinger Scale.

There was also no relationship between educational level or SES on the scores; for example, the subject with the highest level of education and a middle to upper middle class background scored at the Delta/3 stage,

whereas a mother who had dropped out of school in the tenth grade, who seemed to come from the most impoverished background and who, at the time of the study, was in the most dire straits in terms of living conditions had a score at the I-3/4 stage.

There was, however, a relationship between the age of the child and the mother's score, with the mothers of the three youngest children (15, 16 and 19 months) having the lowest scores (Delta/3), the mother of the next oldest child (22 months) having a higher score (at the I-3/4 stage) but with a borderline Delta/3 score, and the five mothers of children aged 24 to 29 months all having higher scores (at the I-3/4 stage).

Outcomes for Hypothesis II

It was predicted that the mothers would score in the lower two levels of Parental Awareness. Five mothers scored at 2(1), one mother at pure level 2, and three mothers at 1(2). The 2(1) score is given when the mean of the mother's scores on the separate issues included in the interview is between 1.50 and 1.74, placing her at the second (Conventional) level of Parental Awareness with "minor" level 1 (Egoistic); issue score means between 1.24 and 1.49 are scored as Major level 1 and Minor level 2, i.e., 1(2). The mother who scored a pure level 2 had an average issue score of 2.22. The range of

the mean of issue scores for mothers at the 2(1) level was 1.52 to 1.73. The means of the issue scores for the mothers at the 1(2) level were 1.40, 1.41 and 1.49. Given the small differences between average issue scores at 1(2) and the lower levels of 2(1), it would seem more accurate to say that within the range of parental awareness levels achieved, about half the group was functioning primarily at the Egoistic level but in transition to the Conventional level, and half the group was functioning primarily at the Conventional level, but with remnants of the Egoistic level still present. For the purposes of clarity in analysis, however, the Major(Minor) score expression as defined by Newberger shall be used.

The outcomes for this hypothesis were as predicted, with all mothers scoring within the first two levels of Parental Awareness. When the issue scores were computed separately for the two different sections of the interview protocol (personal experience and hypothetical situations), all but one of the mothers' scores on the hypothetical situations were higher than their scores on the questions having to do with their own children and child-rearing practices. The aspects of Egoistic thinking about childrearing were much more prominent in the questions about their own experiences, whereas the hypothetical situations evoked a higher level of response.

Outcomes for Hypothesis III

The prediction of this hypothesis, that the mother's stage of ego development would be associated with her level of Parental Awareness, was not borne out for the group as a whole. Only five mothers had Ego scores which corresponded with their Parental Awareness levels. Of these, four mothers were at the 2(1) level of Parental Awareness and at the I-3/4 stage of ego development, and one mother was at the 1(2) level of Parental Awareness with an Ego stage score of Delta/3. Of the other four mothers, two low-scoring (Delta/3) mothers were at the 2 or 2(1) Parental Awareness levels; one high-stage (I-3/4) mother was at the lower 1(2) Parental Awareness level, and the fourth mother, who was at the 2(1) level, had the I-3/4 borderline Delta/3 score on the Ego scale. (See Table 3.)

It appears that the two instruments may measure somewhat different aspects of the subject's development and psychosocial status; issues which are specific to parenting may evoke a different level of response than those in the Loevinger scale. It may also be that for some people, answering at length and having the opportunity to reflect and elaborate, as the mothers did in the interview, encourages the emergence of higher and more integrated levels of thinking than a sentence completion format, whereas for other people the reverse may hold true; answering at greater length may lead to more "free

TABLE 3

Subjects' Scores on Ego Scale and Parental Awareness Interview

<u>S</u>	<u>Ego Stage</u>	<u>Parental Awareness Level</u>	<u>Average Issue Score on Own Childrearing</u>	<u>Average Issue Score on Hypothetical Sect.</u>
A	Delta/3	1(2)	1.03	1.39
B	I 3/4	1(2)	1.60	1.30
C	Delta/3	2(1)	1.47	1.67
D	I 3/4	2(1)	1.38	1.89
E	I 3/4	2(1)	1.47	1.83
F	I 3/4 (Borderline Delta/3)	2(1)	1.05	1.98
G	I 3/4	2(1)	1.67	2.22
H	Delta/3	2	2.00	2.67
I	I 3/4	2(1)	1.17	2.40

association" thinking and result in the emergence of less integrated responses.

Outcomes for Hypothesis IV

Contrary to the prediction that there would be a relationship between the mothers' scores on both Ego and Parental Awareness measures and their scores in the videotaped play sessions, no pattern emerged of clear cut relationships. At one end, the subject who had scored at the Delta/3 Ego stage and at the 1(2) Parental Awareness also had the lowest scores in the dimensions of Contingent Responsivity and Facilitation. She was moderately available to her child in terms of supervising him in a general way, but her level of involvement was very low and consisted for the most part of cleaning up after him. When she did interact, she was only minimally attuned to the needs, cues and behaviors of the child. Another mother who had very low scores on Responsivity, Facilitation and Support of Autonomy was at Ego stage I-3/4, but was only at level 1(2) of the Parental Awareness measure. At the other end of the scale, the mother who had the highest scores on all dimensions of maternal behavior was at level 2(1) of the Parental Awareness (with the highest average issue score) and was at the Ego stage of I-3/4. One mother who had achieved a high average issue score in the Parental Awareness measure and

who was at Ego stage I-3/4 had low scores in Responsivity, Facilitation and Support of the Child's Initiatives and Autonomy. This mother, however, had the lowest score on the personal experience section of the Parental Awareness interview, indicating that there was a considerable gap between her cognitive understanding of parenting issues and her ability to apply this understanding to her own mothering. For the remainder of the mothers, however, the picture was very mixed and no clear cut relationships appeared to exist among the various measures.

In brief, although there were a number of problematic areas of maternal behavior in almost all of the interactions, they did not take the form of consistently low scores in all dimensions, and there were no correspondences for the group as a whole linking maternal behavioral scores with Ego and/or Parental Awareness scores.

Outcomes of Hypothesis V

Several interesting patterns emerged regarding the relationships between maternal scores and child scores on the dimensions measured. It appears that there are two "systems" at work in the mother/child interaction: a purely affective one involving maternal warmth and child pleasure, and a second system which involves affective "messages" of a more instrumental nature. This second system operates in the way the mother structures

the relationship and interprets the environment for the child. For all of the dyads, children's scores on Pleasurable Affects were very closely linked to the mothers' scores on Warmth and Nurturance, regardless of what the mothers' scores were on other dimensions. When mothers had low scores on Responsivity, Facilitation and Support of Autonomy but high scores in Warmth and Nuturance, the children had high scores in Pleasureable Affects. The reverse also held true: if a mother had higher scores on the above-mentioned dimensions but a lower score on Warmth and Nurturance, the child had a lower score in Pleasure Affects. (See Figure 1.)

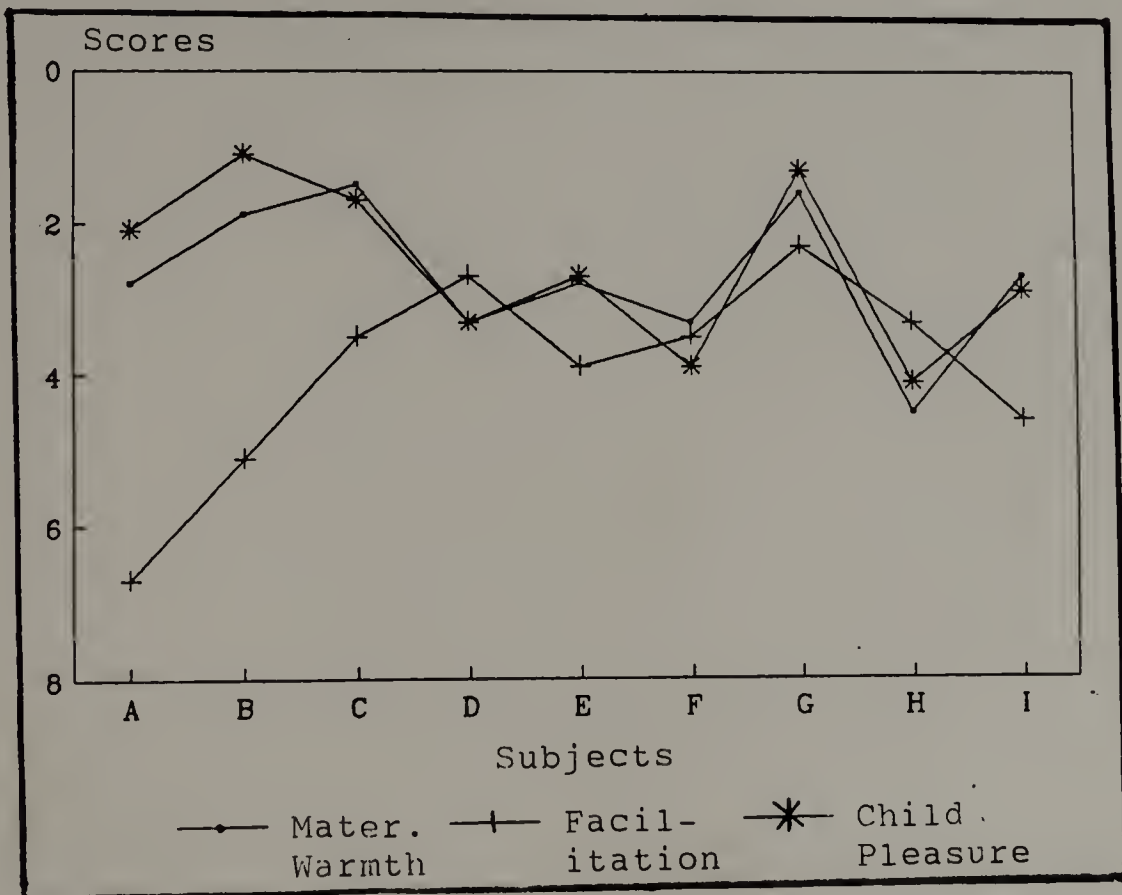


Fig. 1: Relationship between Maternal Warmth, Facilitation and Child Pleasure

It had been predicted that the child's score on Seeks and Maintains Contact would be related to the mother's level of involvement and availability, with children of less involved mothers needing to work at seeking proximity and/or assuring themselves of the mother's availability. This prediction was not borne out. The child's score in Seeking and Maintaining Contact did appear, however, to be somewhat more closely linked to the mother's score in Support of Autonomy. Mothers who were high in Support had children who were in the high-to-moderate range in Seeking and Maintaining Contact, and mothers who were low in Support of Autonomy had children who were very low in Seeking Contact, regardless of whether the mother was highly, moderately or minimally involved and available. It may be that the mother's capacity to acknowledge the child's preferences, to allow the child some space to take initiatives and to have some control over the direction and agenda of the interaction made possible a higher degree of mutuality such that the child would seek out, rather than avoid, the mother. In only one case, where the mother was supportive of the child's choices and initiatives but was also somewhat withdrawn and distant for much of the interaction did the child's contact-maintaining have an air of "work" about it. This child maintained contact with the mother (who was reading a magazine) by frequent

chatter, questions, and running commentary while she played by herself. The mother responded to her verbal output while continuing to read the magazine; this style of relating seemed very built in to the mother/child relationship, and appeared to be the child's way of ensuring some level of response from this essentially unavailable mother.

Children's scores in Use of Mother as a Resource were linked to maternal scores in Facilitation and Responsivity; the maternal scores in these two dimensions tended to be in the same range (high, moderate or low), and children's scores in Use of Mother were in the same range as the mothers'. (See Figure 2.) Since Use of Mother as a

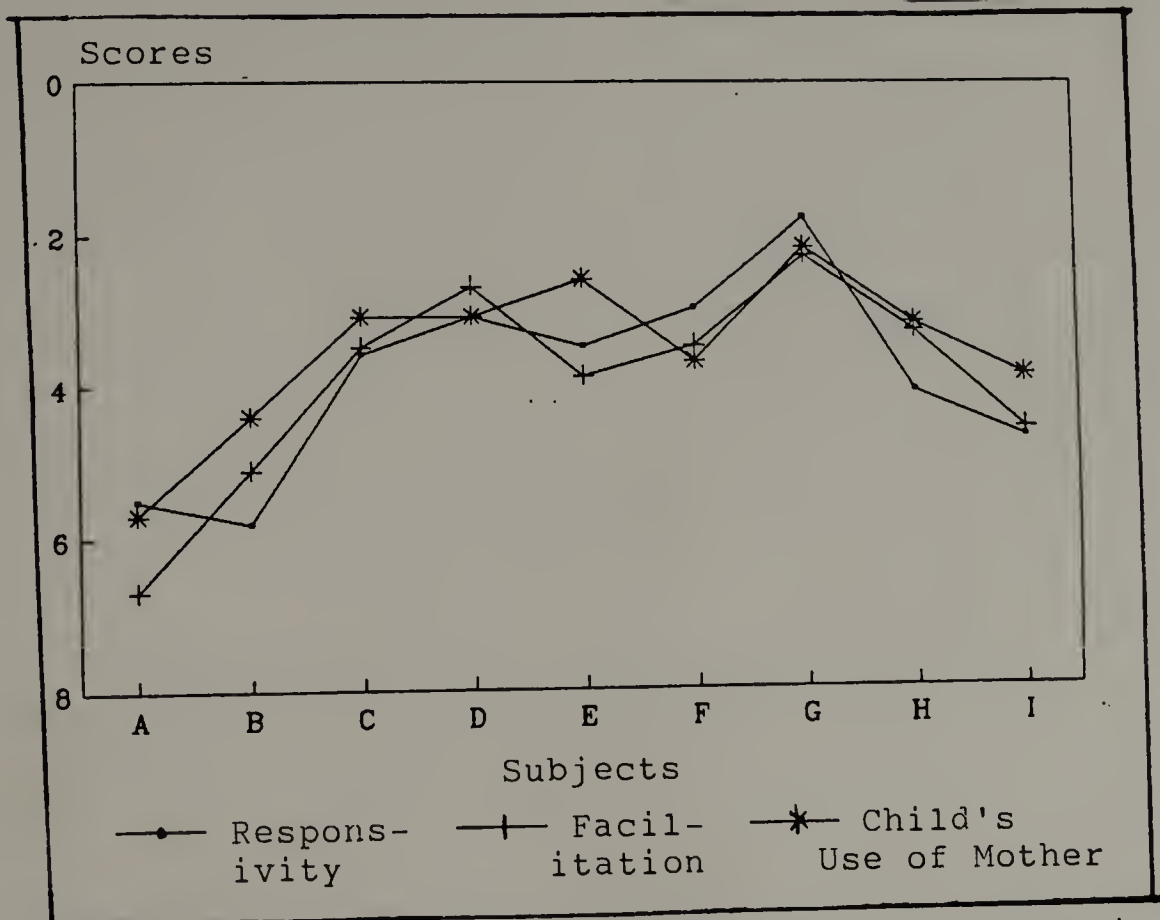


Fig. 2: Relationship between Maternal Responsivity, Facilitation and Child's Use of Mother as a Resource.

Resource measured the degree to which the child sought assistance appropriately from the mother, sought reassurance, information, attended to the mother when she was explaining something, and responded positively to suggestions, praise and/or encouragement on the mother's part, it appears that the mothers' facilitating and responsive behaviors did, as predicted, influence the child's use of the mother as a resource in this manner.

In sum, the outcomes as a whole indicate that there is no relationship between the mother's age, educational level, SES, or any other demographic factors and her scores on the Loevinger Ego Scale or the Parental Awareness Interview. There is, however, a relationship between the mother's stages of ego development and the age of their children, with the mothers of the youngest children being at lower levels of ego development than the mothers of the older children. Contrary to the prediction that none of the mothers would be above Ego stage I-3, five of the mothers did score at the transitional stage of I-3/4, indicating a slightly higher level of ego functioning than had been expected. There is also no one-to-one correspondence between the mothers' scores on the Parental Awareness Interview and their stages of ego development. As predicted, however, all mothers fell within the lower two levels of Parental Awareness. Relationships between maternal scores on

these two measures and their scores in the mother/child interaction were mixed, with the interactive scores of some mothers indicating a better level of maternal functioning than would have been predicted from their Ego and Parental Awareness scores, and others having a lower interactive level of functioning than would have been expected. Child scores corresponded to maternal scores in two separate domains; purely affective, involving maternal warmth and child pleasure, and instrumental/affective, involving the mother's role in teaching, socializing, and interpreting the meaning of event for the child.

It is important to point out here that, because of the small size of the sample, statistical analysis was not feasible, so that the outcomes for these hypotheses are based on observed patterns and correspondences between various scores. Particularly as regards the interaction, it should be noted that in some cases the mothers' scores tended to cluster within a fairly small range, so that making fine distinctions was difficult. However, there were enough instances where the mothers had high or high/moderate scores (e.g., 1 to 3.5) in one or two dimensions and low scores (e.g., 4.8 to 6.8) in others such that it was possible to ascertain where a high or low score given for the child's behaviors in a particular dimension corresponded with a high or low

score of maternal behaviors in another dimension. These correspondences or relationships should be regarded only as suggestive of patterns which characterize the interactive style of mother and child, and not as definitively significant findings.

Findings from Qualitative Data

The qualitative data were analyzed by grouping all subjects' responses to the Loevinger sentence stems and to the Parental Awareness interview according to topic, and examining the responses for similarities of themes, attitudes and concerns expressed in each topic area.

The following areas were found to be problematic and/or have developmental implications for most or all of the subjects: their relationships with their mothers; their relationships with their fathers and their attitudes about men; the transition to parenthood and issues in childrearing; a tendency toward fragmented perceptions of experience; and low sense of efficacy.

Areas of strength and higher level functioning were found in responses to sentence stems dealing with "self-as-woman," and in responses to the hypothetical section of the Parental Awareness interview protocol.

In keeping with the exploratory purposes of this study, I shall present these findings in some detail, using examples to demonstrate the ways in which these

issues were manifested in the data. In this section, Ego stage and Parental Awareness score differences among subjects will not be emphasized in interpreting and evaluating the material. Scores on these measures are computed to reflect the stage or level of thinking which is most prominent in the entire range of responses. All subjects, however, gave some responses at both lower and higher levels or stages than their total protocol scores. For example, in the sentence completion stems which dealt with the subject's relation to her mother, the same subject who had a stage score of I-3/4 for one of her responses might have an I-3 or lower score for another response in the same category. In examining the content, it is the affective tone, ambivalences, and attitudes expressed which are of primary interest, rather than the overall stage or level of thinking.

In the interest of letting the mothers speak in their own words, the responses to the Loevinger scale are reproduced exactly as written, and every attempt was made in transcribing the interviews to use punctuation and capitalization to capture as accurately as possible the inflections, rhythms and grammatical structure of the mothers' language. For clarity, easier reading and a less impersonal approach, mothers and children shall be referred to by name, but it should be noted that these are not their real names.

Psychosocial Issues in the Ego Scale and
the Parental Awareness Interviews

Subjects' Relationships with their own Mothers

A theme which appeared in responses both to the sentence completion test and the interview questions was the degree to which many of the mothers felt very ambivalent about their own mothers. Several of the sentence stems in the Ego measure dealt with mother/child relationships. Three were worded to mean clearly the subject's mother; If my mother---, My mother and I---, and When my mother spanked me, I---. Two others were worded in the third person; When she thought of her mother--- and Whenever she was with her mother, she---. Another sentence stem read A good mother---.

The ambivalence is evidenced in the seeming contradictions which appear when the responses of individual subjects to "mother" sentence completions are examined as a whole. One subject, for example, wrote:

If my mother was behind me more.

My mother and I are best friends.

When my mother spanked me, I cryed and huged her.

When she thought of her mother she thought how
good she raised her.

Whenever she was with her mother, she hangs
on her.

(Although in the latter two stems the use of the third person pronoun makes it difficult to tell whether a subject is thinking of herself as the "mother" or is associating it with her mother, this subject had a male child; thus it is more likely that she is thinking of "mother" as her own mother and "she" as herself.)

Themes of resentment, dependency and ambivalence characterize these responses. The subject, Terri, and her mother are "best friends" yet she wishes her mother was "behind her more." When spanked, she cries and hugs her mother. Her response to the stem When she thought of her mother was to comment on "how good" she raised her. yet when asked in the interview how someone knows if they are a good parent, Terri answered, "They never do. Your child turns out the way he wants to, or the way she wants to. You can't make them do what you want." She seems unable to make coherent meaning of the different aspects of her feelings for or perceptions of her mother; there is no concept of a time frame or element of comparison which would indicate that she sees her relationship with her mother as, for example, sometimes difficult but mostly positive (or vice versa). The contradictions and ambivalences exist as isolated, fragmented perceptions. Her ultimate view of parenting, expressed in the interview, is that the parent is helpless to affect the child in any way, that there is essentially no relationship

between anything the parent does and the outcome for the child. (Her behavior in the interaction demonstrated the same level of helplessness and inability to provide coherent meaning for her child; she sat back passively while the child scattered toys all over the room, tripped over things, and even stepped into the water bin, shoes and all.)

Some of the mothers expressed a combination of resentment, competitiveness and dependency on their mothers regarding help with childrearing. "My mother and I try to teach Karen (the child) as much as we can" was followed a few sentences later by "If my mother would stop telling me how to bring Karen up I think we'd get along better." "If my mother would sometimes mind her own business, and let me take care of Janey when we are in the store together," and "If my mother didn't live so close I might be able to say No to her more often," were responses of two other mothers. In the interview, another mother said, "...my mom [says], Don't hit your kids...give them what they want, what they need...and I sometimes do that. But I kind of also find myself hating that, getting them what they want when they want it. It spoils them...I'm trying to do things my own way."

Although all of the mothers listed themselves as the child's primary caretaker, it was apparent that many

of their mothers took an active role in rearing the child, or at least in giving childrearing advice and directions. One mother, Lucy, described her mother's role in helping her toilet train her son: "...toilet training him is the most impossible task in the world. Like I sit him up there and he says he wants to get down. I was talking to [my mother] on the phone and she says, when he's potty training, put pants on him and put him on the toilet every half hour, tell him five minutes. So I don't know what I'd do without her." Some of her responses to the sentence stems in the Loevinger scale elaborate on her need for support. When people are helpless "they should ask someone for support;" If my mother "ever gave up on me I would be lost her support helps a lot;" I feel sorry "for young mothers that decide to have a baby by an accidental pregnancy and not know how to take care of it." For this young woman, who is close to 18 years old, the age or stage-appropriate tasks of separating from her family of origin and testing her own identity and competencies in the larger world are, at best, being held in abeyance as her struggles to rear a child leave her feeling incompetent, helpless, and increasingly dependent on her mother.

It is important, however, to examine another dimension of this issue. This same mother, Lucy, is talking about her childhood and her own mothering (or lack of it):

"...my mother always loved us but she used to be an alcoholic, she's a recovered alcoholic now. It was hard because my parents got divorced when I was young, my mother was always drinking. We didn't have much. We knew she loved us, she just didn't have the time..."

Like several of the subjects' mothers, Lucy's mother seemed to be in better shape in her own life, and more available to her daughter now than she had been during the daughter's childhood. Although precise demographic data relating to this topic were not collected in this study, anecdotal information gleaned from the interviews, conversations with the mothers, and some of the background data supplied by the subjects do indicate that some of the subjects' mothers have in recent years recouped from the effects of alcoholism, drug abuse, or the trauma of divorce and/or desertion. Whether the timing of the daughter's pregnancy is related to this, and how, are questions for future research. However, material in both the interviews and the Loevinger scale suggests that 1) some adolescent mothers form what in their eyes is a better relationship with their mothers as a consequence of the pregnancy, and 2) some subjects' mothers are more available to their daughters at this stage in their lives than previously, and are quite invested in helping to rear their grandchildren. One subject's mother who had gone to live in another state returned when the daughter got

pregnant; grandmother, mother, child (and, intermittently, the adolescent mother's boyfriend) lived together in a one-bedroom apartment. Another subject who had moved out of her home because she didn't get along with her mother's new live-in boyfriend, moved back when she had her baby. Only one subject broke her ties with her family after having the baby; she stayed home until she finished high school and then moved to a town at some distance from her parents.

Although the availability of the grandmother varied among subjects, for those young women who are now more involved with their mothers, it may be that a formerly fragile mother/daughter relationship was strengthened through the grandmother's concern for and involvement with her grandchild. The sentence stem If my mother evoked negative responses from six of the subjects, but the same six subjects gave positive responses to My mother and I. Although as noted, this indicates some ambivalence in the relationships, the positive answers ("...are best friends; "...get along better than most girls my age") imply a level of companionship which, from anecdotal, interview and demographic material, may have been lacking in the childhood period of many of the young women.

While the birth of the child may have brought the grandmothers into their daughters' lives in a new way, coping with childrearing appeared to give the daughters

a greater appreciation of the difficulties of motherhood and enable them to see things from their mothers' point of view. One young mother put it very clearly: in response to the sentence stem When my mother spanked me, I-- she wrote, "got all mad and thought she was wrong but having a child of my own I know its not easy."

In the interview section which dealt with the hypothetical situation of a mother who wanted to return to work and the child who wanted her to stay home, one can see the young women struggle with whether their greater identification is with the mother's perspective and needs or the child's feelings. All of the subjects favored the mother's keeping her job; their reasons included statements such as "Because I know what it's like to need time away;" "Because she needs to satisfy her personal life;" and "The mother feels very tied down just sitting in the house all day." Interestingly, one mother, Terri, initially responded by saying, "If it was me, I'd quit the job." But in response to a later question as to what was more important, the daughter's happiness or the mother's, she said, "Her mother happier. Cause she's been in the house for ten years." But while the mothers were in favor of "Mrs. Stewart" keeping her job, their responses to questions about the daughter's feelings were quite poignant; "Her daughter probably sees it as she just wants to be away from her..she probably thinks

her mother doesn't want to be with her;" "Maybe she just wants her home to know what she's doing;" "[All her friends] talk about how they come home and their mother's there, and there's probably a snack on the table, and she's mainly going by what all the other kids have and what she had before her mother was working;" and "She feels that her mother doesn't want to be around her."

While a few of the mothers were able to think of compromises (mother can find a job while Susan is at school, etc.) most of them could only conceive of resolving the dilemma at the expense of Susan's wishes and needs; "She'll just have to put up with it;" "I would just still keep working and make Susan have to understand." The one-sided resolution of the conflict, and their inability to incorporate Susan's feelings into a solution may result from the combination of their own current status as mothers who feel tied down to their children and their early experiences as children whose mothers were unavailable; their rather wistful responses about Susan may be a projection of their own feelings regarding their mothers' unavailability but they, too, probably "just had to put up with it."

Thus, it is possible that motherhood has enabled these young women to develop a stronger identification with their mothers on the basis of their new perceptions

of, and identifications with, the maternal role. But on the other hand this may occur at the expense of their capacity to integrate childhood longings and needs into their identities such that they can be more empathic to their own children.

In summary, the adolescent mothers' relationships with their own mothers were characterized by ambivalence, dependency, and struggles for autonomy which often focused on issues around how the daughter was rearing her child. Their own experience as mothers had promoted an identification with the maternal role, and with that an increased appreciation for what their mothers had coped with in raising them, but they seemed unable to see both a mother's and a child's feelings as having equal legitimacy in the relationship.

Attitudes about Men

An examination of subjects' scores on individual sentence stems in the Loevinger scale (as opposed to total protocol scores), reveals that the lowest scores for the group as a whole were in the sentence stems relating to father and to men in general. Seven or more of the mothers' responses were rated in the lowest (1-3 or lower) ranges in these sentence stems.

In contrast to the several sentence stems in the Loevinger scale which referred directly to "mother,"

there was only one stem which dealt with the subject's father. The stem was also phrased quite neutrally, as My father-, unlike the "mother" stems which contained additional words more likely to evoke particular and differentiated responses. On the other hand, the very open-endedness of the "father" stem made it potentially evocative of a wider range of associations. What emerged in the answers of six of the subjects was the unavailability of the father; My father "left my mother when she was three months pregnant with me. He ended up marrying my aunt;" "[divorced my mother] when I was little so I didn't really have a father while I was growing up;" "never did much fun stuff. He usually kept to himself;" "works hard;" "was a person who never missed a day's work." The responses of two other mothers referred to their fathers' love for their grandchild, and one mother wrote, rather cryptically, My father "I loves me." There is no sense in most of these responses of a relationship between father and daughter. Any affective content is very muted, unlike the responses to the "mother" stems where, for example, some resentment was overtly expressed.

An inability to perceive men in more differentiated ways, or to regard relationships with men as having some potential for mutuality, permeates a number of other stem responses. Marriage appears to be a one-sided affair.

Answers to A wife should--include: "be independint;" "be able to go out while the father babysits;" "do whatever she wants to do;" "do the things that make her happy;" and "have some time for herself." Those responses which did refer to a wife in relation to her husband were global and stereotypical: A wife should "respect her husband in every way...;" "be able to keep her husband very happy;" and, more negatively, "not take a man's beating. She should be respected." Similarly, responses to When I am with a man-- were self referential, global, and indicative of an inability to see men as anything other than sources of gratification or fear. Negative associations to this stem included: "I am scared" and "I get nervuse sometimes." Positive responses referred to men as sources of enhanced self esteem: "I feel important and loved;" "I feel secure and wanted;" "I feel loved."

The view of men as objects who in turn see women as objects and take unfair advantage of them comes through in these responses: A woman's body "should never be invaded;" "is something men should never abuse (rape, etc.);" "should be respected of (sic) her wishes." Responses to Most men think that women-- included: "should stay home and have babies, cook, clean and wait on them;" "should keep the house clean and always have an answer to everything;" and "have it easy by raising a

child." Even more revealing were some of the responses to Men are lucky because--: "most women let the men walk all over them;" "they don't get pregnant and if there not ready they can just walk away without even thinking about it;" "they can get up and walk away from anything."

In brief, these mothers experience their fathers as having been distant and unavailable when they were growing up, and they view men in global, undifferentiated terms as, at best, making them feel good about themselves and, at worst, degrading them and taking advantage of their weaknesses. The possibility that one could develop a mutual, shared relationship with a man does not appear in any form in these responses.

Five of the mothers had considered marriage to their child's father but the father had refused. Three of them still had ongoing relationships with the father, characterized by fighting, breaking up, reconciling, fighting again, and so forth. One of these mothers, Connie had lived with the child's father for a while, but moved out because "when we were together with her father, we'd fight a lot and she was -- it just wasn't good for her to watch. So I just said no more of that." She still continued to see the father, however. A sixth mother said she had thought "once or twice" of marrying the child's father, but they drifted apart and she subsequently got pregnant a second time by a different man. The father of her second child

had lived with her for a while after the child's birth, and had been "helping with the kids," but he too drifted away and at the time of the study she was just seeing him "occasionally." One mother was living with her child's father at the time of the study; he had just reappeared on the scene after an absence of two years, during which (as I was later informed by the caseworker), he had been in prison. Two mothers had not considered marrying the child's father, and had minimal or no contact with him. The inability to conceptualize a mutually satisfying relationship with a man is paralleled by the inability to engage in one in the lives of these young women.

Transition to Parenthood and Childrearing Attitudes

Pregnancy, Childbirth and Preparation for Parenthood.

Many conflicting feelings were expressed by the subjects about becoming mothers. Three young women referred to childbirth in their sentence completions of the stem The worst thing about being a woman--; "is going through labor pains..in the long run its really worth it;" "is... being in labor;" and "is having to experience the pain at childbirth." Responses of a more positive nature appeared with the stem Women are lucky because--; "they can carry a child and feel all the joys of it;" "they can experience a child growing inside them;" "they can have the joy and wonderful sensation of carrying a child and

knowing that the child is yours and it brings so much joy and love into the world." In response to the stem The thing I like about myself--, five of the subjects referred to their children: "I've got two wonderful boys that I thought I could never handle but I've really learned and accomplished a lot;" "is...the way I raised my daughter." On the other hand, some of these same women completed the stem Sometimes she wished that-- with answers such as "she had never given birth for the stress was to much;" "she could do it all over again and not have any children;" and "she never got pregant and could start life all over." Similar in tone, although they did not refer directly to the child, were subjects who wished they "could go to Bermuda for a month" or that they had more freedom and fewer worries. Although often contradictory, their responses to the above stems had comparatively strong affective overtones and seemed to express genuine feelings. Their responses to A good mother-- and Raising a family--, however, were stereotypical and expressed external, socially approved norms; they were largely at the I-3 (conformist) scoring level. Good mothers should "give all the love" they can, be "patient, understanding and helpful," and show "love and understanding." "Fun and hard work," "has it's ups and downs," and "involves a lot of time" were typical responses about raising a family.

It seems that although the experience of childbirth was difficult for some of the subjects, by and large the pregnancy itself appears to have been a positive experience. Becoming a parent, however, is a different matter; in spite of the cliches about the "fun and hard work" involved in raising a family, expressions of ambivalence, and sometimes outright resentment, characterize other related stem responses. One subject wrote I feel sorry "for teenage girls who get pregnant and don't understand that they have to take care of that baby for the next 18 years." And another, who was quoted earlier, felt sorry for mothers who have babies "by an accidental pregnancy" and don't know how to take care of them.

The sense of parenthood as something which "happens" to you and which you then deal with as best you can comes through in the interview responses. Following are some of the answers to the question "How did you learn to be a parent?"

Sally: "The hard way. Well, neither one of them were planned. After I had Richie, it was like I just had to grow up overnight."

Terri: "Fast. Doing what I know, day by day."

Kathy: "Just doing -- day by day -- pick up on new things, or -- I don't know."

Cindy: "Just from having kids...It takes hard work, I guess...I don't know, it just does."

These and similar responses typified most of the mothers. Only two mothers mentioned preparing themselves in any way for motherhood; one mother said she read books on child rearing while pregnant, although once the baby was born she said "it went more by instinct and it worked out." Another mother read books, and also attended Lamaze classes which included talks on child development.

Fragmentation of Experience. Looking at all the above responses (to the Loevinger sentence stems and the interview question), they seem characterized by fragmentation of the different aspects of the experience. Conception, pregnancy, childbirth and motherhood are not seen as an integrated experience in which the mother made some choices and exercised some control over the outcome, but rather as a series of events which occurred, and to which the subjects then reacted with either pleasure or resentment, or by "growing up fast." Although the format of the Ego scale may lend itself to that sort of fragmentation of associations and ideas (particularly for young women for whom writing is difficult and who would not be likely to write lengthy answers), the interview responses give the same impression. When I asked Kathy how she learned the "new things" she had said she picked up on day by day, she said "I don't know. Something happens.

People say, don't do it that way, do it this way. My mother tells me. Or Janey's doctor." Another mother said, "I was in a parent group at [local agency]. Just by talking with the other mothers, I learned a lot about different ways of dealing with things. One mother might do something one way, another might do it another way, and you go home and try it out and you're surprised cause it works." Sometimes, the inability to make connections between actions and outcomes led to very illogical responses: when I asked one mother what she relied on to get her child to mind her, she replied that when the child said "No," she told her that it was a bad word and not to say it. "But," the mother added, "she does it anyway." I then asked her if she thought this method worked, to which she responded, "Yeah. It does work. She listens very good."

Like Terri, who felt that children turn out the way they want no matter what the parents do, these mothers do not have a very strong sense of their ability to control the direction of or effect their own lives and the lives of their children in any meaningful way. "Things happen" and you cope with them; something either "works" or doesn't work, but since you don't know why, you can neither repeat a success nor avoid repeating an error. The inability to make cause and effect connections on other than the most simplistic

level left many of the mothers dealing with childrearing, as they seem to have dealt with pregnancy, as a series of concrete and unconnected actions and events. The manner in which "dealing with life as it comes" is transmitted from one generation to the next is effectively expressed by Kathy who, when asked what a parent should be able to expect from a child, said, "When she [the child] gets older? That she should help me. And when I tell her No, not to ask why. Like I asked my mother all the time." When I asked if her mother answered when she asked "why," she said "No, not really." Given the same question as to what parents might expect from their children, Dottie replied, "Their cooperation. Yeah, a little cooperation, and trying to understand their parents, why they discipline them, that it's for their own good." Understanding one's parents' actions can occur only on the global level of knowing that they are doing it "for your own good."

Helplessness and Low Sense of Efficacy in Childrearing Attitudes. The low sense of efficacy implicit in the fragmented perceptions of experience was also demonstrated in attitudes about helplessness. Two sentence stems elicited responses related to meeting needs. The first, When people are helpless, is clearly phrased to elicit such a response. The other stem, I feel sorry, however

is more general, and could just as readily have evoked responses of remorse for past actions, (as, in fact, it did in two cases,) or regret for unfulfilled goals. It is noteworthy, then, that many mothers associated neediness and helplessness with the latter as well as the former stem. Taken together, responses to these two stems demonstrate a self-referential focus on unmet needs and a global, simplistic level of dealing with them. Examples of responses to these stems include:

When people are helpless "I feel sorry for them;" "I cry. I hate seeing somebody or even hearing about people who are helpless;" "I want to do everything for them."

I feel sorry "for many people;" "for starving people;" "for people who are not as fortunate as I am." (This latter response was given by the mother who lived in a shelter for the homeless with her two children.) The responses of two subjects did express regret for past actions, (specifically, having gotten pregnant) and one mother was sorry she didn't have her own home.

Six subjects responded to When people are helpless with an expression of their own feelings: "I feel such and such." Three responses focused on what "they," the helpless people, might do, with two of these three responses being at a global and undifferentiated level of thinking (e.g., they should "ask for help.") None of the responses included the possibility of the respondent

taking action to alleviate the situation by clarifying the nature of the helplessness and finding solutions. This is reminiscent of the working mother dilemma in the Parental Awareness interview, where the mothers could express what they assumed were the daughter's feelings of sadness and loneliness, but were unable to see any solution to the problem which would address those feelings. In the Ego scale responses, they can only respond to helplessness by expressing their own feelings of sadness and helplessness. This is congruent with the findings of McLaughlin and Micklin that early timing of a first birth reduced feelings of personal efficacy in the mothers. These researchers posit that "adolescent motherhood prematurely forecloses the process of identity formation, resulting in an ego structure characterized by the feeling that one's destiny is controlled by forces and events external to the self" (1983, p. 48). Implicit in these mothers' responses is an identification with feelings of helplessness and a sense of powerlessness to effect change in that status.

A lowered sense of personal efficacy has implications regarding the mothers' capacity to perceive accurately their children's needs and to respond efficaciously and appropriately to these needs. Their answers to the interview question "What do you feel children need most from their parents?" were quite global, with six mothers

answering that children needed love, understanding, attention, discipline, or some combination of these terms. When probed to elaborate on these answers, responses included "I just think that every child needs that. In order to develop, in order to learn, you teach them and do things with them...so they won't feel so lonely in their life;" "If you're gonna sit there and ignore them, it's just...I don't know...I mean, I tell her I love her all the time when she's doing something good... and when she's doing something wrong I'll tell her she's a bad girl..;" "[Children need love because if] you don't have love, you don't survive;" and, "...so they know that there is someone there that cares about them, so they don't have to feel left out, or whatever."

Underlying these responses is a sense that the best a mother can do is love her child and by so doing, mitigate the child's loneliness. Only one mother responded to this question with a more differentiated perception of a child's needs, a somewhat less global concept of how a mother might meet those needs, and some intimation that she perceived herself as able to have an effect on the child when she took action. While it is true that the mothers' lack of sophisticated verbal skills may account to some extent for their cliché responses, their views on the hypothetical situations were expressed in more complex terms and evinced a higher level of articulation,

which suggests that they were capable of thinking in less global ways when their own feelings were not involved. Their problems in recognizing and responding differentially to a child's needs were also evident in their scores in Contingent Responsivity in mother/child interaction: on a scale of one (high) to seven (low), three mothers scored at 4.7 or lower, three in the range of 3.1 to 4.1, and only one mother had a score (1.8) in the high range. The usual assumption is that adolescent mothers are poor at recognizing the child's affective expressions and behavioral cues, but perhaps the lack of responsivity is also related to the mothers' low sense of efficacy and their underlying (probably unconscious) feelings of helplessness in the face of anything other than concrete physical needs.

Issues of Control in Childrearing Attitudes. The mothers seemed to feel that they could control outcomes only by disciplining the child properly or by meeting stereotypical role expectations as best they could. In response to the question "How does someone know if they're a good parent," Cindy said, "I don't let them run around in their pajamas all day, I don't let them go outside by themselves, I don't send them off to the store at this age, like so many people I know do..Actually, I think I'm a good parent." And Sally commented, "A lot of parents

that let their kids get away with stuff..as they get older they think it's still okay to keep doing it because they did it when they were younger. So it's basically from the time when they're a year old, you have to tell them no."

The need to control one's child was perceived as the major task of childrearing, and the child who listened and obeyed was seen as a good child. Mothers wanted their children to "understand who's boss," "not be a little brat," "when I tell her to do something, not to go against me," and "to listen when they [parents] tell them to do something." Most of the mothers had rather limited repertoires for disciplining their children, using yelling, spanking, ignoring or locking child in his room as ways to get children to behave as the mothers wanted them to.

Newberger (1984) aptly characterized this attitude toward childrearing as needing to control what is seen as "the natural anarchy of the child" (p. 184). Given the mothers' concerns with (and occasional regrets about) their own impulsive behavior, it is not surprising that they should see their own children as needing so much control. Throughout many of the interview responses and some of the Loevinger sentence stems, answers reflecting problems around impulse and impulse control were prominent. When they talked about sex, I "should have listened and understood before I did it;" If I can't get what I want "I think about stealing it;" What gets me

into trouble is "opening my big mouth sometimes;" and "when I start thinking about my sons father and I get so frustrated I go to his house and usually end up in a fight;" and A woman should always "carry herself well and not sleep around keep a good reputation;" are examples of stem responses in which the subjects' struggles with sexual and aggressive impulses emerged. In the interviews, one mother said she didn't know whether she would ever tell her children that she had dropped out of school, because then they would "think they could do it because mom did." Another was afraid that if she smoked pot in front of her son, he would think that he could smoke pot also. Control of the child, which was conceptualized primarily as disciplining and saying "no," was seen as the best way to keep the child from acquiring "bad" ways.

Capacities for Higher Level Thinking

Some responses on the Loevinger Scale and in the interviews demonstrated that for most mothers, there were areas of strength in ego development, and capacities for higher level thinking about parenting.

The finding that five subjects were at the I-3/4 transitional level between the predicted Conformist (I-3) stage and the higher I-4 (Conscientious) stage, (with a sixth subject having I-3/4 as a borderline score) indicates that there are areas of ego functioning which, for

the majority of the group, were congruent with what would be expected developmentally for older or post-adolescents. The I-4 subject's capacities to think about long-term goals, express more highly differentiated feelings, to be concerned about mutuality and communication, and to assume responsibility for the consequences of her actions are partially present or emergent in the I-3/4 subject. This suggests that these mothers have at least begun to move beyond the "personal fable," the concrete level of cognitive thinking, and the limited awareness of long-term consequences which are typical of the younger adolescent.

A more detailed analysis pinpoints more specifically those areas in which functioning was higher. An examination of the distribution of the stage scores assigned to individual sentence stems shows that the highest group scores were attained in stems eliciting associations related to sexuality, gender identity and maternal role. In each of the following stems, seven or more of the mothers scored at the I-3/4 level or higher: When she thought of her mother---; A woman's body---; Usually she felt that sex---; For a woman a career is---; and A woman should always---. Some of the responses to these stems included:

A woman's body "is precious and they should be careful who or what touches it;" "is a miracle when it comes to devolping a child."

When she thought of her mother "she was filled with hatred. Her mother tried to get her to put her baby up for adoption;" "she wishes she could go back in time and take back all the bad things that were said and done."

Usually she felt that sex "was something dirty until she learned more about it;" "was something teenagers didn't know to much about."

For a woman a career is "something she has to earn by working very hard;" "an interesting challenge if a woman wants one."

A woman should always "be clean, neat, and keep her head right up there. Every body is equal, women included!;" "be herself know matter what other people thing."

These responses demonstrate a higher level of thinking, with less global, more finely differentiated feelings, more complex concepts of cause and effect, awareness of the relationship between past, present and future, and a more intact, less fragmented sense of self. It seems that one area of ego strength is in the area of self-as-woman. Without available data on ego functioning prior to pregnancy, it is impossible to say whether or not the concentration of higher ego level scores in this area is suggestive of a positive effect of childbearing for these young women. However, it is interesting that in spite of ambivalences about their relationships with their own mothers and about having had a child, a large majority

of the mothers demonstrated their highest levels of ego development in an area which touches on their experience of sexuality and womanhood.

Although many of the responses in the interview centered on issues of control or stereotypical role conceptions, there were occasional answers which revealed the potential for both higher level thinking about parenting, as well as a greater capacity for seeing the child as something other than a bundle of impulses needing control:

Tina: "Being young and becoming a parent, you learn a lot more -- you're growing up with your child...If you have a child, you want the child to have better things than you did."

Sally: "I don't know if [I am a good parent] or not, but watching my kids...the way they like to play with me, they laugh and stuff, they -- I can play with them and they'll smile and laugh and they're not all cranky. They are good natured and affectionate...they are loved."

Connie: "I wonder if I'm doing right for Karen.. I think about that a lot, if I'm doing the right thing for her."

Lucy: "He always comes first in my life. I could never do anything to hurt him. It's those things that make you feel like you're a good parent."

These responses demonstrate a more integrated level of thinking in which affects, traits and concerns exist as internal states which are stable over time, as opposed to concrete responses to immediate events, and suggest that all of the mothers have some strengths in ego functioning and in parenting potential which could enable them to function better in their actual parenting if they were given some support in this area.

In the next section I shall deal with patterns of mother/child interaction manifested in the videotapes, which, like the material discussed above, indicate areas of strength and weakness in maternal functioning.

Patterns of Interaction in Videotaped Play Sessions

Different maternal styles, age differences among the children, and the openness of a setting which offered many options for both maternal and child behavior are all factors which resulted in considerable variation in the dyadic interactions. However, certain patterns emerged which typified the interactive style of sub-groups, or in some cases, the whole group. These patterns illuminate the affective context in which maternal behaviors occurred, as well as their impact on the child. In many cases, maternal behaviors in these interactive patterns reflected issues which had emerged in their responses to the Parental Awareness measure and the Ego Scale.

The patterns which occurred in some or all of the interactions included: mother as "playmate;" mother as teacher, and unavailable mother. Each of these shall be discussed separately in the following sections, with examples from those interactions in which each pattern was most prominent. An example will also be given of interaction from the videotape of the mother whose scores indicated that her parental functioning was more than adequate in all dimensions.

Mother as Playmate

This pattern was particularly characteristic of three of the interactions, and appeared intermittently in all of them. Maternal behaviors in this mode of interacting ranged from parallel play to the "bossy big sister" playing with a younger sibling, (I am indebted to Jon Ploof, who coded half of the interactions, for the "bossy big sister" characterization).

Mothers who related to their children as playmates tended to play with the child at the child's level, rather than as an adult whose participation is in response to the child's wishes, initiatives and ideas. This occurred particularly in the "house" play and sometimes at the water bin, both of which were areas that did not lend themselves to "teaching" a child how to do a

specific activity. When mothers could not assume a clear "teacher" role, they played with the child as an equal partner, using the materials in the same way the child did and at times competing over ideas and materials.

A striking example of this was the interaction between Sally and her two-year-old son Richie. Although it appeared on the surface to be that of the "bossy big sister" type, upon closer examination it appeared that Sally was behaving more like a same-age sibling.

Sally and Richie are using the play dough. Sally keeps up a running commentary to Richie as to what he should do: make the cookies, put them in the stove, don't burn them, answer the telephone, baby's crying, go feed the baby. These directives are delivered at a pace which, for a while, literally keeps Richie running from stove to baby to phone and back to stove. After a few minutes, however, Sally becomes very involved in using the play dough herself. She discovers that she can make "noodles" by pushing the dough through the holes in a strainer. For almost two minutes of the videotape, she is completely absorbed in this activity. Suddenly remembering Richie (who is enjoying a few minutes of doing what he wants to do), she says that she is making him some noodles, and goes back to her activity with the strainer. Finally, she puts some "noodles" on his plate. On several occasions during the session, Sally takes various objects

away from Richie, presumably in order to show him how to do something. In slow motion on videotape, one can see that she is literally grabbing the objects from him. At the water table, for example, as he tries to put various objects into the bin, she takes each thing out of his hand, saying "Do it like this," and, while ostensibly showing him how to do it, again becomes absorbed herself in the activity. Richie finds a few remaining objects and plays parallel to her in the water bin. Later, Richie brings her the doctor's kit; as she takes each object out of it, she says, "Look at this, what's this one?" When he reaches for the object, she pulls it away or clutches it.

It is interesting to see, however, the extent to which her intrusiveness is counteracted by her warmth and her sense of playfulness. Richie tends increasingly to ignore his mother, finding ways of doing what he wants, and taking advantage of her own absorption in playing to explore materials and activities on his own. Although she is very directive, and quite out of tune with any of his behavioral cues or expressions of preference, she is related to his underlying affect of enjoyment, and is herself enjoying the chance to play with so many different things. The warmth and playfulness help to mitigate the impact of her own neediness and competitiveness, and her bossiness.

During the interview, Sally in several responses refers to her playmate relationship with her child as a source

of gratification to her: "I can play with them and they'll smile and laugh and stuff...[I enjoy it when] Richie, if you laugh at him for doing something well, thinks it's funny so he'll start doing something crazy."

What is problematic in this pattern, however, is the fact that in relating to her child as a peer, Sally is competing with him for toys, attention, and achievement. She often seemed to need to show that she could do something "better" than he could. At times when he wandered off, she would rather insistently demand that he focus his attention on what she was doing, like a child telling her friend to come back and play with her.

This latter "playmate" characteristic appeared frequently in the interaction between Connie and her daughter Karen. Connie did follow Karen's initiative at times in terms of choice of activity, but once involved Connie would be quite directive and often have inappropriate expectations for what Karen, who was only 15 months old, could do. Karen would then lose interest and walk away, at which point Connie would say, quite wistfully, "Don't you want to play anymore?" with the affect of a playmate who has been rejected.

Other mothers in playing with their children interacted as if they were the older sister who would play with the younger sibling on condition that the younger

playmate would "do it my way." One mother, Melissa, actually said to her child at one point, "If you're not nice, I won't play with you anymore."

The following is a description of a segment of interaction between Dottie and her two-year-old daughter Angela, which illustrates the "older sibling" playmate pattern.

Mother and child are at the "kitchen table" in the housekeeping area. Mother has just opened a can of play-dough and begins shaping it. "Okay, we gotta roll it." Angela is watching. Dottie hands the shaped dough back to Dottie. Dottie says, "Wanna try it?" She pokes Angela dough back, and begins rolling it. Dottie watches for a few seconds, then says, "I love you." She pokes Angela and says again, somewhat more loudly, "I love you." Angela ignores her. She raises her voice slightly and says "Angela? Angela! Angela, I love you." Angela says, "I'm cookin'." Dottie: "Oh, you're cooking? I love you." This declaration of love does not seem to have any relation to anything the child has done, or anything which has occurred mutually between mother and child in the preceding several seconds. Dottie's underlying affect is more insistent and demanding than warm; it appears to be a bid for the child's attention, which has shifted away from her mother to her own activity. (When, later in the session, Angela "talked back" to her mother, Dottie poked

her and said, laughing, "Hey, don't be fresh!" Angela's response to this much more genuine expression of warm affect was to brighten visibly with delight; it was interesting to note the difference between her response there and her ignoring of her mother's previous "I love you.") Later in the interaction, Angela wants to color. Dottie takes the coloring book from the table and looks through it: "I like this picture. How about I'll color this one, and you can color that one [pointing to the picture on the other half of the page.] You gotta help, though." Angela gives her mother a brief look and wanders away. Dottie says, "Hey, you gotta help me, Angela." Angela, who is now back in the housekeeping area, says (again), "I'm cookin'".

The child's responses to her mother's style of interacting suggest that she is not unaccustomed to dealing with it. She is quite adept at providing just enough gratifying feedback to her mother to minimize the intrusiveness and maintain some space for herself. At one point, when Dottie tells her to mow the lawn and she wants to continue "cooking," she puts some play dough on a plate and puts the plate on top of the lawn mower, a clever compromise between her wishes and her mother's attempt to refocus her attention elsewhere.

The role of "big sister" who acts as a play companion for the child, but only on her own terms, appeared in

varying degrees in many of the other interactions. Two of the mothers, however, did participate in playing with their children in a more appropriately companionable and facilitative way; Tina, for instance, when her two-year-old son Jimmy was playing with a train, provided some impetus for him to elaborate on his fantasy by giving him little toy people to put in the train. She helped him when he had trouble hooking the cars together, and showed him how to pull the train. But the choice and the initiative was his, and her involvement was to provide support and to extend his play rather than to set the terms or compete with him. Kathy, playing with 29-month-old Janey, also provided similar support and companionship; she sat at the "kitchen table" in the housekeeping area and rolled play dough, while Janey did the same, but interacted by labelling, answering questions, supporting Janey's actions and choices, and making suggestions which extended Janey's ideas.

In summary, a frequent pattern, particularly in "pretend" play interaction, was for the mothers to relate to the child in these situations as peers; competitiveness, control of the fantasy, disappointment when the child wouldn't play what the mother wanted to play, and imposition of the mothers' ideas rather than elaboration of the child's were typical of this pattern. Their re-

gression to a peer/sibling role and their need to control the content of the play and the expression of affect suggests that unstructured activities which lent themselves to fantasy, and in particular "family" fantasy play such as would be elicited in a housekeeping area, evoked affective content for the mothers which was of a regressive nature.

It is important to note that the level of directiveness, control and intrusiveness observed in some of the pretend play situations was also present in other situations in the interactions. But the competitiveness, "parallel play," and role playing dialogues which created the impression of an interaction between peer or siblings rather than mother and child were not in as much evidence at those times when the focus was on objects. When using toys or objects which required manipulation or problem-solving (such as puzzles, etc.), rather than "role-playing," the mothers' directiveness was in the service of "teaching" the child. There was a concrete task to be achieved, and (in the mothers' eyes, at any rate) a "right" way to use the object. In this situation the mother's status as the expert adult authority was implicit, and the situation did not evoke behaviors or affects related to family life.

Mother as Teacher

Although not all mothers engaged in pretend play or unstructured activities with their children, all of them spent at least some of the session doing a more goal-oriented or problem-solving activity such as a puzzle or manipulative toy. Some mothers were quite supportive, encouraging and facilitating while others tended to focus heavily on the "right" way to do something, giving little opportunity for the child to try something out or explore different options. Many of the mothers asked predominantly test questions -- questions having only one possible right answer -- and either answered the questions themselves or corrected the child's answer. There was an emphasis on "performance" rather than on process; on several occasions, when a child attempted a task that was beyond the child's capability, the mother would either do it for the child, or remove the toy, saying "This is too hard for you." The mothers who did this seemed to have little sense of how they might help the child master the task. When Angela was playing ball, for example, Dottie told her several times not to throw the ball so hard. But as Angela had neither the coordination nor the control to modify her throwing, she could not comply with her mother's request. As she continued to throw the ball, Dottie said, "I guess you don't know how to play with balls. I'm going to put this somewhere else." She then placed the ball out of the

child's reach. An alternative such as sitting down with Angela and showing her how to roll the ball apparently did not occur to Dottie. Using a toy which involved putting sticker figures of Sesame Street characters in various places on a Sesame Street board, Kathy "showed" Janey how to do it by putting all the stickers on the board herself; Janey lost interest and wandered off, leaving Kathy to complete the task. At other times, the mother's expectations were inappropriate. Connie, painting with 15-month-old Karen, tried to get her to make lines on the paper by putting her own hand over the child's and pushing it along the paper. Karen, who had been enjoying the painting until her mother intervened to teach her how to "do it better," dropped the brush and left to do something else.

Maternal intrusiveness extended beyond interactions around helping the child do a specific activity with an object. Many of the mothers often directed or redirected the child's attention away from what the child was interested in, and onto an object which the mother had chosen. I believe that this was, in part, because the mothers had been told that I was interested in videotaping their children to "see how children played" and they were anxiously making sure that their children played with a lot of things and performed well. However, much of the time it also appeared that it was related to the mother's boredom and her own short attention span. One

mother who had, in fact, spent quite a bit of time interacting in a fairly facilitative manner helping her child use a rather complicated toy pointedly ignored the child's continued interest in the toy for the rest of the session. Since this pattern persisted even after the child had played with a number of other things before returning to what had obviously most intrigued her, it would seem that the mother was simply tired of that toy and determined not to get involved with it again.

Many mothers, however, were at least occasionally facilitative with their children. Although they could not always sustain this level of functioning for prolonged periods, (either withdrawing from interaction or reverting to a more controlling and directive mode of interacting), the fact that they could relate differently some of the time suggests that the capacity is there. All but one of the children were in day care for anywhere from 8 to 40 hours a week, and it is possible that the mothers modelled some of their more facilitative teaching behaviors after the day care teachers. (Two of the day care programs being used by the mothers made provision for the mothers to spend some time at the center observing and/or interacting with the child, as a way of enhancing childcare skills.)

Three of the mothers were rated as high in facilitative behaviors; these mothers tended to give praise,

encouragement, offer suggestions, and gear their level of explanations to the child's level of understanding. These mothers also permitted the child to try things out, make mistakes, and for the most part to choose his/her own activities. Although asking frequent test questions was also characteristic of the facilitating mothers, they tended to wait for the child to answer, and to intersperse open-ended questions occasionally among the test questions.

The "teaching" role seemed to be one that many of the mothers felt secure in. It enabled them to do something specific for and with their children, and provided them with the gratification of seeing the child accomplish something concrete. All of the mothers praised the children when they succeeded at a difficult task, and demonstrated genuine pride in performance even when they were unattuned to the process.

As noted earlier, children whose mothers were more facilitative and/or contingently responsive used their mothers as resources more frequently, bringing objects to the mothers for assistance, asking questions, prolonging their interest and persevering in response to the mothers' praise and encouragement, and attending to the mothers' explanations and demonstrations. In those interactions where the mothers were very low in their capacity to facilitate the child's exploration and learning, the impact

on the children was quite negative. Like Karen in the example given above, they often wandered away while the mother was attempting to engage them, or ignored the mother, or stood by passively while the mother did the task for them. One would imagine that these children, if exposed to too much of this kind of intrusiveness and directiveness from the mothers, would have difficulties in school attending to and "taking in" information from other adults. Although often the child exhibited considerable creativity in pursuing his or her own agenda in spite of maternal intrusiveness, this could be done only by disregarding the mother's input, either overtly or covertly.

The mothers' intrusiveness in changing the child's focus by continually and persistently directing the child to objects or areas of the mothers' choice rather than responding to the child's expressions of preference had the quality of fragmenting the child's experience of the environment. In some mother/child pairs, there was a fair amount of dysynchrony between the child's initiative and the mother's response; the child's focus of engagement and the mother's focus of attention; and the child's interest and the mother's level of investment.

Given that maternal interpretation of and response to the child's actions contained so little regard for the child's perceptions, affects, and initiatives, it is

probable that over time, these children absorb the affective "message" that the ways in which they act on the environment and the affects which motivate them to act in those particular ways have no coherent internal validity, and no legitimacy in the context of a relationship with another person.

In summary, many of the mothers were frequently directive and intrusive in their "teaching" style. However, there were varying degrees of intrusiveness in each dyad, with even the most intrusive mothers revealing some capacity for relating to the child in a more facilitative and supportive way. Three mothers were rated highly in facilitation, and demonstrated adequate to more-than-adequate skills in helping their children function optimally in their use, exploration and mastery of both specific objects and in the environment in general. A fourth mother was high in facilitation when she was involved in using an object with the child, but as shall be discussed in the following section, when she was not actually engaged with him in this manner she was withdrawn and unavailable.

Unavailable Mothers

While four of the mothers were quite highly involved with and available to their children, five mothers were

either uninvolved and/or unavailable to their children for large parts of the interaction. For each mother, the type and pattern of unavailability was somewhat different; thus each case will be discussed separately.

Terri was largely uninvolved; she was available only on the level of "watching from a distance." (See Appendix C for scoring instructions.) When 19-month-old Kevin entered the room, he immediately went to the paints and spilled a jar; Terri spent the first several minutes of the session running after Kevin and cleaning him up, cleaning the table, and putting the paints away. She then sat in the lounge chair and lit a cigarette. Aside from cleaning up after Kevin on a few other occasions, and changing his diaper once, she remained uninvolved until the last six or seven minutes of the session, when she offered Kevin some cookies and juice and interacted with him around helping him hold the cup, etc. Kevin meanwhile spilled boxes of blocks, scattered puzzle pieces on the floor, ran around the room, and in general wreaked havoc. After a while he found the water bin, which commanded his attention for several minutes; after using the cup to scoop up water and drink it, he stepped into the bin and sat down. At this point I became concerned that he might slip and hurt himself, since his shoes were wet, the floor was wet, and there were toys all over the

floor. I reminded Terri that she could "feel free to intervene as she thought necessary." She did get up to remove his shoes and wipe the floor with a towel, but then sat down again.

Her affect during all this was a combination of amusement at his antics, and helpless passivity. As Terri was the mother who said that children turn out the way they want, no matter what parents do, this was not surprising. Kevin seemed to be having a fine time; he had at that point not yet started attending day care, and this sort of playroom setting was a novelty for him. However, Terri's inability to provide even a modicum of structure for him, or to intervene in any but the most minimal, physical-caretaking manner was very striking. Interestingly, Kevin approached me on a number of occasions, holding a toy up to me, looking into the camera, or just babbling to me. He rarely approached his mother, and when he did babble in a general way it did not appear to be with any expectation of response from her. Toward the end of the session, Terri asked him to do a few "tricks" which she had taught him (blow kisses, make "fish lips") which he did willingly enough, but always in my direction and away from his mother. He was very delayed in language development; his "babbling," in fact, consisted almost entirely of his repeating the one word he knew, which was "okay."

As the mother who had an Ego stage score of Delta/3 and the lowest score on the Parental Awareness interview, Terri was one of the few mothers whose developmental status on both of these measures was predictive of her scores on her interaction with her child. Whereas most mothers presented a mixed picture, revealing higher levels of functioning along with problematic areas, Terri was at a very low level in both developmental and parenting functioning. Kevin's enthusiasm in the playroom setting was appealing, but did not mitigate the fact that he was developmentally delayed, not just in language, but in behavioral organization in general. He had only the most rudimentary knowledge of the use and functions of objects; even at the water bin, his actions consisted of drinking the water and then stepping into it as if it were a bathtub. The one object he used appropriately was the riding truck. On both occasions when Terri gave him a cookie, he took it to a rug which was at the other end of the room, lay down on the rug and ate the cookie, a position which very much resembled a baby self-feeding from a bottle.

Cindy, too, was largely uninvolved and unavailable to her child. She chose to spend almost all of her time sitting in the chair, and a fair amount of that time reading a magazine. She did, however, interact intermittently with Annie on a verbal level, giving instructions

from the chair or responding when Annie brought a toy over to her. As Annie was 29 months old, and very verbal, this mode of interaction worked for mother and child, with Annie proving to be very adept at getting and maintaining some contact with her mother by talking to her. She kept up a running commentary and asked many questions which necessitated some response from her mother. There was a striking lack of physical contact between them. It was particularly interesting, in the light of this, to see that when Annie asked her mother for help in putting the blanket on the doll, Cindy held the doll awkwardly and at some distance from her body while wrapping it in the blanket. She then laid the doll on the floor, several inches away from her, so that "baby could go nitey-nite." In her interview material, Cindy emphasizes the importance of independence. "I really enjoy that she [Annie] knows how to do things by herself, she is not always saying "mommy do this, mommy do that...when she's in a bad mood, she's hard to handle...she wants me to do everything for her...[I hate] getting them what they want when they want it. It spoils them." In response to the Loevinger scale sentence stem When people are helpless, Cindy wrote "they need to ask for whatever they need or else they won't ever get the things they want." Annie's behavior in the interaction suggests that she had learned how to deal with this distant, unresponsive mother quite well; she is very

good at asking for what she wants and at engaging her mother in terms which are acceptable to the mother. Her rather precocious verbal ability was most certainly an asset in relating to her mother, and may in fact have been developed in part as a way of obtaining more gratification from the relationship.

In the interaction between Dottie and Angela, on the other hand, a pattern of high involvement of an intrusive nature alternated with complete withdrawal on the mother's part. After playing with Angela in an older/younger sibling manner in the housekeeping area, Dottie retreats to the lounge chair and reads a magazine with apparent absorption. During this interlude, Angela makes a bowel movement in her diaper. Aware of the camera on her as she does so, she covers her face in visible shame. After a few minutes, during which she is walking very stiffly and obviously feeling uncomfortable, she says to her mother, "I pooped." Dottie, who is in the process of closing the magazine, says "Mmm?" in a cheery tone, and looks away from Angela, who repeats, "Go home, get tissues." Dottie then looks at Angela. Angela says again, "Get tissues. Go home and get tissues." Dottie says, "We can't go home. We just got here." It is not entirely clear whether she really did not hear all of Angela's request. Both coders, however, in watching this incident several times, agreed that it was quite

unlikely that Dottie was so totally absorbed in the magazine that she failed to hear Angela's repeated announcements and requests: the impression is that she chose to ignore the announcement about the bowel movement and respond only to the "go home" part of Angela's statement. In any event, the effect on Angela is that her affect of embarrassment has been validated by her mother's silence regarding the bowel movement and her request for help in remedying the situation. The message is that bodily functions are shameful; her loss of control must be "bad" and she must now suffer the discomfort alone and in silence. Although it is possible that Dottie had not brought a change of diaper and therefore could not have done anything, a verbal acknowledgment and explanation would have at least eased some of Angela's anxiety. This incident, and other interludes during the session during which Dottie withdrew from contact, exacerbated the impact of her intrusiveness when she was involved. There was no middle ground; Angela either did things mommy's way, or she didn't have mommy at all, even when she needed her very much.

A similar pattern of periodic unavailability was present in the interaction between Lucy and Mark. While, as noted earlier, Lucy was quite facilitative when engaged with Mark in play with an object, she sat in the chair for the majority of the interaction, giving verbal

directions, or having Mark bring the toys over to her when he wanted help. When he did not actually approach her or indicate an obvious need for help, she either watched him in a "neutral" and somewhat affectless manner or appeared self-preoccupied. When she did do something with him, she brightened considerably, but when the activity was over she "retreated" to her preoccupied stance. Mark was the most anxious of all the children, stopping his activity frequently to stare at or into the camera with an expression of cautious wariness. Lucy was very unresponsive to his frequent and clear, though non-verbal, expressions of anxiety. He was also the most overtly aggressive of all the children, biting and hitting the doll on several occasions, to which Lucy responded with "Be nice." There was much verbal repeating between mother and child, with Mark using one or two-word phrases and Lucy repeating them but not expanding on them in any way; for example, Mark says, (pointing to the doll,) "Baby." His tone of voice is partly a question, partly a statement of discovery. Lucy repeats, using the same tone, "Baby." Mark repeats this again, and Lucy echoes him. It appears that Mark wants some response or action from her, but her echoing puts the burden on him to decide what to do about the "baby."

The erratic quality of Lucy's interaction, ranging from a more-than-adequate level of facilitation when she

was involved to a passive and preoccupied manner when she wasn't, is reflected in her erratic scores on the other measures. With some of her responses to the Ego scale sentence stems being at a surprisingly high level, she nonetheless had a borderline Delta/3 score for the total protocol because many of her other responses were at a very low level. Similarly, in her interview she gave a number of Parental level 2 and 3 responses to questions on the hypothetical situation, but her responses about her own childrearing were all at the Egoistic level. Mark is afraid to sleep alone, and sleeps in a double bed with Lucy; she is concerned about this but has no ideas as to how to change this pattern. Lucy was the youngest mother in the group (both at delivery and at the time of the study) and gives the impression of being a fairly bright young woman who is not lacking in insights or ego strength. She seems, however, overwhelmed by the task of raising this child. Her extreme dependence on her mother, and the helplessness which she so often expresses suggest that at least at this point in time, her own development is in serious jeopardy under the stress of childrearing.

The fifth mother, Melissa, was also quite high in her facilitation in "teaching" situations, and supportive of 16-month-old Andrea's autonomy and initiatives. But as a very depressed, tense mother, she was extremely unavailable emotionally. She said the "right" things much of

the time, but in a flat, affectless voice and with very little eye contact. Her body language was awkward and hesitant. Many of Andrea's cues were ambiguous, due in part to her young age and in part to her own lack of affect, which reflected her mother's depressive manner. For example, Andrea often handed toys to her mother-- something many toddlers do as a way of establishing contact or as an invitation to play. But Andrea's gesture of handing the toys was not accompanied by any affective cue which would indicate what sort of response she wanted. Melissa, on the other hand, tended either not to respond, or to do so with great hesitancy and equal ambiguity. She made no interpretation of Andrea's cue, which served to perpetuate and exacerbate the ambiguity of the communication. Although it is possible that the mother's depressive affect was reactive to some temperamental or affective qualities in the daughter, it seems unlikely. Andrea begins the session with some enthusiasm, but becomes increasingly withdrawn and depressed in her own affect, apparently in reaction to the mother's mechanical and emotionally unresponsive communications.

Coming from a middle-class background, and having the highest educational level of all the subjects, Melissa was knowledgeable about child development and had a good intellectual understanding of childrearing. The gap between her cognitive grasp and her underlying psychosocial/emo-

tional status is suggested by the fact that she had very high issue scores on both the personal and the hypothetical sections of the Parental Awareness interview, but a Delta/3 stage score on the Loevinger scale. As the only subject who understood that the Loevinger measure was a psychological test, her very brief answers may represent an attempt to "fool" the tester by not revealing anything. But what she unintentionally reveals is an underlying hostile tone which, in Loevinger's characterization of the Delta/3 subject, is indicative of a self-protective, wary, interpersonal style and a preoccupation with advantage and control. For example, she writes When they avoided me "I didn't care;" When she thought of her mother "she laughed;" When I am with a man "I analyze him;" When she was with her mother, she "was bored."

This interaction underscored the presence of a purely affective system as differentiated from an instrumental/affective system in the interactions, and highlighted the effect of maternal warmth and pleasure on the child's level of enjoyment and pleasure. Although Sally, for example, was intrusive, regressive, often inappropriate and quite unable to structure the situation so that her child could explore and master the environment, her underlying affect was warm and playful, and her child demonstrated considerable pleasure in his surroundings. Melissa, on the other hand, is more appropriate in her instrumental

"teaching" manner, but emotionally so withdrawn and unavailable that even with the proper verbal encouragement and response from her mother, Andrea is unable to explore objects, focus on activities, or show pleasure in her play.

Adequate Mothering

One mother could be characterized as consistently demonstrating more-than-adequate mothering throughout the interaction. This mother, Tina, was the third youngest mother in the sample, at time of delivery and at the time of the study. She was able to play with her child while still maintaining an adult, maternal role; she was very supportive, facilitating and encouraging of his explorations of objects and of the environment. She had a nice balance between direct involvement and a more supervisory availability, withdrawing from direct involvement at times when the child seemed not to need her, and stepping in when it seemed appropriate to do so. She was warm and affectionate, and expressed amusement and pleasure at her child's actions and vocalizations. She seemed quite attuned to his non-verbal cues, following his glance, responding to his proximity-seeking, and communicating in a clear and unambiguous fashion. Jimmy, her 25-month-old child, had a wide repertoire of engaging behaviors, good language skills, and many competencies in using the

various toys. It often happened that when Tina appeared preoccupied and a little sad, Jimmy would do some funny, charming and particularly engaging thing which would always elicit a positive response from Tina. It appeared that this child was quite attuned to his mother's affects and moods, and had developed a number of effective ways of ensuring her emotional involvement. Since her response at these moments was usually readily forthcoming and positive, he received considerable gratification for his efforts.

Tina was the one mother who had left home and lived at some distance from her family of origin. She described her relationship with her own mother as very poor, claiming that her mother had much preferred her anorexic sister to Tina. She was quite determined to raise her own child differently from how she had been raised, and had given some thought as to how to do this. She had taken Lamaze classes, which included information about child development, in preparation for motherhood, and had apparently absorbed what she learned there. In the Parental Awareness interview, she said, "...I feel that, if a baby cries, you should find out why, the reason he's crying, instead of saying shut that kid up, he's crying...try to understand a little bit. With Jimmy, I can tell if he's got a dirty diaper, or if he did something bad. I can tell just by his cry. If he's scared I can tell by his cry..."

[You have to] let him know, mommy's there, she's not going to spank you because you're crying. I believe in that, that you understand it first, before you jump the gun." Of all the mothers, Tina had the most highly articulated awareness of a child's internal life as motivating his actions, and the least concern or focus on controlling the child's inherent "badness."

Summary of Results

Summary of Hypotheses Outcomes

No relationships were found between the mother's age, educational level, socioeconomic status or any other demographic factors and her scores on either the Loevinger Ego Scale or the Parental Awareness interview. Five of the nine mothers were found to score at higher ego levels (I-3/4) than had been predicted, with a sixth mother achieving a borderline score at this level. All mothers were within the lower two levels of Parental Awareness; however, when scores from the two sections (personal and hypothetical) were calculated separately, mother's scores on the hypothetical section were higher than their level scores on the personal section. (An examination of Newberger's work with this interview did not reveal any instances of separate section scoring, and there is no research data available which would confirm or disconfirm the frequency of this occurrence. My

decision to examine section score differences was based on my observation that the "issue scores" assigned within each interview as part of the scoring procedure were notably higher in the hypothetical section.)

Maternal scores on the Loevinger Ego Scale were found to correspond to the age of the child, with mothers of the children who were less than 20 months old having lower level scores (all at the Delta/3 stage), and mothers of children 24 months or older having the higher scores (I-3/4). One mother, whose child was 22 months old, had a I-3/4 Ego score with a borderline level of Delta/3.

Ratings of the videotaped interactions indicated a better level of maternal functioning for some mothers than would have been expected from their Ego scale and Parental Awareness scores and a lower interactive level of functioning for others. Child scores on the interaction corresponded to maternal scores in two separate areas; one, the purely affective, involving maternal warmth and child pleasure, and the second involving the mother's role in teaching, socializing and interpreting the meaning of events for the child. Mothers who had high scores in Warmth had children whose scores in Pleasure Affects were high, and conversely, mothers with low Warmth scores had children with low scores in Pleasure Affects. The children of mothers who had high scores in Facilitation and/or Responsivity were high in Use of Mother as a

Resource: children who were low in this had mothers who were low in Facilitation and/or Responsivity.

Summary of Qualitative Data Analysis

Analysis of the qualitative data from the Loevinger Ego scale and the Parental Awareness interview revealed several themes which have developmental significance for the mothers.

One such issue is the mothers' attitudes about men. Low ego scores for a large majority of the group on all sentence stems having to do with relationships with men indicates that this is an area of psychosocial development which is possibly delayed or arrested in this population. Related to this is the fact that almost all of the young women indicated that they had little or no meaningful contact with their fathers while growing up.

Relationships with their mothers were characterized by ambivalence and expressions of resentment at their mothers' interference in their lives, along with indications of their dependency on and their needs for their mothers' support. Some of the Ego and Interview responses, as well as some of the demographic data, suggested, however, that the young women were closer to their mothers at this point in their lives than they had been while growing up.

The experiences of pregnancy, childbirth and transition to parenthood were perceived in a fragmentary and

isolated form, as events which had happened rather than as a coherent experience over which the mothers had exercised some control. Only two of the mothers had prepared themselves for parenthood in advance (by reading material about childrearing, taking courses, and so forth). The data in this area, combined with data dealing with feelings of helplessness and with attitudes about learning and evaluating parenting, indicate that the mothers have a low sense of efficacy.

Control of the child was seen by the mothers as a major issue in childrearing, with a "good" child being one who obeyed and listened. Several mothers expressed concern that the child would imitate their bad habits or grow up to make the same mistakes they had made. The mothers had a limited repertoire for disciplining their children, using punishment forms such as spanking or yelling as their primary modes of discipline.

Higher-level ego functioning emerged in the area of gender/sexual identity as women, with a large majority of the group giving higher-scoring responses to sentence stems related to this area. The capacity to think about parenting at a higher level was revealed in higher issue scores on the hypothetical section of the Parental Awareness interview.

Summary of Interactive Patterns

When directly involved with their children, the mothers most often functioned as "teachers" or, in some cases, as older siblings/playmates. Some of the mothers were quite intrusive and unattuned to the child's cues, underlying affects, initiatives and interests. Most of them, however, showed some capacity for more facilitative behaviors, even if they could not sustain this level of functioning for prolonged periods. The children who seemed to fare best were those whose mothers' affects of warmth, pleasure and playfulness mitigated the effects of their often inappropriate and overly-controlling behaviors. Five of the mothers had patterns of either intermittent availability alternating with periods of withdrawal, or generally low level involvement and availability. One mother was involved and superficially available, but emotionally depressed and withdrawn.

Most of the children had a variety of adaptive coping mechanisms, ranging from verbal engagement of a distant mother to overt ignoring or covert disregarding maternal input of overly intrusive mothers.

Only one mother/child interaction revealed a fairly high level of functioning, with both mother and child engaged in mutually satisfying interaction.

As noted earlier, there were no direct correspondences between maternal scores on the Loevinger Ego Scale and the

Parental Awareness measures and their scores on the various interaction dimensions. A more in-depth, non-quantitative analysis of the interactions and of the content of the other two measures reveals, however, that there is often a relationship between maternal attitudes as expressed in their interview and sentence stem responses and their patterns of interacting with their children. Of the nine mothers, one is functioning very well in her parenting and seems to be negotiating her own developmental issues well, although her break with her family of origin and her continued deep resentments against her mother may, at some time in the future, present difficulties for her. At the other end of the scale, two mothers seem particularly problematic. Terri's low scores on the Loevinger scale, the Parental Awareness measure, and in all dimensions of the interaction indicate that she is at risk developmentally as well as in her parenting capacity. Her child's language delays and lack of competence with objects in the videotape session suggest that he is rather seriously at risk. Melissa's extremely depressive affect and its reflection in her child's affect, coupled with the hesitancy and ambiguity of their communication are signs that this is an at-risk relationship, in spite of Melissa's cognitive grasp of child development issues. Among the six remaining mothers, there appear to be both strengths and weaknesses in maternal developmental status and in the

mother/child interactions, with most of these mothers demonstrating some capacity for adequate parenting but limited capacity for seeing their children as separate individuals having internal feelings, intents and desires which motivate their actions.

CHAPTER 6

CONCLUSIONS

This exploratory investigation has illuminated a number of significant areas relating to the psychosocial development of the adolescent mothers and their interactions with their children. These include the following: the association between the age of the child and the mother's stage of ego development; differences in scores on the personal and hypothetical sections in the Parental Awareness interview; the relationship between Maternal Warmth and Child's Pleasure Affects in the interactions; developmental issues in the subjects' relationships with their mothers; and the subjects' capacities for developing mutually satisfying relationships with men.

In the following sections, I shall discuss these findings in terms of their developmental significance, the directions they suggest for further research, and their implications for program planning.

Discussion of Findings

Relationship between Age of Child and Mother's Ego Stage

Although there was no relationship between maternal age and stage of ego development, there was a relationship between the age of the child and the mother's score. There are several possible explanations for this. Rearing a

child through the stage of young toddlerhood may have a regressive effect on the mother's ego functioning. While infancy as a stage places its own stresses on the mother, young toddlerhood may be even more stressful, as the child has more complex needs and desires but does not yet have a level of language adequate for the expression of these needs. In her description of the characteristics of the various stages of ego development, Loevinger places a young toddler (appropriately) at the Impulsive Stage (I-2). She notes:

The child is preoccupied with bodily impulses, particularly (age-appropriate) sexual and aggressive ones. Emotions may be intense, but they are almost physiological...The child's orientation at this stage is almost exclusively to the present rather than to past or future..he lacks a sense of psychological causation (1976, p. 16).

For an adult at the Delta/3 stage, concerns are similar but there is a struggle to control impulses, preoccupation with the control of others, with cleanliness and physical appearance, and a concern with self-protection. It may be that for an adolescent mother whose ego functioning has not stabilized at its highest potential, coping with the impact of the sexual and aggressive impulses, bodily functions and concerns and labile emotionality of the young toddler produces a regression or a hiatus in her own ego development which comes about as a

response to the manifestations of her child's ego stage: the child's preoccupations and behaviors may elicit responses in the mother which are typical of lower-level, and in particular Delta/3, ego stages.

As the toddler begins to mature and develop some self controls, internalize some rudimentary concept of "right" and "wrong," and acquire the capacity to sublimate some of his/her aggressive and sexual impulses, the emotional and ego-related stresses on the mother may abate; she may be able to achieve some distance from her own struggles with similar impulses and move to a higher level of ego functioning.

The development of language is also a possible factor here. In a linguistic analysis of the mother/child interactions, I found that there were differences between the older (more than 24 months) and the younger (less than 22 months) children in their use of language to express needs, interests and wishes in a clear, purposeful verbal form. The child's linguistic output was analyzed by checking off each utterance made by the child into one of the following categories: 1) Questions; 2) Responses (to maternal utterances directed at the child); 3) Narratives (e.g., labelling of objects, commentary about activities, and similar general statements all of which appeared to be directed toward the mother with some expectation of response); and 4) General

Vocalizations (e.g., commentary of a vocal nature which included the child clearly talking to him/herself, ambiguous vocalizations and noises made to accompany play). Any vocalization was counted, so that a one-word utterance with a questioning tone from a younger child would be counted as a question, as would a fully formed question from an older child. A frequency count was then done of the number of utterances in each category. The older children were found to have a much higher proportion of their total utterance in the Questions, Responses and/or Narrative categories than in the General Vocalization, whereas the younger children had a much higher proportion in the General Vocalization category. The proportion of utterances for older children in the General Vocalization category ranged from 1% to 10%; for the younger children it was 25% to 71%. In other words, the utterances of the older children were more frequently unambiguous, directed toward the mother, and clearer in communicative intent as well as articulation. Although the younger children vocalized frequently, their vocalizations were more ambiguous, more general, and less often accompanied by the non-speech signs such as eye contact or voice inflection which would clearly indicate expectation of response. Thus a greater burden is placed on the mother of a younger child to interpret his/her vocalization and intent. Given the fact that the mothers in this sample, (and teen-age

mothers in general) have been found to be less than adequate in reading their child's non-verbal cues, it is possible that the mother responds on the basis of the affects which the child's behavior arouses in her, rather than on the basis of a more reflective or cognitive assessment of the child's needs or emotional state. If the child is expressing strong affects (particularly of an unpleasant or threatening nature) in non-verbal form such as hitting, crying, or motoric hyperactivity, similar affects may be evoked in the mother if she cannot "read" or label the child's behavioral cues such that she can achieve some distance from their emotional impact on her. For example, when one of the (younger) children was biting the doll, the mother said nervously, "Be nice." This "warning " was repeated several times during this episode and at other times when the child expressed aggression. She seemed unable to specify or label to the child what he was doing (or feeling) or what she expected of him; her reaction primarily conveyed her own discomfort at the underlying aggressive affect of the child's behavior. When a child acquires more language and verbal interchange becomes a more primary mode of communication between mother and child, it may be that the language becomes a cognitive or symbolic step which mediates between action and

affect, enabling the mother (as well as the child) to gain some distance from her own immediate affective response.

In brief, the data on the mother's stage of ego functioning appear to suggest that the child's age and stage of development has an effect on the mother's level of ego development. It is possible that although rearing a younger child exerts a regressive pull on the mother's ego, as the child matures, becomes more verbal and achieves a somewhat greater measure of self-control and independence, the mother can integrate (or reintegrate) some of her own ego strengths at a higher level.

Another possibility is that the very experience of parenting over time affects the mother's capacity for perspective taking and enhances her ability to differentiate feelings and to be aware of alternatives and complexities (characteristics which would be found at higher ego stages). If this were the case, one would have expected the mothers of older children to have higher levels of Parental Awareness as well as higher ego stage scores. Although Newberger (1984) found that the "close relationship between greater numbers of children and greater years of parenthood" confounded the relationship between experience and level of parental awareness (p. 64), she did find a statistically significant correlation between years of experience and

awareness level when the correlation was calculated with the number of children partialled out. It was not the case with the adolescent mothers in this study, however, that the age of the child correlated with Parental Awareness scores. But we are dealing with a relatively small age range (15 to 29 months); although this time span entails developmental changes in the child which could affect the mother's psychological and ego functioning, it is a short time span in terms of the broader issues of parental awareness which might show developmental growth with increased experience in parenting.

Given the small size of the sample, it must be reiterated that these conclusions (or, more accurately, conjectures) can only be regarded as suggestive. This finding does, however, generate interesting hypotheses for further research in this area. A study which measured maternal ego stages and Parental Awareness levels from the prenatal period through delivery and the first several years of childrearing would provide more conclusive data on this topic.

Differences in Scores on Personal and Hypothetical Sections of the Interview

Although answers representative of a lower level of thinking were more prevalent in the section of the interview which dealt with the subject's own childrearing

experiences, as mentioned earlier, a greater number of higher level responses appeared in the hypothetical section. This would indicate that the mothers have the capacity for thinking about mother/child relationships in a way that is both more complex and also more empathic to the feelings and needs of the child as an individual. For example, in the hypothetical situation involving an older brother and the newborn baby, a much greater sense of internal psychological causality was revealed in some responses. Sally, who complained that she was at a loss as to how to keep her own two boys from fighting all the time, was able to say about "Sam," (the hypothetical older sibling) "Deep down, he probably loves his brother, but on the surface, he's still jealous of him. He probably says [that he loves the baby while still hitting him] because that's the only way he can explain how he feels about the baby...he could one minute love the baby and the next minute not know if he loves it or no, because he's jealous."

Interestingly, the sibling situation evoked considerably more affectively-toned responses and more suggestions for handling the situation which included consideration of the needs of both children, than did the working mother/daughter conflict. Since all but one of these mothers were the second or third children in their families of origin, and since (excluding a complicated

array of step-and/or half-siblings) seven of the mothers came from families of three or more children, they had obviously had a fair amount of experience dealing with issues of sibling jealousy. Perhaps their birth order positions had enabled them to have a greater empathy for the feelings of both "Sam" and his baby brother, as most of them had been in the position of being younger than one sibling and older than another.

Differences in ability to deal with issues on a more complex and thoughtful level did emerge in other areas of response, also. For example, in her answer to a question about the working mother dilemma, Dottie says, "The mother doesn't think the working is a problem. She enjoys it, and it gives her time to get out of the house, which all mothers need once in a while. And the daughter thinks it's a problem, because she just wants her mother home all the time to come home to, and I don't think it has to be that way as long as the mother makes sure that she spends time with her daughter and doesn't involve herself so much in work that she doesn't have time for her daughter...It's just two different viewpoints." This response demonstrates a capacity to see both sides of the issue, and an understanding of the need to consider people's internal wishes and motivations in finding a solution. And yet when asked what she relies on to make her child "mind her," she responds, "Mainly just when

she's bad, yelling and yelling...if that doesn't work she'll get a spanking." When asked how that method works out, she answers, "It depends what mood she's in. If she's in a good mood to begin with it works to tell her, but if she's in a bad mood she ends up with a spanking." Although in her answers to the questions about her own child she showed some glimmering of understanding that the child had an internal life and motivations (good moods and bad moods), this understanding didn't lead to actions or responses on her part which would have been more considerate of the child's views or needs.

The fact that the mothers exhibit higher-level thinking in some areas demonstrates that they have the potential for, and are possibly in transition to, a developmental increase in level of parental awareness. The gap between their ability to reason about parenting in hypothetical situations and to apply this reasoning to their own issues in childrearing suggests, however, that when interacting with their own children, they are too affected and thus too limited by their own unresolved developmental issues around separation, autonomy, identity and impulse control to perceive their children's needs accurately and function effectively in meeting these needs.

Relationship between Mother's Warmth and
Child's Pleasure Affects

Of particular significance in the ratings of the interactions was the close connection between maternal warmth and the expression of pleasure in the child. The observation was made by both videotape coders and supported by the ratings given in these dimensions that even when mothers were intrusive, controlling and non-facilitating in their style of relating to the child, if their underlying affect as expressed in voice tone, body language and facial expression demonstrated some real warmth and affection, the child tended to display pleasurable affects, show interest in his/her surroundings, and have a low level of anxiety and tension. For some dyads, high levels of maternal warmth and child pleasure characterized the interaction as a whole. But in some instances, mothers who were generally low in their warmth occasionally displayed moments of spontaneous affection; in such instances, the child often brightened and responded with pleasure to the display. When the mother's affect reverted to a distant, depressive or more neutral tone, the child would visibly dampen in his/her affect. One mother, who had been quite tense and ungiving in her affect for most of the interaction, responded to something her daughter said by hitting the daughter playfully and saying, in a teasing and affectionate tone, "Hey, don't be fresh." The child burst

into delighted laughter. This was a fleeting moment, however, and both mother and child reverted quite quickly to the previous tense and distant way of relating. Another mother, whose level of intrusiveness and lack of responsivity to even the most obvious cues on the part of her child was distressing, was nevertheless very warm and enthusiastic in her underlying affects. Her child appeared to "tune out" the content of her many directives, (often issues in rapid-fire succession, such as, "Put the cookies in the oven; the phone's ringing, answer the phone; put the baby to bed; get the puzzle.") The child seemed to respond more to the warmth in her tone of voice and the fact that, although this was her style of interacting, her affective intent seemed quite benign, and her manner did not essentially interfere with his enjoyment of the play situation, (although it certainly did not promote explorations or problem-solving behaviors in the child).

On the other hand, Melissa, who often said all the "right" things in terms of explaining, labelling, making suggestions rather than giving directives, letting the child try things out for herself, and so forth, was emotionally very stiff and somewhat depressed in her affect. This child responded by becoming increasingly withdrawn and silent, which then exacerbated the mother's tension and depressive affect. By the end of the inter-

action, the child was seen sitting on a plastic riding toy for several minutes, unmoving and silent, almost paralyzed into inaction.

For some of the mothers whose scores on all dimensions tended to cluster in the same range, these distinctions could not be clearly quantified, of course. But for the five cases in which there was a gap between underlying affect and what I would call style of relating, it was striking to note that the mothers' underlying affect seemed to have a greater effect on the child's capacity for enjoyment and pleasure than the mothers' style of relating.

This has clinical implications for assessing the overall quality of the mother/child relationship, and suggests that the underlying emotional tone between mother and child may be an equal or more potent factor in outcomes for the child than particular behavioral characteristics. In a study of patterns of childrearing, Sears, Maccoby and Levin (1957) found maternal warmth to have a "pervasive" and positive influence on child behaviors. Research emphasis on dimensions such as punitiveness, intrusiveness, and even nurturance, or a focus on frequencies of specific behaviors in time-limited observations, may fail to capture adequately the underlying affects which are more enduring characteristics of the relationship. Some aspects of the child's development, such as cognitive

processing and attention span, are likely to be affected negatively by maternal intrusiveness, for example. But there is more potential both for changing maternal behavior and mitigating negative effects on the child if warmth and affection, rather than tension, anxiety and hostility, are dominant elements in the relationship. It would be useful for future research in this area to address these qualities of relationship, and to formulate and test hypotheses regarding correlations between maternal warmth and other psychosocial, demographic and developmental factors. It would also be helpful to know whether there are any long-term effects on children associated with maternal warmth.

Developmental Issues in Subjects' Relationships
with their Mothers

One aspect of the possible positive outcomes of motherhood (for the mother, at any rate) which emerged from many of the interviews was an increased ability to understand their own mothers, and to see things from their parents' perspective. Several of the young women made comments in the interviews which indicated that they had gained some empathy for the difficulties their parents had had in their lives. One young woman who had written on the Ego sentence completion measure that she wished she "could go back in time and take back all the bad things"

she had said to her mother, responded to one question in the interview by saying, "My mother was always drinking, we didn't have much. We knew she loved us -- she just didn't have the time, and I grew up..well, I was a hard-ass...my father wasn't there, and my father -- he expresses his discipline." Another commented, "My father wasn't around a lot. She (the subject's mother) raised the four of us alone. She was always really there for us. She taught us not to lie."

In the hypothetical situation which involved the resolution between the needs of a mother who wants to go back to work because she is bored at home, and her ten-year-old daughter who wants her to stay at home, many of the mothers' responses revealed a struggle as to whether they were in sympathy with the mother or with the child as to whose needs should come first. For example, in response to the question "What would a good mother do [about going back to work]? one mother answered, "I would tell Susan (the hypothetical daughter) that she'll just have to put up with it. If the mother's not happy and things, she might take it out on the father. I don't know -- I sit around here and I'd go nuts...If it makes her happy -- I'd do it." But this same mother, in response to questions about Susan's feelings, said, "She feels that her mother doesn't want to be around her...She

just wants her mother to be home with her...Susan thinks that her mother should be there." What one sees in these conflicted responses is an inability to coordinate the two perspectives and find a compromise solution; there is one side, and the other side, and no solution is possible. But another and perhaps more critical issue is the young woman's struggle with her own neediness as regards having an available mother (identification with the child in herself) in conflict with her new role as mother and her identification with the problems of a mother who is tied down to a child. At best, one would wish that over time these dual identifications could be integrated so that the mother could see things from the child's perspective and thereby empathize with the child, while still maintaining a maternal role and making more mature decisions based on that role.

Most of the mothers in the study were dependent on their mothers (to varying degrees) for advice, emotional support and concrete help with babysitting. In response to the interview question, "How have you learned to be a parent?" all but two of the subjects mentioned their mothers as sources of advice and influence. (Of the two who didn't, one did refer to her mother, but as an example of "how not to" raise a child.) As noted previously, Sahler (1983) commented on the ways in which mother-daughter conflict around issues of separation and

autonomy, typical of adolescence, will be complicated when the mothering of the daughter's child is shared. While some of the mothers responded to the stem My mother and I with phrases such as "get along pretty good;" "get along a lot better than most girls my age," and "are best friends," the same mothers gave negative responses to If my mother--, answers which expressed resentment at their mothers' interference in their lives. This in itself is hardly unusual; feelings of an ambivalent nature characterize many mother/daughter relationships, particularly in adolescence. What is different for these adolescent mothers is that by having a child, they have increased their dependence on their mothers at the point when they are struggling with issues of autonomy and separation. They resent their mothers' interference in their lives at the same time as they need it. As one young mother said, "Me and my mother have really different views about everything...She doesn't believe in disciplining -- [she'd say] he's just a baby, you know...It was really hard living at home, because everytime I would do something my mother would jump in and I really didn't have a chance to be disciplining my own child." But this teenage mother was, at that point, trying to complete high school, and talked with pride of how she had passed all of her courses with good grades in spite of the fact that she had given birth in the fall of that year. She

was able to do so only because her mother took over the care of the baby while she went to school, did her homework, and studied for her exams.

The material in the interviews and the sentence completions indicates that the child becomes a focal point in the mothers' conflicted needs for both autonomy and dependency, as the mothers try to "do things their way" while still relying on their mothers for help and advice.

If the issues of separation, autonomy, and competition over childrearing can be negotiated successfully over time, however, the development of a companionable and close relationship with their own mothers could prove to be a positive consequence of adolescent motherhood for the mothers in this study.

From a clinical standpoint, it would be important to know what emotional salience the daughter's early childbearing had for the (grand)mother. A longitudinal study which investigated adolescent motherhood from a three-generational standpoint would be of considerable interest and could possibly shed some light on life-span familial events as causal agents in early childbearing, as well as delineating the effects of the grandmother's involvement in childrearing on grandmother, mother and child.

Capacity for Intimacy: Relationships with Men

Erikson (1981) characterizes the development of the capacity for intimacy as a critical task of adolescence. He feels that a breakdown in attempts at intimacy results from unresolved problems with identity:

Where [firm self-delineation] is missing, the young individual when seeking tentative forms of playful intimacy in friendship and competition...is apt to experience a peculiar strain, as if such tentative engagement might turn into an interpersonal fusion amounting to a loss of identity, and requiring, therefore, a tense inner reservation, a caution in commitment. Where a youth does not resolve such strain he may isolate himself and enter, at best, only stereotyped and formalized interpersonal relations; or he may, in repeated hectic attempts and repeated dismal failures, seek intimacy with the most improbable partners (p. 196).

Certainly the adolescent mothers in this study appear to have engaged in "hectic attempts" and "dismal failures" in their attempts to form relationships with men. Whether or not their problems with intimacy are a result of identity diffusion is a question which cannot be answered in this study. But the fragmented and isolated perceptions of relationships, and the stereotypical, externally derived ideas of family roles which were expressed in both the interviews and the Loevinger scale indicate that the young women do not have a strong sense of themselves as persons with internal identities and traits which are stable over

time and situations. When completing the stem I am--, some of the mothers responded in concrete ways, such as "very proud of my two boys for trying so hard to talk." Others gave role definitions, or definitions specific to a situation: I am "a mother and a student" or "...quiet when I don't know someone in a group." Only two mothers gave answers which had elements of an internal identity which transcended situations, roles, or current concerns: one mother wrote, I am "very sure of myself," and the other wrote, " a good person with my own thoughts and ideas and I would to be (sic) respected because of it."

From the background data as well as their responses on the Loevinger scale, it can be seen that the psychosocial task of engaging in developmentally appropriate intimate relationships was not one which had been achieved by the mothers in this study. Both their attitudes about and their actual relationships with men are very problematic.

Although there did not appear to be any differences in the mother/child interactions which were related to the child's gender, one does wonder if, over time, the mothers' attitudes about men will have increasingly detrimental effects on their male children. By the same token, these attitudes could have a detrimental effect on the female children if the mothers replicate the single-parent status of their mothers, and in addition transmit to their

daughters their problematic conceptions of relationships with men. Research does bear out the possibility of negative effects on male children; as noted earlier, male children of adolescent mothers have been found to suffer more from cognitive and behavioral deficits than female children (Baldwin and Cain, 1980; Chilman, 1980; Brooks-Gunn and Furstenberg, 1986a).

In a study of maternal relationship history as an indicator of developmental risk, Pianta, Egeland and Hyatt (1986) found that children whose mothers "had been historically involved in numerous unstable, changing relationships" with men were rated as functioning significantly less adequately at 42 months in interaction with their mothers and as being significantly less competent in socioemotional and behavioral functioning in first grade, when compared to children whose mothers had been living with the same man in a stable relationship over the same time period. (Group comparisons were made when the children were 24, 42 and 64 months old; maternal relationship status was measured from child's birth to 24 months, and again at the 42 and 64 month periods.) At 42 months, mother/child interaction in the Chaotic group was characterized by "the mothers' inadequate support of their children, their inability to structure the setting for the children, and their intrusiveness in the children's attempts to solve the problems themselves"

(p. 396). The study sample of 267 women included, but was not limited to, adolescents; but the mean age of the mothers at time of delivery was 20.5 years, (with a range of 12 to 37 years) which suggests a preponderance of adolescents in the sample. While chaotic relationships with men are certainly not confined to an adolescent population, studies which include information on marital and partner relationships among adolescent mothers (Chilman, 1980; Unger and Wandersman, 1985; Crockenberg, 1987) do indicate that unstable and chaotic relationships with male partners are quite prevalent in this population, such that their children might be at particularly high risk for the outcomes noted in the study of Pianta et al.

To sum up, problematic conceptions of and relationships with men have implications not just for the adolescent mother's own psychosocial development, but can result in potentially negative outcomes for her children.

Limitations of the Study

As this study was conceived as an exploratory investigation, its purpose was not to obtain definitive results but rather, to raise questions for future research, to delineate areas of previously uninvestigated issues, and to examine in more depth developmental factors as they impact on adolescent motherhood.

Although various facets of adolescent motherhood have been examined in depth in this study, the limited sample size makes analysis of statistical significance infeasible. Therefore, findings must be regarded as suggestive and subject to further research. The mothers were all white, lower/working or middle class, and from semi-rural areas, so that generalizations to different ethnic populations would have to be made with caution. In addition, all but one of these mothers were voluntarily participating in some aspect of social service support, and all but one received at least occasional help from their mothers. The developmental status and outlook for adolescent mothers who have little or no familial or institutional support is likely to be very different, and findings from this study may not be applicable to such mothers.

Since this study proposed to look at issues from a developmental perspective, interpretations of the findings have been made within that theoretical framework. Social class differences in childrearing, however, must be considered as influencing factors such as maternal intrusiveness, concerns with obedience and control, and the mothers' teaching styles. Borman and Fishbein (1982) note, for example, that working class parents tend to stress obedience to authority, and that socialization of children in working class families is character-

ized by parental emphasis on conformity "to a value code governing appearances" (p. 14). Bee et al. (1969) found significant social class differences in maternal teaching strategies, with lower class mothers being more intrusive in the child's problem solving, and making more concrete suggestions than middle class mothers. Less educated mothers were found by Minton, Kagan and Levine (1971) to be more intrusive and prohibitive than college educated mothers in handling child violations of maternal standards. It should be noted, however, that I found the underlying and more enduring maternal affects (of warmth and/or tension and coolness) to be of greater significance in mother/child interactions than control or intrusiveness. If, indeed, some of the intrusiveness and concerns with control and obedience are more highly associated with the mothers' social class than with their age or developmental status, it would be of particular importance to know whether the effects of these factors on the child were mediated by other relationship traits such as affection and pleasure, or by other maternal developmental issues such as separation and autonomy, sense of efficacy, and attitudes toward men.

In summary, further research in several areas would be necessary to ascertain the significance of the findings and the generalizability of this study to larger populations of adolescent mothers.

Recommendations for Program Planning

The finding that attitudes toward and relationships with men constituted a problematic issue for the subjects in this study suggests that more programs for adolescent mothers should make every effort to include the fathers. Although in recent years more agencies which offer services to teenage mothers have attempted to involve fathers, such efforts have not been consistently successful. Forbush comments that "outreach to the boys...requires a high level of motivation and an even higher degree of persistence" (1981, p.272), and many agencies fail in their attempts.

My findings suggest that the problem may extend beyond the particular father of the child, to the mothers' relationships with their own fathers and their feelings about men in general. Perhaps equally effective in the long run would be therapeutically oriented support groups which focus on the young women's relationships with men with the aim of helping them resolve this developmental impasse and engage in healthier, more satisfying relationships with male partners in the future.

It has also been found that the young women had a lowered sense of efficacy, which seemed related to their tendency to fragment their perceptions of experience and to their inability to see clear cause and effect relationships between actions and outcomes.

These findings have implications for the organization of services for teenage mothers. Many of the services currently in place for teenage mothers are themselves very fragmented, with different institutions, agencies and bureaucracies responsible for different aspects of service provision. An adolescent mother will often find herself dealing with the Welfare Department for her housing and monthly allowance needs; with an agency such as Women, Infants and Children (WIC) for nutritional help and food stamps; a job training program for work-related needs; a social services agency for casework and therapeutic assistance; and a day care center for child care. Although in some cases several of these services may be offered by one agency, there is still usually a different person responsible for each service. In addition, programs are often short term, with a teenager receiving prenatal care from one source, postnatal infant care assistance from another, and so forth. Since these mothers already have tendencies to fragment and dissociate their perceptions of events, and have lowered senses of personal efficacy, it would seem vital to arrange programs which would enable the young women to integrate their perceptions of events and provide them with guidance and experiences which would help them gain greater confidence in their ability to exercise some control over their lives. It would seem

particularly important to develop long-range programs for teen mothers, in which various services are coordinated and in which one or two people serve as consistent "anchors" over an extended period of time such that the young women could develop meaningful relationships which have some degree of stability and mutuality.

For all of the mothers, there was a gap between their cognitive awareness of parenting and their ability to apply this level of reasoning to their own childrearing. The fact that they could think about issues such as meeting needs, discipline, resolution of conflict, and evaluating parenting is indicative of areas of strength in their parenting potential. But the gap between cognition in the abstract and the actual realization of this understanding in their daily lives with their children suggests that educational programs for teen mothers which "teach" child development may not be very effective. Such programs must deal with mother and child as a dyad, and find ways of providing experiential learning such that the mothers can absorb and integrate what they have learned into their own emotional makeup and into their daily interactions with their children.

The early timing of the birth of their children has put these mothers at a disadvantage in terms of the timing of other events which mark adolescent passage in our society. All but one mother were in some sort of educa-

tional program, ranging from studying for their General Equivalent Degree to attending a community college. (The one mother who was not involved in an educational program had graduated high school following the birth of her child). But the mothers who were not at the community college were very vague about what they might do when they finished their GEDs. All of them are likely to face problems in getting low-cost child care if they should decide to go to work. The likelihood is that several of these mothers will remain on Welfare for a number of years to come.

Socially, they are isolated from their peers and from the kinds of experiences and supports which peer groups provide in adolescence. This was reflected in some of the responses to various sentence stems in the Ego scale: When they avoided me "I felt so good because they were playing with my baby;" "I felt really dumb because I was 15 and pregnant." When I am with a man "I'd like them to pay the same amount of attention to my daughter as they do to me." Being with other people "my own age with children helps a lot;" "is fun and hard when I have Janey with me." A woman feels good when "they find a man that cares about them and cares about ther kids to even if there not the natrul father."

One mother told me how happy she was that her mother agreed to babysit so that she could go to her Junior Prom,

even though she had not attended the high school for two years. Another mother quit her job training program so that she could "hang out" with her friends while the baby was at the day care center.

The early childbearing has put these mothers into a position where they must be concerned with completing some essential step in their lives, such as obtaining a high school degree, while caring for a child, managing to live on a very limited budget, and struggling to resolve some of their developmental issues in relation to their families of origin.

Given the proper supports and opportunities, it may be possible for the mothers to avoid the negative socio-demographic consequences of early childbearing and, in fact, do somewhat better vocationally and educationally than they might have otherwise. But it is also important that programs designed to enable the adolescent mother to finish her education and become economically self-sufficient take into account the level of stress and the nature of the stresses in the adolescent mother's life. For young women who may not have driver's licenses and are not very likely to have cars, there is little point in getting job training if the mother lives (as many of my study subjects did) in a semi-rural area in which a car is essential for getting to work. Day care programs are most helpful in freeing the mother up for schooling

or job training, but when the child is too sick to be at the day care center, (which can happen quite frequently with young children) the mother often has no alternative care arrangement. Teenage mothers also seem to need contact with peers, and it is difficult for them to juggle motherhood and school or work and still find the time and means to be with friends.

In brief, programs providing schooling or job training should arrange for part-time participation or be organized around flexible schedules which are designed to meet the needs of the teen mother participant.

Given the involvement of the grandmother in the rearing of the adolescent mother's child, it would seem that programs serving teen mothers should involve the grandmother (and other family members, if appropriate), in their services. In an article on family involvement in adolescent parent programs, Forbush (1981) remarks that

...agencies have very little specific information about the kind and extent of practical help that families provide their pregnant teenagers...although many of these...programmers did recognize that the family is much affected by, and involved in, her pregnancy and subsequent parenting, for the most part, services have yet to incorporate this realization into the design of their programs (p. 273).

It is apparent that more research, as well as program design, is needed in the area of family involvement.

The findings in this study have implications for program and service design in a number of areas: developmentally and therapeutically oriented groups to help the mothers form more satisfying relationships with men; longer-range and less fragmented services to promote a greater sense of efficacy; job training and educational programs which are organized to take into account the realities of the teenage mother's needs and stresses; programs which serve the mother and child as a dyad and provide experiential learning in childrearing; and programs which involve the family.

Summary

The basic question of this exploratory study has been: what are some of the developmental issues which characterize teen mothers in ego development and in their conceptions of the parental role, and how do these issues affect their childrearing?

In this group of nine adolescent mothers and their toddler aged children, the mothers were found to be either at the transitional I-3/4 stage of ego development or lower, and to be within the lower two levels of Parental Awareness. Ego stage did not predict Parental Awareness level for the group as a whole, although four subjects who were at the I-3/4 stage of Ego development were also at the 2(1) level of Parental Awareness. Mothers'

interactions with their children generally indicated areas of adequacy in parenting as well as problematic areas, with maternal warmth being more highly related than any other category of maternal behavior to the child's affects of pleasure and enjoyment of the play session. Maternal age was not predictive of either Ego stage or Parental Awareness level; the age of the child, however, corresponded to the mother's stage of Ego development, with the mothers of the youngest children having the lowest scores on the Ego scale.

In a more intensive analysis of the data, areas of developmental concern for the adolescent mothers were: issues of autonomy and separation versus dependency on their own mothers; their attitudes toward men; their fragmented sense of their experiences and their inability to see cause and effect relationships; and their concerns with control of impulses. These issues impacted on their childrearing in the following ways: competition with their mothers over childrearing while remaining dependent on them for help and support; an inability to respond to the child in the interaction so as to help the child make sense of and integrate his/her experiences coherently; a view of the child as naturally anarchic and the imposition of control in the form of prohibitions and punishments; and an inability to respond contingently to the child's subtle affective cues and behaviors.

On the other hand, there appear to be some intimations that early childbearing may have had a positive effect on the mothers' development. Identity with the maternal role and subsequent greater appreciation for their own mothers (along with ambivalent feelings), higher-level responses to sentence stems having to do with femininity and sexuality, higher ego stages for the mothers of older children, and the presence of some higher level social cognitions regarding complexities of parenthood are all indications of developmental functioning which has moved beyond the younger adolescent phase and is congruent with post-adolescent or young adult psychosocial development. Whether these young women were in the category described by Hamburg (1986) of teenagers who had become pregnant to solve a "developmental impasse" is not known, and therefore one cannot ascertain whether these positive aspects of their developmental status are gains related to their early childbearing. At the very least, however, one can say that early childbearing does not seem to have resulted in regressed or delayed ego and psychosocial development in all areas of the mothers' functioning.

While much of the research regarding adolescent motherhood is equivocal regarding the primacy of age per se as a causal factor in negative sequelae, many researchers and most clinicians and policy planners accept the categorization of adolescent mothers as an

"at-risk" population. The question must be asked, then, what are the characteristics that put teenage mothers and their children at risk? Although there were some areas of adequate functioning found in the mothers in this study, there were many factors which would constitute risk factors:

1) An unplanned birth; inadequate preparation for motherhood; and single parenthood with lack of stable partner support.

2) Dependence on their own mothers for concrete as well as emotional support which may interfere with their ability to achieve a more developmentally appropriate level of autonomous functioning.

3) Areas of psychosocial/developmental functioning such as fragmentation of experience; minimal sense of causality; and problems with impulsivity, all of which are likely to impact on their childrearing in negative ways, as well as being problematic for the mothers' own development.

4) Histories of unsatisfactory relationships with their own fathers and with their children's fathers; problematic attitudes toward men; an attenuated possibilities for marriage as a consequence of early motherhood, all of which puts them at risk for continued histories of chaotic and unstable relationships with men.

5) Sociodemographic characteristics such as attenuated education; vague, impractical or non-existent vocational goals; and potential problems in entering the job market due both to limited skills and the need for child care during working hours.

These "at-risk" factors are not necessarily confined to adolescent mothers. These are characteristics which most certainly could be found among populations of older mothers too. It would seem, then, that adolescent mothers and their children should be considered as a sub-group of generally "at-risk" dyads. As adolescents, they may be more likely to need certain kinds of services, particularly of an educational and vocational nature, and they may have certain other age-related needs such as opportunity to interact with same-age peers. But the fact that the age of the adolescent per se may not be the primary causal agent for her "at-risk" status should not diminish the realities of the risk factors which do exist for many adolescent mothers. Although the limitations of this study are such that definitive conclusions cannot be drawn, it is hoped that the findings will lead to further research. It is also hoped that the more intensive analysis of the data will be helpful to program planners and clinicians in suggesting ways to assess and evaluate the psychosocial and developmental status of the adolescent mothers who

comprise their client population in order to offer services which better address those issues.

Appendix A

Sentence Completion Form

Loevinger, Jane. Measuring ego development. San Francisco: Jossey-Bass, 1970.

Instructions: Complete the following sentences.

1. Raising a family -
2. Most men think that women -
3. When they avoided me -
4. If my mother -
5. Being with other people -
6. The thing I like about myself is -
7. My mother and I -
8. What gets me into trouble is -
9. Education -
10. When people are helpless -
11. Women are lucky because -
12. My father -
13. A pregnant woman -
14. When my mother spanked me, I -
15. A wife should -
16. I feel sorry -
17. When I am nervous, I -
18. A woman's body -
19. When a child won't join in group activities -
20. Men are lucky because -
21. When they talked about sex, I -
22. At times she worried about -
23. I am -
24. A woman feels good when -
25. My main problem is -
26. Whenever she was with her mother, she
27. The worst thing about being a woman -
28. A good mother -
29. Sometimes she wished that -
30. When I am with a man -
31. When she thought of her mother, she -
32. If I can't get what I want -
33. Usually she felt that sex -
34. For a woman a career is -
35. My conscience bothers me if -
36. A woman should always -

Appendix B

Parental Awareness Interview

Carolyn Moore Newberger: Parental Conceptions of Children and Child-Rearing: A Structural-Developmental Analysis.
University Microfilm, Ann Arbor, Michigan, 1984.

Interview Protocol

I. Parent Concepts Section

1. Can you describe your children for me?
2. What do you enjoy most about (child or children)?
3. What do you find hardest to put up with?
Why is that?
How do you handle it? How does it seem to work out?
4. Every parent has to find some way to get children to do what they want them to do, and not to do what they feel they shouldn't do. What do you rely on most to make your child(ren) mind you?
Why do you use this method?
How does it work out? Why?
Do you feel this is the best way? Why (not)?
5. What do you feel children need most from their parents?
Why?
6. What do you feel is the most important goal of raising a child? Why?
7. What should parents be able to expect from their children, do you think?
8. How have you learned to be a parent; what has been the most important influence on the way you are as a parent?
9. What do you feel is the most important influence on the way children turn out as adults? Why do you feel that way?
10. How does someone know if they're a good parent?

II. Working Mother Dilemma

Mr. and Mrs. Stewart have a ten year old daughter Susan. Mr. Stewart earns a good living, so that Mrs. Stewart doesn't have to work, but with Susan in school most of the day, Mrs. Stewart has been feeling unhappy at home and wishing she could get out of the house. She decided to get a job, and after much looking, she found

a wonderful secretarial job three days a week. She loves the job and feels much happier. The problem is that three days a week, Susan comes home to a babysitter. The sitter is a kind woman who does nice things with Susan, and whom Susan seems to like, but she told her mother that it's not the same as coming home to your own mother. Susan says that it's not fair for other children to have their mothers home every day and not she. Mrs. Stewart doesn't know what to do. She feels it isn't fair for her to have to give up her job when Susan has a kind, reliable babysitter, and she is much happier working than staying home. But she wants to be a good mother to Susan, too.

1. What do you think a good mother would do? Why?
2. Do you think Susan is being a good daughter by wanting her mother home every afternoon? Why (not)?
3. Do you think Susan sees her mother working differently from how Mrs. Stewart sees her working? How could you explain that?
4. Do you think Mrs. Stewart might have mixed feelings about working? How would you explain that?
5. Do you think Susan might have mixed feelings about her mother working? How would you explain that?
6. What do you think is more important, that Susan have her mother home when she gets home from school, if that makes her happier, or that her mother have a job, if that makes her mother happier? What are your reasons for the way you feel?

III. New Baby Dilemma

Sam is 3½ years old and has a two month old baby brother. At first he was excited about the baby, and gentle with him. Lately, he'll be hugging him one minute and before you know it, he'll hit him. Sam's mother want Sam to love his brother, but she doesn't want the baby to be hurt, either.

1. What do you think Sam's mother should do? Why?
2. How would you explain Sam's kissing the baby one minute and hitting him the next?
3. Do you feel what Sam is doing is something a good child would do? What are your reasons for how you feel?

When Sam's mother tried to talk with Sam about why he wants to hurt the baby, Sam said, "I don't want to hurt him. I love my baby brother."

4. Could Sam be telling the truth, that he loves his

baby brother, when he seems to want to hurt him? How would you explain that?

5. Could Sam have mixed feelings, or not really know how he feels? How would you explain that?
6. What should Sam's mother be able to expect of Sam, do you think? Why?
7. What should Sam be able to expect of his mother? Why?

Appendix C

Scoring Guide for Maternal Behaviors

Note: Ratings are given in time blocks of two minutes. For the Involvement and Availability categories, the scoring system is quite specific, and focuses more on actual time that behaviors occur. For the other categories, coder should use his/her judgment as to quality, intensity and predominance of behaviors in any given time block. Two scores for one time block are acceptable if behaviors/affect change during the two-minute segment. Consider whether the behavior(s) are high, moderate or low in frequency, intensity and quality, and to what extent they characterize the interaction of that time span.

Scoring is on basis of 1 to 7, with 1 as high and 7 as low.

Category 1:

High Involvement to Low Involvement

1. Mother is involved for entire interval with child.
2. Mother is involved for majority of interval with child.
3. Mother is involved intermittantly but appropriately, at request of or need of child.
4. Mother is involved intermittantly, either for a short segment of the interval, or in specific instances (at least several per interval coded).
5. Mother is minimally involved (a few instances per interval or a segment of about 10 seconds or less).
6. Mother is uninvolved.
7. Mother is uninvolved and ignoring child's request, communications, initiations, etc.

(Involvement is defined as talking with or to child, playing with child, and/or maintaining physical contact with child.)

Category 2:

High Availability to Low Availability

1. Mother is watching, supervising child in same area as child.
2. Mother is watching, supervising child from chair or from distance.
3. Mother is in area with child but is occupied with task and/or playing with materials herself for segment of

- interval (less than half).
4. Mother is occupied with task, etc. but at a distance from the child for segment of interval (less than half).
 5. Mother is occupied as above (as in #3 and #4) for more than half of interval.
 6. Mother is occupied reading magazine for less than half the interval, (is either supervising or interacting for other half).
 7. Mother is occupied reading for more than half of interval.

Category 3:

High Facilitation of Learning, Play to Low Facilitation

(1) ----- (7)

(To be scored when mother is playing with child, or showing child how to use toys, etc.)

Score high range if mother:

- a) offers object, encourages use, exploration; b) assists child in use; c) praises; d) labels or describes object; e) offers information; f) elaborates or expands on child's interest; g) shows child how to do something, gives child a chance to try it him/herself; h) introduces new object or focus but does not force it on child.

Score middle range if mother:

- a) works object for child (e.g., does puzzle, uses materials), leaves little chance for child to do it; b) asks test questions and either answers them herself, corrects child frequently, and/or does not leave room for child to do much other than answer the questions; c) tends to give instructions as to the "right way" to do something' focuses on cleanliness, neatness, and/or rigidly proper use of object, discourages exploration and/or creativity.

Score low range if mother:

- a) takes toys from child; b) criticizes child's use of toys; seems inappropriately concerned with mess, potential breakage or misuse of object; c) prohibits child rather than teaching more appropriate use; d) mother does a lot of instructing, directing of child's activity, giving many directive commands and telling child what to do, how to do it; e) ignores child's need for assistance, structure, input and makes little attempt to facilitate child's learning or exploration; f) intervenes with child only for

non-play related activity, such as to clean up after child.

Category 4:

High Support of Autonomy to Low Support

(1) ----- (7)

Score high range if mother:

a) acknowledges, supports child's preferences; b) follows child's lead, focus of attention; c) responds positively to child's requests when appropriate; d) offers choices, suggestions; e) warns child before prohibiting actions; f) stops inappropriate behavior when necessary but is tolerant, rather than punitive or critical; g) requests compliance, offers redirection or gives explanation.

Score middle range when mother:

a) demands compliance, nags, threatens or bribes; b) prohibits actions where necessary but with no redirection or explanation; c) suggests activity or use of object but in an insistent manner which indicates little awareness of child's focus or choice; d) makes unnecessary bid for child's attention when child is occupied, or interrupts child's activity for unnecessary intervention.

Score low range when mother:

a) ignores child's play and/or vocal initiatives; b) responds to child but not to content of child's initiative; c) imposes her own agenda and choices on child, ignoring preferences of child; d) is very unavailable/unresponsive, offering no support or structure within which child can function effectively.

Category 5:

High Contingent Responsivity to Low Contingent Responsivity

(1) ----- (7)

Score high range when mother:

a) responds positively to child's vocal and/or social play initiations; b) responds positively or appropriately to child's requests, needs; c) responds to non-verbal cues such as looking, proximity seeking.

Score middle range when mother:

a) attends to child's need, request, cue after one or two repetitions; b) appears attentive, responding non-verbally, to child's cue or initiations but does not act on it in a clear way; c) responds to child's cue but with modifications, e.g., child brings toy to mother and mother responds to invitation to play but suggests other toy.

Score low range when mother:

a) responds negatively to child's request, cue, etc., seeming to misread or misunderstand it; b) responds negatively to child's initiation such as saying "No, you do it yourself"; c) ignores child's requests, cues, etc. either by not reacting at all or by proceeding with her own agenda.

Category 6:

High Warmth, Nurturance to Low Warmth and Nurturance

(1) ----- (7)

Score high range when mother:

a) demonstrates affection toward child either directly or indirectly; b) reassures, comforts child; c) demonstrates pleasure or shares in child's pleasure in activity, achievement; d) praises child with warmth and pride; e) demonstrates nonverbal aspects of warm affect such as good eye contact, smiling, open and relaxed body language; f) offers food, physical grooming or care in keeping with child's apparent need.

Score middle range when mother:

a) relates to child in generally appropriate way, but with somewhat neutral, matter-of-fact affect; b) does nurturing actions such as feeding or physical care but not at child's request or apparent need; c) has pleasant affect but in a non-specified way, does not seem to be particularly directed toward child; d) encourages and rewards distance, appears to keep the child "at arm's length"; e) seems somewhat preoccupied or self-involved.

Score low range when mother:

a) is very distant, cool; b) seems tense, withdrawn or depressed; c) conveys disapproval or dislike of child.

Appendix D

Scoring Guide for Child Behaviors

Child behaviors are rated on a scale of 1 to 7, with 1 being the high score and 7 the low. Rating should be done on the basis of frequency of the behavior in any given time block, and/or intensity and quality of the behavior. More than one rating can be recorded for any time block, but more than two scores should only be recorded if all the behaviors related to the score seem to have equal weight in terms of frequency of occurrence or intensity and quality within the time block. A general rule of thumb is to rate those behaviors which seem to predominate in characterizing the direction and tone of the interaction in the time block being scored. Note: Some of these behavioral descriptions overlap categories. The rater will have to use his/her judgement as to which category it should be scored in; decision should be based on the context in which the behavior has occurred, the mother/child behaviors which preceded and which follow the instance, and the affective tone of the interaction.

Category 1:

High Maintenance of Contact to Low Maintenance

(1) ----- (7)

These behaviors are scored only when mother is supervising, reading, or otherwise occupied and not involved with child: child must initiate the contact, or, if mother has initiated, child must take the lead in maintaining the contact once initiated. This category does not include instances where the child genuinely needs and seeks assistance, reassurance, or information; behaviors to be scored in this category are more in the nature of the child making general bids for mother's attention; seeking proximity by bringing toys to where mother is sitting and playing close by; carrying on conversations; attempting to engage mother, or otherwise "making sure" that mother is available.

Score high on range when: child engages mother continually in a general conversational manner; child makes bid for attention that is compelling enough to get mother reinvolved in play; child brings toys to where mother is sitting and (either verbally or non-verbally) gets mother involved.

Score middle range when: child makes occasional contact;

when child plays by self but brings toys over to where mother is stationed and plays in that vicinity; when child makes bid for attention, and then returns to solitary play. Score low when: child plays by self for most or all of time block, makes no contact with mother. If mother makes contact with child during this time, score low if child responds in minimal way and returns to solitary play.

Category 2:

High Use of Mother as Resource, Support to Low Use

(1) ----- (7)

These behaviors are scored when they occur as independent actions of the child and/or when they occur as responses to the mother's behavior. They are most likely to occur as responses when the mother is behaving in a facilitating, non-intrusive manner.

Score high range when: child seeks assistance appropriately; seeks reassurance, permission; seeks information; attends to mother when she is demonstrating or explaining something' responds positively to mother's praise, encouragement, and other facilitating behaviors (e.g., child expands on activity, sustains interest, or tries something again in response to mother's encouragement).

Score middle range when: child's response seems neutral (he/she attends to what mother is saying or doing but doesn't show any change in affect or behavior); child approaches mother for help, permission or information but then disregards mother's input.

Score low range when: child resists or ignores mother's input, continues with activity; child clearly needs assistance with task, toy or whatever and does not approach mother; child seems fearful, wary, or seems to need reassurance but does not approach mother.

Category 3:

High Pleasurable, Enjoyment Affect to Low Pleasure Affect

(1) ----- (7)

This category should be scored for each time block. If affect changes during time block, record two scores.

Score high range when: child appears relaxed, is enjoying him/herself, seems secure and at ease. (Laughs, smiles, relaxed body language, and/or seems curious and interested in surroundings, toys.)

Score middle range when: child seems somewhat wary or tense, doesn't smile much, but does show interest in surroundings; child shows little affect, seems "neutral" or reserved, shows interest in surroundings and toys, but in muted way.

Score low range when: child shows negative affects of some intensity (fear, tension, anger, depression) or, intensity is moderate but negative affects predominate over positive ones.

BIBLIOGRAPHY

- Ainsworth, M. (1973). The development of infant-mother attachment. In B. Caldwell & H. Ricciuti (Eds.), Review of Child Development and Research: 3 (pp. 1-95). Chicago: University of Chicago Press.
- Bakeman, R. & Brown, J. V. (1980). Early interaction: Consequences for social and mental development at three years. Child Development, 51, 437-447.
- Baldwin, W. & Cain, V. (1980). The children of teenage parents. Family Planning Perspectives, 12, 34-43.
- Baldwin, W. (1983). Trends in adolescent contraception, pregnancy and childbearing. In E. R. McAnarney (Ed.), Premature adolescent pregnancy and parenthood (pp. 3-19). New York: Grune & Stratton.
- Bee, H. L., Van Egern, L. F., Streissguth, A. P., Nyman, B. A. & Leckie, M. S. (1969). Social class differences in maternal teaching strategies and speech patterns. Developmental Psychology, 1 (6), 726-734.
- Bell, R. Q. (1974). Contributions of human infants to caregiving and social interaction. In M. Lewis & L. Rosenblum (Eds.), The effect of the infant on its caregiver. New York: John Wiley & Sons.
- Benedek, T. (1938). Adaptation to reality in early infancy. The Psychoanalytic Quarterly, 3 (2).
- Borman, K. M. & Fishbein, H. D. (1982). Introduction: Evolution, culture and social change. In K. Borman, (Ed.), The social life of children in a changing society. New Jersey; Lawrence Erlbaum Associates.
- Brazelton, T. B., Koslowski, B., & Main, M. (1974). The origins of reciprocity. In M. Lewis & L. Rosenblum (Eds.), The effect of the infant on its caregiver (pp. 49-75). New York: Wiley & Sons.
- Brazelton, T. B., Tronick, E., Adamson, L., Als, H., & Wise, S. (1975). Early mother-infant reciprocity. In M. A. Hofer (Ed.), The parent-infant relationship (pp. 137-153). London: Ciba.

- Broman, S. H. (1981). Longterm development of children born to teenagers. In K. Scott, T. Field & G. Robertson (Eds.), Teenage parents and their offspring (pp. 195-224). New York: Grune & Stratton.
- Brooks-Gunn, J. & Furstenberg, F. (1986). Antecedents and consequences of parenting: The case of adolescent motherhood. In A. Fogel & G. Melson (Eds.), The origins of nurturance (pp. 233-258). New Jersey: Lawrence Erlbaum Associates.
- Brooks-Gunn, J. & Furstenberg, F. (1986a). The children of adolescent mothers: Physical, academic and psychological outcomes. Developmental Review 6, 224-251.
- Brown, H., Adams, R. G. & Kellam, S. G. (1981). A longitudinal study of teenage motherhood and symptoms of distress: The Woodlawn community epidemiological project. In R. Simmons (Ed.), Research in community mental health: 2 (pp. 183-213). Greenwich, Conn.: JAI Press.
- Card, J. J. (1981). Long-term consequences for children of teenage parents. Demography, 18 (2), 137-156.
- Carey, W. B., McCann-Sanford, T. & Davidson, E. C. (1983). Adolescent age and obstetric risk. In E. R. McAnarney (Ed.), Premature adolescent pregnancy and parenthood (pp. 109-118). New York: Aldine de Gruyter.
- Chilman, C. (1980). Social and psychological research concerning adolescent childbearing: 1970-1980. Journal of Marriage and the Family, 42 (4), 793-805.
- Colletta, N. D. (1983). At risk for depression: A study of young mothers. Journal of Genetic Psychology, 142, 301-310.
- Crockenberg, S. (1987). Predictors and correlates of anger toward and punitive control of toddlers by adolescent mothers. Child Development, 58 (4), 964-975.
- Cvetkovich, G. & Grote, B. (1980). Psychosocial development and the social problem of teenage illegitimacy. In C. Chilman (Ed.), Adolescent Pregnancy and Childbearing (pp. 15-41). U.S. Department of Health and Human Services, Pub. #81-2077.

- Demos, V. (1982). The role of affect in early childhood: An exploratory study. In E. Tronick (Ed.), Social inter-change in infancy: Affect, cognition and communication (pp. 79-123). Baltimore: University Park Press.
- Dreyer, P. H. (1982). Sexuality during adolescence. In B. Wolman (Ed.), Handbook of developmental psychology (pp. 559-601). Englewood Cliffs, N.J.: Prentice-Hall, Inc.
- Edwards, C. P. (1986). Another style of competence: The caregiving child. In A. Fogel & G. F. Melson (Eds), Origins of nurturance. New Jersey: Lawrence Erlbaum Associates.
- Elkind, D. (1981). Understanding the young adolescent. In L. D. Steinberg (Ed.), The life cycle: Readings in human development (pp. 167-177). New York: Columbia University Press.
- Elster, A. B., McAnarney, E. R. & Lamb, M. E. (1983). Parental behavior of adolescent mothers. Pediatrics, 71, 494-503.
- Emde, R. N. (1983). The prerepresentational self and its affective core. In A. J. Solnit, R. S. Eissler, & P. Neubauer (Eds), Psychoanalytic study of the child (pp. 165-192). New Haven: Yale University Press.
- Emde, R. N. * Sorce, J. (1983). The rewards of infancy: Emotional availability and maternal referencing. In J. Call, E. Galenson and R. Tyson (Eds.), Frontiers of infant psychiatry (pp. 17-31). New York: Basic Books.
- Erikson, E. (1950). Childhood and society. New York: W. W. Norton & Co., Inc.
- Erikson, E. (1981). The problem of ego identity. In L. D. Steinberg (Ed.), The life cycle: Readings in human development (pp. 189-199). New York: Columbia University Press.
- Fisher, S. M. (1984). The psychodynamics of teenage pregnancy and motherhood. In M. Sugar (Ed.), Adolescent parenthood (pp. 55-64). New York: SP Medical and Scientific Books, Spectrum Publications.
- Forbush, J. B. (1981). Adolescent parent programs and family involvement. In Ooms, T. (Ed), Teenage pregnancy in a family context (pp. 254-276). Philadelphia: Temple Press.

Furstenberg, F. (1976). Unplanned parenthood: The social consequences of teenage childbearing. New York: Free Press.

Garn, S. M., Pesick, S. D., & Petzold, A. S. (1986). The biology of teenage pregnancy: The mother and the child. In J. Lancaster & B. X. Hamburg (Eds.), School-age pregnancy and parenthood (pp. 77-93). New York: Aldine de Gruyter.

Garcia-Coll, C., Hoffmn, J. & Oh, W. (1987). The social ecology and early parenting of caucasian adolescent mothers. Child Development, 58, (4), 955-963.

Givelber, F. (1983). The parent-child relationship and the development of self-esteem. In J. E. Mack and S. L. Ablon (Eds.), The development and sustenance of self-esteem in childhood (pp. 163-177). New York: International Universities Press.

Grow, L. (1979). Childrearing by young mothers: A research study. New York: Child Welfare League of America.

Hamburg, B. X. (1986). Subsets of adolescent mothers: Developmental, biomedical and psychosocial issues. In J. Lancaster & B. X. Hamburg (Eds.), School-age pregnancy and parenthood (pp. 115-145). New York: Aldine de Gruyter.

Hardy, J., Welcher, D., Stanley, H. & Dallas, J. (1978). Long range outcome of adolescent pregnancy. Clinical Obstetrics and Gynecology, 21, (4), 1215-1232.

Hatcher, S. M. (1973). The adolescent experience of pregnancy and abortion: A developmental analysis. Journal of Youth and Adolescence, 2 (1), 53-102.

Hollingsworth, D. R., Kotche, J. M. & Felice, M. E. (1983). Impact of gynecologic age on outcome of adolescent pregnancy. In E. R. McAnarney (Ed.), Premature adolescent pregnancy and parenthood (pp. 3-19). New York: Grune & Stratton.

Jones, F. A., Green, V. & Krauss, D. R. (1980). Maternal responsiveness of primapara mothers during the postpartum period: Age differences. Pediatrics, 65, 579-584.

Kidder, L. (1981). Research methods in social relations. New York: Holt, Rinehart and Winston.

- Kreipe, R. E. (1983). Prevention of adolescent pregnancy: A developmental approach. In E. R. McAnarney (Ed.), Premature adolescent pregnancy and parenthood (pp. 37-59). New York: Grune & Stratton.
- Lancaster, J. & Hamburg, B. X. (1986). The biosocial dimensions of school-age pregnancy and parenthood: An introduction. In J. Lancaster & B. X. Hamburg (Eds.), Schoolage pregnancy and parenthood (pp. 3-13). New York: Aldine de Gruyter.
- Lawrence, R. (1983). Early mothering by adolescents. In E. R. McAnarney (Ed.), Premature adolescent pregnancy and parenthood (pp. 207-217). New York: Grune & Stratton.
- Lawrence, R. & Merritt, T. A. (1983). Infants of adolescent mothers: Perinatal, neonatal, and infancy outcome. In E. R. McAnarney (Ed.), Premature adolescent pregnancy and parenthood (pp. 149-168). New York: Grune & Stratton.
- Lerner, R. M. & Shea, J. A. (1982). Social behavior in adolescence. In B. Wolman (Ed.), Handbook of developmental psychology (pp. 503-525). Englewood Cliffs, N. J.: Prentice-Hall.
- Levine, L., Garcia-Coll, C. & Oh, W. (1985). Determinants of mother-infant interaction in adolescent mothers. Pediatrics, 75, 23-29.
- Leynes, C. (1980). Keep or adopt: A study of factors influencing pregnant adolescents' plans for their babies. Child Psychiatry and Human Development, 2 (2), 105-113.
- Loevinger, J. (1976). Ego development. Washington: Jossey-Bass.
- Loevinger, J. & Wessler, R. (1983). Measuring ego development: Volume one. Washington: Jossey Bass.
- Mahler, M. S., Pine, F., & Bergman, A. (1975). The psychological birth of the human infant. New York: Basic Books.
- Main, M. & Weston, D. (1982). Avoidance of the attachment figure in infancy: Descriptions and interpretations. In C. M Parkes & J. Stevenson-Hinde (Eds.), The place of attachment in human behavior (pp. 31-59). New York: Basic Books.

- Massie, H. & Rosenthal, J. (1984). Childhood psychosis in the first four years of life. New York: McGraw Hill.
- McDonald, L. & Pien, L. (1982). Mother conversational behavior as a function of interactional intent. Journal of Child Language, 9 (2), 337-358.
- McLaughlin, S. D. & Micklin, M. (1983). The timing of the first birth and changes in personal efficacy. Journal of Marriage and the Family, 45 (1), 47-55.
- Menken, J. (1980). The health and demographic consequences of adolescent pregnancy and childbearing. In C. Chilman (Ed.), Adolescent Pregnancy and Childbearing: Findings from Research (pp. 157-205). U. S. Department of Health and Human Services, Publication # 81-2077.
- Miller, S. H. (1983). Children as parents: Final report on a study of childbearing and childrearing among 12-to-15 year olds. New York: Child Welfare League.
- Minton, C., Kagan, J. & Levine, J. (1971). Maternal control and obedience in the two-year-old. Child Development, 42, 1873-1894.
- Moore, K. A., Hofferth, S. L., Wertheimer, R. F., Waite, L. J. & Caldwell, S. B. (1981). Teenage childbearing: Consequences for women, families and government welfare expenditures. In K. Scott, T. Field & E. Robertson (Eds.), Teenage parents and their offspring (pp. 35-55). New York: Grune & Stratton.
- Newberger, C. M. (1984). Parental conceptions of children and childrearing: A structural-developmental analysis. Doctoral dissertation, University Microfilm International, 78-8622. Ann Arbor, Michigan.
- Oppel, W. C. & Royston, A. B. (1971). Teen-age births: Some social, psychological and physical sequelae. American Journal of Public Health, 61, 751-756.
- Phipps-Yonas, S. (1980). Teenage pregnancy and motherhood: A review of the literature. American Journal of Orthopsychiatry, 50 (3), 403-431.
- Pianta, R. C., Egeland, B. & Hyatt, A. (1986). Maternal relationship history as an indicator of developmental risk. American Journal of Orthopsychiatry, 56 (3), 385-398.

Pressor, H. (1980). Social consequences of teen-age childbearing. In C. Chilman (Ed.), Adolescent Pregnancy and Childbearing: Findings from Research (pp. 249-265). U. S. Department of Health and Human Services: Publication #81-2077.

Progress Report of the Center for Population Research (Jan. 1983). National Institute of Child Health and Human Development.

Quay, H. (1981). Psychological factors in teen-age pregnancy. In K. Scott, T. Field & E. Robertson (Eds.), Teen-age parents and their offspring (pp. 73-89). New York: Grune & Stratton.

Ragozin, A., Basham, R., Crnic, K., Greenberg, M. T. & Robinson, N. M. (1982). Effects of maternal age on parenting role. Developmental Psychology, 18 (Supplement 4), 627-634.

Rogel, M. J. & Peterson, A. C. (1984). Some adolescent experiences of motherhood. In R. S. Cohen, B. J. Cohler & S. H. Weissman (Eds.), Parenthood: A psychodynamic perspective (pp. 85-102). New York: Guilford Press.

Rossi, A. S. (1980). Transition to parenthood. In A. Skolnick & J. Skolnick (Eds.), Family in transition (Third edition) (pp. 389-399). Boston: Little, Brown & Co.

Sahler, O. J. Z. (1983). Adolescent mothers: How nurturant is their parenting? In E. R. McAnarney (Ed.), Premature adolescent pregnancy and parenthood (pp. 219-230). New York: Grune & Stratton.

Schilmoeller, G. L. & Baranowski, M. D. (1985). Child-rearing of firstborns by adolescent and older mothers. Adolescence, 20 (80), 805-822.

Sears, R., Maccoby, E. and Levin, H. (1957). Patterns of child rearing. New York: Row, Peterson & Co.

Spitz, R. (1965). The first year of life. New York: International Universities Press.

Steinhoff, P. G. (1978). Premarital pregnancy and the first birth. In W. B. Miller & L. F. Newman (Eds.), The first child and family formation (pp. 180-208). Chapel Hill, North Carolina: Caroline Population Center, University of North Carolina.

Stern, D. (1977). The first relationship. Cambridge, Ma.: Harvard University Press.

Sugar, M. (1976). At risk factors of the adolescent mother and her infant. Journal of Youth and Adolescence, 5, 251-270.

Tronick, E., Ricks, M. & Cohn, J. (1982). Maternal and infant affective exchange: Patterns of adaptation. In T. Field & A. Fogel (Eds.), Emotion and early interaction (pp. 83-89). New Jersey: Lawrence Erlbaum Associates.

Trusell, J. & Menken, J. (1978). Early childbearing and subsequent fertility. Family Planning Perspectives, 10, 209-213.

Unger, D. G. & Wandersman, L. P. (1985). Social support and adolescent mothers: Action research contributions to theory and application. Journal of Social Issues, 41 (1), 29-45.

Ventura, S. & Hendershot, G. (1984). Infant health consequences of childbearing by teenagers and older mothers. Public Health Reports, 99 (2), 138-146.

Wise, S. & Grossman, F. K. (1980). Adolescent mothers and their infants: Psychological factors in early attachment and interaction. American Journal of Orthopsychiatry, 50 (3), 454-468.

Zongker, C. E. (1977). The self-concept of pregnant adolescent girls. Adolescence, 12 (48), 477-488.

Zuckerman, B., Walker, D., Frank, D., Chase, C., & Hamburg, B. (1984). Adolescent pregnancy: Biobehavioral determinants of outcome. Journal of Pediatrics, 105 (6), 857-863.

