

THE UNIVERSITY OF CALGARY

AN EXPLORATION OF THE CAREER DEVELOPMENT STATUS OF  
PREGNANT AND PARENTING ADOLESCENTS

by

MICHELE A. PASELUIKHO

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES  
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR  
THE DEGREE OF MASTER OF SCIENCE

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

CALGARY, ALBERTA

June, 1992

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ISBN 0-315-79102-0

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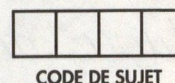




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The undersigned certify that they have read and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "An Exploration of the Career Development Status of Pregnant and Parenting Adolescents", submitted by Michele A. Paseluikho in partial fulfilment of the requirements for the degree of Master of Science.

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## ABSTRACT

The purpose of this study was to examine the degree to which the fundamental life transition of pregnancy to motherhood during the life-stage of adolescence affects the career development status of female adolescents. This study tested the null hypotheses that there will be no group differences on personal and familial variables (parent's marital status, whether they come from single-parent households, the nature of their living arrangements, their source of income); that there will be no significant differences between the groups on measures of self-esteem, career salience, career decision-making self-efficacy, and vocational indecision; that the age of the subjects will not be significantly related to the career measures; and that the three groups scores on career salience, self-esteem, and career decision-making self-efficacy will not significantly predict scores on vocational indecision.

Subjects, 28 pregnant teens, 39 teen mothers, and 48 non-pregnant and non-parenting teenage girls, and 5 pregnant mothers were administered a demographic questionnaire and measures of career decision-making self-efficacy, career salience, self-esteem, and vocational indecision in counterbalanced order. Chi-square analyses and ANCOVA's were performed to test for differences between groups. Results confirmed previous research findings that pregnant and parenting teens come from less stable family backgrounds. No differences between pregnant teens, teen mothers, and non-pregnant and non-parenting teens, controlling for age, were found on the measures of career decision-making self-efficacy, career salience, self-esteem, or vocational indecision.



Results from three separate multiple regressions found that career salience, self-esteem, and career decision-making self-efficacy were predictive of non-pregnant and non-parenting teens' vocational indecision scores, but not the teen mothers. For the pregnant teens, only career salience was a significant predictor of vocational indecision scores. Results and implications for future research and for counselling interventions are discussed.

## ACKNOWLEDGEMENTS

I would like to extend my thanks and appreciation to the following people who were supportive throughout the "extended" period involved in the completion of this work:

My supervisor, Dr. Kris Magnusson, whose "counselling skills" and use of "cognitive restructuring" helped to modify my irrational beliefs around what a thesis should look like, and what time it should be completed by! With respect to the latter, I appreciated not being overly pressured to produce when I fell behind what tentative deadlines we actually set.

To my parents, Bernie and Cindey Paseluikho, who instilled a desire for excellence and learning in me from day one... words cannot express my love and caring enough! You never pressured me to be something I did not want to be; rather, guiding me to find my own dream. I thank-you also for both your concrete and emotional assistance during my years at the University of Calgary. I could never have done it all without you.



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## CHAPTER ONE

## INTRODUCTION

Career development theory and research has been criticized for inadequately describing and explaining the vocational behaviour of women (Betz & Fitzgerald, 1987; Fitzgerald & Crites, 1980). This criticism has been extended to encompass recognition of the difficulty in generalizing many of today's "cutting edge" research findings, which almost exclusively rely on college students for subjects, to specific "at-risk" populations such as pregnant and parenting adolescent girls. Potential application of Super's (1969; 1980) career development theory, as well as Bandura's (1977) self-efficacy theory, have been suggested by authors such as Lent and Hackett (1987) as having utility in explaining the career development of "populations who commonly face special internal or social barriers in the occupational realm" (p. 373). This study is an attempt to redress the lack of knowledge in the literature concerning how self-esteem, career salience, career decision-making self-efficacy, and vocational indecision may be significant to the career development of pregnant and parenting female adolescents.

Background to the Problem

Understanding of the unique career development process of an "at-risk" population such as pregnant and parenting female adolescents is necessarily grounded in adolescent development theory and career development theory. One of the most fundamental tenets of career development theory is proposed by Super (1969, 1980) who asserts that the selection of an occupation is an attempt by the individual to fulfil his or her sense of self. The self-concept is influential in the career development process, and it is theorized to progress in a continuous and



orderly process through adolescence to adulthood. Super (1969; 1980, 1982, 1985) proposes that there is a congruence between self-concept and vocational self-concept. However, one might wonder how "continuous and orderly" the self-concept of pregnant and parenting adolescent girls evolves as they encounter various obstacles that may circumscribe their career development options? The literature suggests that these at-risk youth experience a loss in self-esteem (Borowski & Macdonald, 1982; Burge, 1987; Barth, Schinke & Maxwell, 1983; Tindall, 1988), and congruent with this, that their career aspirations and expectations are not very high (Ortiz & Bassoff, 1985), and that some almost exclusively invest themselves in the role of mother, to the detriment of the development of the work role (Archer, 1985; Shtarkshall, 1987). Little is actually known, however, about how self-esteem impinges on the career development of pregnant and parenting adolescent girls.

Given the transitional nature of adolescent development, the career development that occurs at this stage in life is essentially described as being an exploratory period of discovery and reality-testing (Herr & Cramer, 1988). Unfortunately, untimely early childbearing, viewed by some as a "dual-developmental crisis" to adjust to (Freeman, 1989; Sadler & Catrone, 1983), can have negative consequences on the depth of exploration and career decision-making engaged in. Indeed, Freeman (1989) asserts that early childbearing in adolescence can result in significant losses in the process of career planning and career choice; "failure to develop (or denial of) one's interests and aptitudes regarding career choice can result in loss of control over one's life, which may also delay separation from parents" (p. 23). This is important, for ultimately, the outcomes of adolescent

exploratory behaviour, such as self and environmental awareness, goal-setting, and decision-making directly affect the transition to work and adult adjustment in a number of roles. The role of adolescent career development in determining the future lifestyle of pregnant and parenting teens is critical. Adult adjustment is mediated by the choices made, planning abilities, and life management skills learned in adolescence.

Adolescent career development is widely recognized as being embedded in a personal and social context in which many different factors will ultimately have a meaningful influence on the direction of individual early childbearer's career choices. For instance, the social learning oriented model proposed by Farmer (1985a) suggests that the career motivation of adolescent girls develops through three interacting influences: background variables (e.g., gender, race, social status, school location, age, verbal and math ability), personal psychological variables (e.g., academic self-esteem, success attributions, intrinsic values, home-making commitment, expressive and independent characteristics), and environmental variables (e.g., support from teachers and parents, support for women working, etc.). Astin's (1984) need-based sociopsychological model suggests that motivation, expectations, sex-role socialization, and structure of opportunity are variables that affect career development. Such models can serve as a guide to the empirical exploration and understanding of pregnant and parenting adolescent girls' career development.

Given the importance of career pursuits to an individual's emotional, psychological, economic, and social welfare, it seems crucial that one also examine the role of self-efficacy expectations in the



career development process of adolescent girls. According to Bandura's (1977) self-efficacy theory, self-efficacy expectations, which refer to the beliefs about one's ability to successfully perform a given task or behaviour, may be important mediators of behaviour and behaviour change. This thesis, that psychological and attitudinal variables mediate career-related behaviour, is a recurring theme in both the career development (Astin, 1984; Farmer, 1985a; Hackett & Betz, 1981) and transitions from school-to-work literature (Duggan & Mazza, 1986; Herr & Cramer, 1988; Magnusson & Redekopp, in press; Mangum, 1987). Indeed, Hackett and Betz (1981) propose that self-efficacy might be an important variable to include in models of career development, influencing the achievement behaviour, academic and career decisions, and career adjustment of both males and females. Specifically, they suggest that the socialization-based differences between males and females in self-efficacy for traditionally male and female career domains may be a causal factor influencing females' under-utilization of their career talents and their underrepresentation in many male-dominated careers, especially higher status, higher paying fields. Thus, self-efficacy beliefs can serve as potent internal barriers to females' career choices and achievements. Betz and Hackett (1981), in attending to the process of career decision-making, have discovered that career decision-making self-efficacy is related to vocational indecision. Individuals with lower levels of confidence in their capacity to accomplish specific skills and activities necessary for career decision-making exhibited higher levels of vocational indecision (Taylor & Betz, 1983). Unfortunately, these findings are limited to college students, and the nature of pregnant and parenting adolescent girls' career decision-

making self-efficacy expectations is not known.

Finally, career development theory emphasizes the increasing importance of work for adolescents as sequential career developmental tasks are confronted (Krau, 1989; Nevill & Super, 1986). Havighurst (1964) observed that in each life stage, there is a salient role which appears as a developmental task. Indeed, Super and Nevill (1984) have demonstrated that the developmental readiness of adolescents for the career-choice process is significantly related to their commitment to work and seems to be determined more by their career salience than by their socioeconomic status or sex. When career salience is low, career development may have been minimal. However, the majority of studies demonstrating such findings are typically conducted with college students. Little is known about the career salience of "at-risk" youth, such as pregnant and parenting adolescent girls. One might wonder, for instance, which is more salient to the female adolescent: career or her baby? One may argue that the baby is more salient than career in her life because it is a critical life event to adjust to with implications for one's self-esteem and relationships (Barth, Schinke & Maxwell, 1983; de Anda, 1983; Streetman, 1987). On the other hand, one may argue that career salience and vocational decidedness may be increased because the responsibility of care for an infant gives her incentive to find a way to support herself and her child.

Although the need for further research of career salience and the variables that might affect it with respect to career development of females has been acknowledged implicitly in the literature, such research is lacking with pregnant and parenting adolescent girls. The present investigation attempts to redress this situation and to clarify



the influence that pregnancy and parenting has on the self-esteem, career salience, career decision-making self-efficacy, and vocational decidedness of pregnant and parenting Calgarian adolescents.

#### Definition of Terms

At this point it may be beneficial to clarify the definition of some terms that will be used consistently throughout the thesis. Career development has been defined by Donald Super (1969) as a lifelong process of developing and implementing a self-concept with satisfaction to self and to benefit society. Congruent with this is Tiedeman and O'Hara's (1963) recognition that "career development refers to those aspects of the continuous unbroken flow of a person's experience that are of relevance to (personal) fashioning of an identity "at work" (p. 311). Kokaska and Brolin (1985) describe it as the process of "systematically coordinating all school, family, and community components together to facilitate each individual's potential for economic, social, and personal fulfilment and participation in productive work activities that benefit individual and others" (p. 43). Such definitions share the recognition that career development is a dynamic and multifaceted process that encompasses various life-roles and life-spaces over the life-span. Based on this, it should be apparent that this thesis is utilizing quite a broad and all-encompassing definition of "career development", suggesting that it is a life-long process that entails much more than one's job.

Similarly, career may be described as the dynamic interaction of one's social, educational, recreational, and work experiences over the life span in various life roles (e.g., student, worker, leisurite, citizen, home-maker). Super (1976) stated it best:

The course of events which constitutes a life; the sequence of occupations and other life roles which combine to express one's commitment to work in his or her total pattern of self-development; the series of remunerated and nonremunerated positions occupied by a person from adolescence through retirement, of which occupation is only one; includes work-related roles such as those of the student, employee, pensioner together with complementary avocational, familial, and civic roles. Careers exist only as people pursue them; they are person-centered (p.4).

Relevant to this, transition is a process that involves preparing adolescents for post school life and easing adjustment from a school environment to the responsibilities of adult life. The concepts of career development and transition are frequently intertwined within the process of career guidance, increasing the probability of adolescents having a brighter future and bridging the gap between school and work (Rau, Spooner, & Fimian, 1989).

Inherent in such definitions are the implicit assumptions that: a career is individual or unique in nature, despite the fact that all humans move through predictable stages throughout the life-span; that individuals have the freedom to choose and enact their career choices; and that individuals can plan and manage their lives to some extent. Moreover, it is widely recognized that the process of career development is complex and dynamic, influenced by a wide variety of factors ranging from personal interests and aptitudes to socioeconomic status and gender. The present study, in considering a sample of pregnant and parenting adolescents, has chosen to delineate several specific career



development constructs which have been given considerable attention in the literature. These include: (1) self-esteem, which is the evaluation which the individual makes and maintains with respect to him or herself, expressed largely as an attitude of approval or disapproval (Rosenberg, 1965); (2) career salience, which is the degree to which one attaches value or importance to the role of career in one's life (Greenhaus, 1971); (3) career decision-making self-efficacy, which is defined as the level of confidence one has in oneself to complete various career decision-making tasks (Hackett & Betz, 1981); and (4) vocational indecision, which is the extent to which one is decided on what occupation one has chosen to implement one's self-concept (Osipow, Clarke, Carney, & Barak, 1976).

#### Aim of the Present Study

Given that the incidence of pregnancy among female adolescents is rising and is considered by many to be a growing social problem that perpetuates the feminization of poverty (Kamerman & Kahn, 1988), an examination of the tenets of Super's developmental theory (1969, 1980), as well as Bandura's (1977) self-efficacy theory has direct relevance to the practice and education of guidance counsellors. A major aim of this inquiry is to facilitate a greater understanding of the psychology of the individual female in this situation. This is particularly relevant since the literature demonstrates a considerable gap in knowledge with respect to investigating how pregnancy and parenting in adolescence may influence variables such as career salience, self-esteem, career decision-making self-efficacy, and vocational indecision; especially with a Canadian population that may be considered less disadvantaged than those typically depicted in the literature (i.e., high school drop-

outs, socioeconomically disadvantaged, Black or Hispanic).

#### Research Questions

In comparing three groups of adolescent girls (pregnant adolescents, adolescent mothers, and non-pregnant and non-parenting adolescent girls) the present study will explore the following questions:

1. Do pregnant and parenting adolescent girls differ significantly from a comparison group of non-pregnant and non-parenting adolescent girls on personal and familial variables (e.g., parent's marital status, whether they are from single parent households, whether they live with their parents or have independent living arrangements, and their source of income)?
2. Do pregnant and parenting adolescent girls differ significantly from the comparison group on the career development variables of self-esteem, career salience, career decision-making self-efficacy, and vocational indecision?
3. Is age significantly related to self-esteem, career salience, career decision-making self-efficacy, and vocational indecision in all three groups?
4. What is the relationship between self-esteem, career salience, career decision-making self-efficacy, and vocational indecision, and can career salience, self-esteem and career decision-making self-efficacy variables be used to predict vocational indecision scores of the pregnant teens, the adolescent mothers, and the comparison group?

## CHAPTER TWO

### LITERATURE REVIEW

#### Adolescent Development

Adolescence is perceived as an intermediate time period between two defined periods, childhood and adulthood, and it is widely recognized as a period of major physical, psychological, social, and cognitive development (Blos, 1962; Erikson, 1968; Muuss, 1988). Typically, it is characterized by a large degree of ambiguity and absence of clear limitations, norms, and expectations. Hence, adolescent theory has identified numerous challenges and accomplishments that accompany the transition from childhood to adulthood. To understand the implicit difficulties associated with adolescent parenthood, as well as the career development needs of adolescent girls, it is necessary to examine adolescent developmental theory.

The physiological changes that occur at the onset of puberty include the emergence of sexual maturity and reproductive capacity. However, adolescent girls often experience different aspects of development at different rates, and this process contributes to profound changes in self-perception and evaluation (Blos, 1962; Diamond, Carey, & Back, 1983). For instance, Berger and Shechter (1989) note that a girl may be physiologically childlike but intellectually and cognitively mature, or vice versa. "This discrepancy in developmental levels can result in uncertainty about themselves and their environment. This uncertainty is intensified by the extreme moodiness typical of this stage" (p. 360).

It is likely that the process of physical maturation has implications for self-esteem, which has been conceptualized as "the



evaluation which the individual makes and customarily maintains with regard to himself, expressed as an attitude of approval or disapproval" (Rosenberg, 1965, p.5). Adolescents are inclined to be more concerned with their self-image and what others think of them than are other age groups. A number of studies have documented that adolescent girls report lower self-esteem than boys do (Harper & Marshall, 1991; Richman, Clark, & Brown, 1985). Speculation concerning these findings suggest that the results are a reflection of the evaluation of a society that values masculine attributes over feminine attributes. Moreover, it has been observed that males seem to simply respond to environmental changes (i.e., the transition from elementary school to junior high school), in contrast females' decreases in self-esteem are related to environmental and pubertal issues. For instance, Simmons, Blyth, VanCleave and Bush (1979) have shown that the lowest self-esteem scores were evident for females who had experienced menarche, changed schools, and begun dating. Indeed, stress or the number of life events experienced by adolescents appears to be related to a significant decrease in the level of self-esteem (Youngs, Rathge, Mullis, & Mullis, 1990).

From a cognitive development perspective, the adolescent girl is moving away from concrete operations toward formal operations (Piaget & Inhelder, 1969). The adolescent girl is relying less on objective reality as the basis for intellectual reasoning and more on abstract reasoning. She has the cognitive capacity to reason abstractly and speculatively, to think of hypotheses and imagine their logical consequences, to select and plan information-processing strategies better than children, to discuss abstract topics like love, work, politics, religion, and the meaning of life; and to know what she is

talking about (Clarke-Stewart & Friedman, 1987). Piaget and Inhelder (1969) described this developmental achievement as the "final fundamental decentering". A noted implication of this cognitive transition is the shift in time orientation from the present to the future.

However, the movement towards formal operations is not without its setbacks. Elkind (1967) notes that the adolescent's cognitive development to formal operations is affected by various forms of egocentrism. Characteristics of adolescent egocentrism include the failure to differentiate between one's own thoughts and those of others' and the projection of one's own thoughts and preoccupations onto others. Moreover, in spite of the maturing levels of cognitive functioning, Rickel (1989) observes that periods of high stress and anxiety are likely to cause adolescents to revert to earlier, more concrete forms of information processing. Hamburg (1986) states that this may impair adolescent girls' ability to make effective decisions and plans when placed in novel or disturbing situations related to sexuality, pregnancy, or parenting. Relevant to this, Miller and Moore (1990) state that "adolescents' cognitive and emotional development often lag behind their biological development. Teenage girls who are physically capable of sexual and reproductive behaviour may lack the cognitive and behavioral skills necessary to choose a responsible course of action and understand its longterm consequences and implications" (p. 1027).

Changes in cognitive capacity are accompanied by equally significant psychological alterations. The most significant psychological development in later adolescence, after age 16 or so, is the gradual appearance of a mature identity (Erikson, 1968). A mature

identity involves both an inner sense of uniqueness and a clarification of one's goals, values, and beliefs. The major task at hand in the process of personal identity formation is answering the critical question "Who am I?" The "answer" is partially sought through a process of "free role play experimentation" and peer group involvement in which the adolescent adopts various recreational, social and work-related roles without assuming any fixed adult commitments or responsibilities. Mood swings, inconsistent reality testing and difficulty in regulating self-esteem are characteristic of this stage. Socially, this process is accompanied by the increasing desire to be independent and autonomous of the family (Montemayer, Adams, & Gullotta, 1990), while simultaneously becoming more involved with the adolescent peer cultures (Fasick, 1984).

#### Pregnancy and Parenting in Adolescence

##### The Target Population

Black and DeBlassie's (1985) survey of the literature indicated that school-age girls who become pregnant come from all socioeconomic classes and from both public and private schools. In fact, all races, all religions, and both rural and urban areas of the country are represented. The degree to which adolescent pregnancy is perceived to be a social problem varies with the age of the adolescent girl: the younger the adolescent girl, the greater the perceived risks and costs (de Anda, 1983). Younger adolescent mothers rarely live alone, and are likely to receive tangible assistance from their families (Miller & Moore, 1990). With respect to the longterm consequences, the young adolescent mother is more likely to have limited educational and occupational achievement, and therefore, poorer economic prospects (Furstenberg, Brooks-Gunn, & Morgan, 1987; Rickel, 1989).



### Extent of the Problem

Reports indicate early and high sexual activity among Alberta's teenagers. A 1985 study documented that one in six Alberta teens was sexually active between the ages of 10 and 14, and Alberta Community and Occupational Health reports that 40 percent to 50 percent of Alberta teens between 14 and 18 were likely to be sexually active (Alberta Department of Education, 1989). Moreover, Alberta teenagers are more likely to become pregnant than teens in most other Canadian provinces. Indeed, if current trends continue, the Alberta's adolescent (12-19 years) pregnancy rate will continue to be higher than the Canadian average. An Alberta Community and Occupational Health study documents that between 1974 and 1984, the adolescent pregnancy rate (live births plus abortions) was significantly higher in Alberta than the rest of the country. In fact, the Alberta adolescent pregnancy rate remains 36.8 percent higher than the overall national rate for Canada (Alberta Department of Education, 1989).

### Contributing Factors

Recently, the public concern and interest surrounding adolescent pregnancy has generated research investigating some of the factors associated with adolescent sexual behaviour in the hope that teenage pregnancy rates can be reduced. Variables such as adolescent-parent relationships and communication, socioeconomic status, personal attitudes and needs, and level of education and educational aspirations have been studied in the quest to discover characteristics of adolescents at-risk for early pregnancy. None of these factors exist in isolation of the other and are seen as being complexly intertwined. This is not intended to be an exhaustive review, and only those

variables considered pertinent to the purpose of this study and the career development of female adolescents will be examined.

Educational Aspirations. Donovan and Jessor's (1985) 10-year longitudinal study demonstrated that adolescent girls who experienced sex earlier placed lower value and expectation on academic achievement (i.e., lower grade point averages) and placed higher value on and expectation for independence. Rickel (1989) cites several studies that also suggest that having positive attitudes toward education, higher levels of achievement, and clear educational goals lessens the tendency to engage in premarital sex. Indeed, pregnant teens who have made the decision to obtain an abortion are adolescent girls who have never dropped out, who are doing well in school, and who have higher educational aspirations (Henshaw & Silverman, 1988). It should be noted, however, that such findings are confounded by various socioeconomic, situational and psychosocial variables (i.e., higher socioeconomic status, higher levels of cognitive development, ability to plan for the future, work vs. play orientation, etc.) which may also serve as deterrents from sexual activity in female adolescents.

Personal attitudes/needs. In his review of the literature, Scott (1983) discovered that sex, pregnancy, and childbirth are strongly related to satisfying needs for love, sharing, and a continued close relationship. Indeed, "teenagers, no less than adults, have psychosocial needs" that are clearly linked to pregnancy and childbirth (p. 891). Relevant to this, Ktsanes (1980) discovered that some adolescent girls become pregnant in the hope of receiving more attention from family or friends. She may also hope that her child will fulfil her needs for companionship. Amongst low-income youth, Davis (1980,

1989) notes that their lifestyle and living situations promote attitudes of alienation and fatalism that undermine the planned, rational use of contraceptives.

Family Antecedents. Several reviews of the literature suggest that there is a link between familial background and adolescent girls' sexual behaviour. Adolescent girls who come from lower familial socioeconomic status are more likely to engage in early sexual activity and to become pregnant. This effect may arise from a perceived lack of options and lack of desirable alternatives for the future, as well as community norms and supervision practices (Miller & Moore, 1990). Stiffman, Earls, Robins, Jung and Kulbok's (1987) study indicated that sexually active adolescent girls come from more psychosocially disadvantaged backgrounds than their sexually inactive peers. More of them come from single-parent families, more have a family member with mental health problems, and more have had foster or group home experiences. Moreover, the sexually active girls who became pregnant also came from more psychosocially disadvantaged backgrounds than those who have never been pregnant. There seems to be a consensus in the literature that the rates of teen intercourse are higher for adolescent girls from single-parent homes, for those who feel they have poor communication with their parents, and for those who are unhappy at home (Furstenberg et al., 1987; Miller & Moore, 1990; Rickel, 1989).

#### Consequences of Adolescent Pregnancy

The evidence that school-age childbearing increases the risk of social and economic disadvantage is compelling. Indeed, the social science literature and the popular media have perpetuated the "social stereotype" of the teenage mother as an unemployed woman with many

neglected children who is living on public assistance. This brief literature review of some of the consequences of adolescent pregnancy should be read with the following caveats outlined by Furstenberg and his associates (1987): (1) Although teenage mothers do not do as well as those women who delay childbearing, it is less clear whether the social and economic differences due to the timing of parenthood are large enough to validate the widespread beliefs that early parenthood completely shapes the destiny of a woman's life; (2) Practically all existing studies show great variation in outcomes of early parenthood, however most do not highlight their individual differences. A sizable proportion of adolescent parents recover from the handicaps imposed by early parenthood. Some portion of the adverse consequences attributed to early parenthood are in fact due to prior differences in family backgrounds of early and later childbearers, possibly leading to the overestimation of the impact of premature parenthood of the lifecourse of females; and (3) Very few longitudinal studies that would demonstrate how women adapt to early childbearing over their life course are available. Therefore, the majority of studies which focus on the years immediately following the infant's birth, a difficult transition period, may provide an overly negative impression of female adolescents' adjustment.

Ultimately, researchers' failure to take into account individual variation in outcome has perpetuated the negative stereotype of the teenage mother, resulting in the missed opportunity to examine why some teen mothers have adapted to the transition to parenthood and adult responsibilities (e.g., work) while others are overwhelmed by it.

Economic Consequences. There is an overwhelming consensus in the



literature that adolescent mothers are ensuring for themselves bleak futures distinguished by truncated education, inadequate vocational training, economic dependency and poverty, large single-parent families, and social isolation (Furstenberg et al., 1987; Grindstaff, 1988; Hofferth, 1987; MacKay & Austin, 1983; Rickel, 1989). Future employment opportunities and subsequent earnings are a function of one's educational level, ambitions, and goals. Furstenberg and his associate's (1987) 17-year longitudinal investigation of the career patterns of early childbearers clearly demonstrated that those pregnant teens who had low educational aspirations are (1) more than twice as likely to be on welfare for much of the study's first segment (5 years), (2) over twice as likely to be unmarried, (3) more than three times as likely to have high additional childbearing in the first segment, and (4) four times as likely not to have finished high school by the 5-year follow-up.

Other research has turned to the relationship between educational attainment and early childbearing on the complex effects of dropping out of school. For instance, Hofferth's (1987) review reports that the unequivocal conclusion of numerous studies is that adolescent girls who have a first birth while they are still under 18 are more likely to drop out of school than those who do not. Interestingly, those adolescent girls who give birth at ages 16, 17, and 18 are at a greater risk of not finishing school than those who give birth at younger ages. Hofferth asserts that teens who have a first birth at younger ages are more inclined to remain in their parental home and therefore to stay in school or to return to school. In contrast, older adolescent girls are likely to make other adult transitions simultaneously, such as

establishing independent living arrangements, obtaining employment, or getting married; all of which make it more difficult for the older adolescent to continue her education. The disconcerting reality of this situation is that high school dropouts generally do not catch up completely with their peers.

Fortunately, not all pregnant teens drop out of school and are destined to a life of economic destitution. In fact, Furstenberg and his associates' (1987) 17-year longitudinal study of pregnant teens pathways to success or economic self-sufficiency in adulthood show that those pregnant adolescents who are at the appropriate grade level for their age clearly have higher educational aspirations. They are almost three times as likely to plan on attaining post high school training. The authors suggest that it is likely that those who do better in school also receive more encouragement from parents, teachers, and peers. Finding school pleasurable and rewarding fostered higher educational aspirations. This was particularly apparent in those subjects, relative to those who attended regular schools or dropped out, attending a special school for pregnant teens, which emphasized academic achievement, delaying marriage, and postponing further childbearing.

Social and Emotional Consequences. Adolescent pregnancy is considered a serious social problem in both the United States and Canada (Black & DeBlassie, 1985; Kamerman & Kahn, 1988). It has been demonstrated that undesired early pregnancy creates acute stress, threatens the adolescent girl's need for privacy, and inhibits identity formation (Black & DeBlassie, 1985; Miller & Moore, 1990; Rickel, 1989). Lightman and Schlesinger (1980) documented that Toronto adolescents who kept their babies were characterized as having low self-esteem and

coming from families with poor relationships. Lieberman's (1980) study of unmarried pregnant women documented that they expressed more self-doubt, loneliness, uncertainty, and helplessness relative to their peers. The most dramatic psychiatric outcomes were suicidal behaviours and postpartum psychosis.

Dual-Developmental Crisis. Sadler and Catrone (1983) refer to the phenomenon of pregnancy and parenting in adolescence as a "dual developmental crisis". These authors convincingly argue that early parenthood, like adolescence, may be viewed as a period of developmental crisis in which several notable psychological adjustments must be made. Developmental adjustments accompanying parenthood involve developing empathy with the child; developing mutuality between mother and child; maternal identification; maternal role definition; body-image changes of pregnancy; labor; delivery and the postpartum period; family role assignments and problem-solving and future-planning skills necessary for child-rearing.

Unfortunately, when early parenthood and early and middle adolescence are "superimposed" it becomes apparent that the needs arising from one developmental process conflict with those arising from the other. Sadler and Catrone (1983) describe several instances of this phenomena. The adolescent girl's level of cognitive development (concrete operations or early formal operations) may potentially clash with the parental need to solve problems and think about the future. Aspects of adolescent identity formation, including the need for a period of moratorium, role experimentation, and peer relationships, may directly impact the issues of maternal identification or role definition. The teenage mother's roles as teenager, high school

student, and peer group member may directly conflict with the societal role expectations of a mother. This may limit her time, mobility, and capacity to experiment and explore various roles. This "conflict" is further complicated by a significant gap between the pregnant adolescent's fantasy expectations of parenthood and the reality of parenthood, with respect to life with the baby, parenting, self-esteem, relationships, finances, housing, and life goals (Browne & Urback, 1989). The deleterious implications this may have for the necessary exploration period relevant to adequate career development via work, job-shadowing, volunteering, and educational experiences and opportunities for teen mothers are evident.

#### Adaptation to Transition

It is clear from the literature that pregnancy in adolescence is considered a major life-event or life-transition. Nancy Schlossberg (1981), who has made a seminal contribution to the understanding of human adaptation to transition, asserts that transition can be said to occur if an event or nonevent results in a change in assumptions about oneself and the world and thus requires a corresponding change in one's behaviour and relationships. It can provide individuals with both the opportunity for psychological growth or the danger of psychological deterioration. With respect to early pregnancy and parenting in adolescence, the process of adaptation involves the adolescent initially being totally preoccupied with the transition (i.e., pregnancy; motherhood), such that it permeates all of the adolescent girl's attitudes and behaviours, to integrating the transition into her life. The ease of the adaptation depends on one's perceived and/or actual balance of resources to deficits in terms of the transition itself, the



pre-post environment, and the adolescent girl's sense of competency, well-being, and health. Three major sets of factors influence adaptation to transition: (1) the characteristics of the particular transition, (2) the characteristics of the pre- and post-environment transition environments, and (3) the characteristics of the adolescent experiencing the transition.

An important related concept Schlossberg (1981) introduces is that of "marginality and mattering". She observes that individuals who are in transition typically feel marginal and that they do not matter, such as the adolescent girl making the transition to college, or work, or parenthood. Every time an individual adapts from one role to another or experiences a transition, the potential for feeling marginal arises. Thus, Schlossberg's (1981) model clearly advocates that the adaptation to transition is a dynamic, complex and multifaceted process. It also suggests to educators, mental health professionals, and career development practitioners several important areas in which interventions can be effected to ease the nature of the pregnant and parenting adolescent girl's adaptation to transition.

#### Adolescent Career Development

Career may be described as the dynamic interaction of one's social, educational, recreational, and work experiences over the life span in various life roles (e.g., student, worker, leisurite, citizen, homemaker). According to Super's (1980) career development theory, the selection of an occupation is an attempt by the individual to fulfil his or her sense of self. The self-concept plays a pivotal role in career development, which is theorized to progress in a continuous and orderly process through adolescence to adulthood. Super (1980) proposes that

there is a congruence between self-concept and vocational self-concept. Relevant to this, empirical studies have generally supported the contention that since self-esteem is an aspect of self-concept and since self-concept influences career development, high or low self-esteem may affect the progress of an adolescent's crystallization process. Adolescents' level of career decisiveness also reflects their feelings of self-worth (Chiu, 1990). This is significant as self-esteem is one variable that the literature consistently relates to females' career development and nontraditional career choices (Fitzgerald & Betz, 1983). Indeed, Hughes, Martinek, and Fitzgerald (1985) have demonstrated that, for girls, the relationship between self-esteem and nontraditional attitudes is reliably established as early as the primary years in school, and that high self-esteem is associated with nontraditional career choices.

Given the transitional nature of adolescent development, the career development that occurs at this stage in life is essentially described as being an exploratory period of discovery and reality testing (Herr & Cramer, 1988). Ultimately, the outcomes of adolescent exploratory behaviour, such as self and environmental awareness, goal-setting, and decision-making, directly affect the transition to work and adult adjustment in a number of roles. The role of adolescent career development in determining the future lifestyle of an individual is significant. Adult adjustment is mediated by choices made, planning abilities, and life management skills learned in adolescence.

Adolescent career development does not occur in a vacuum and many different factors will ultimately have significant influence on the

direction of individual adolescent's career choices. The attention to complex and multifaceted factors impinging on one's career development is a recent development in career development theory. Theorists such as Farmer (1985a), Hackett and Betz (1981), Astin (1984), Forrest and Mikolaitis (1986) and Gottfredson (1981) have attempted to redress the inability of earlier theoretical models to adequately explain the vocational development of females (Fitzgerald & Crites, 1980). Perhaps the inadequacy of extant theoretical models in addressing females' vocational behaviour stems from the fact that females experience a complex pattern of career development with additional factors that males do not have to contend with. Indeed, Betz and Fitzgerald's (1987) and Fitzgerald and Crites' (1980) extensive reviews of the literature conclude that females' career development paths tend to be more complicated than those of males', reflecting the negotiation process around competing work and family roles (i.e., Eccles, 1987; Farmer, 1983; 1984; 1985a; 1985b; Farmer & Bohn, 1970; Holms & Esses, 1988), as well as experiencing different career stages or patterns than males. The former is a potent variable considering that many females are socialized to believe that they cannot effectively combine career and family roles. Dissonance results for some females who wish to combine these roles but continue to believe that they cannot without harming the relationship with their partner or the psychological health of their children (Farmer, 1984). Given the societal prescriptions for females' roles, it is not surprising that there is a negative relationship between long-range career motivation and family commitment, particularly among young white females who are strongly committed to homemaking and

family (Farmer, 1985b). Perhaps Forrest and Mikolaitis' (1986) extrapolation from extant theory on female identity development (i.e., Gilligan, 1982; Surrey, 1985), which advocates that females' identity is expressed within a context of connectedness and responsiveness to others, holds significant implications for how females resolve work and family role conflicts, as well as explicating the apparent preference of females for work environments in which connectedness can be expressed and valued.

Farmer's (1985a) model attempts to illuminate the differences between males' and females' career development choice and behaviours, and in her review of the literature on achievement and career motivation, she suggests numerous factors which are significant in females' career development: (1) lower academic self-confidence, competitiveness, and risk-taking; (2) fear of success; (3) vicarious achievement motivation; (4) home-career conflict; (5) myths about women and the world of work; and (6) sex-role orientation. Thus, the social-learning oriented model subsequently proposed by Farmer (1985a) suggests that the career motivation of adolescents develops through three interacting influences: background variables (e.g., gender, race, social status, school location, age, verbal and math ability), personal psychological variables (e.g., academic self-esteem, success attributions, intrinsic values, home-making commitment, expressive and independent characteristics), and environmental variables (e.g., support from teachers and parents, support for women working, etc.).

Alternatively, Astin's (1984) need-based sociopsychological model, which assumes that work motivations are the same for males and females,

asserts that motivation (e.g., survival, pleasure, contribution), sex-role socialization (e.g., play, family, school, work), and structure of opportunity (e.g., distribution of jobs, sex typing of jobs, discrimination, job requirements, economy, family structure, reproductive technology) and expectations (re: perceptions of one's capabilities and strengths, the options available and the kinds of work that can best satisfy one's needs) are variables that affect the career choice and work behaviour of both males and females. Recent trends affecting females' opportunity structure is resulting in more equality with males, such that females' labor force participation has increased and their career aspirations and choices have become increasingly non-traditional. Astin (1984) suggests that, "the socialization process probably sets limits to changes in the structure of opportunity, whereas the structure of opportunity ultimately influences the values that are transmitted through the socialization process" (p. 122). Although Brown and his associates (1990) note that Astin's (1984) model possesses some intuitively valid ideas, it is clear that substantial criticisms exist. Specifically, Astin's (1984) lack of differentiation between paid and unpaid work is considered a major oversight by Betz and Fitzgerald (1987). Moreover, advocating that both women and men have the same work motivations overlooks the societal predominance of the male work model which assumes that work is the primary life-role, thus giving little attention to the barriers that females must contend with in attempting to balance both work and family (i.e., Farmer, 1985a; 1985b).

Gottfredson (1981) advocates a theoretical model of "circumscription and compromise" to illuminate how males' and females'



differences in occupational aspirations arise from a developmental perspective. Essentially she asserts that the reason why females are in lower-status, lower-level positions in the work-force is that these occupations are congruent with their self-concepts and views about accessibility. The model embraces numerous tenets; however, Meier's (1991) extensive review of the literature demonstrates that the most recent tests of Gottfredson's (1981) propositions have relatively little empirical support.

Self-efficacy expectations. Ultimately, due to the significance of career pursuits to an individual's emotional, psychological, economic, and social welfare, it seems crucial that one also examine the role of self-efficacy expectations in the career development process of adolescents. According to Bandura's (1977) self-efficacy theory, self-efficacy expectations, which refer to beliefs about one's ability to successfully perform a given task or behaviour, may be important mediators of behaviour and behaviour change. Indeed, Hackett and Betz (1981) propose that self-efficacy might be an important variable to include in models of career development, influencing the achievement behaviour, academic and career decisions, and career adjustment of both males and females. Specifically, they suggest that the socialization-based differences between males and females in self-efficacy for traditionally male and female career domains may be a causal factor influencing female's underutilization of their career talents and their underrepresentation in many male-dominated careers, especially higher status, higher paying fields. Thus, self-efficacy beliefs can serve as potent internal barriers to females' career choices and achievements.

Indeed, Betz and Hackett (1981) have found significant and consistent sex differences in self-efficacy with regard to traditional versus nontraditional (for females) occupations. Moreover, numerous studies have demonstrated the utility of self-efficacy in predicting college major choices, perceived career options, academic achievement, and persistence in academic programs (e.g., Lent, Larkin, & Brown, 1986, 1987; Rotberg, Brown, & Ware, 1987) as well as a variety of other vocational phenomena (see Lent & Hackett, 1987, for a review). An interesting finding of Layton's (1984) was that career salience moderated the effects of self-efficacy on occupational consideration. Career self-efficacy was a better predictor of college major choice for women with high versus low career salience than was locus of control. Career salience moderated the effects of self-efficacy on occupational consideration. Nevill and Schlecker (1988) also report that strong self-efficacy expectations and assertiveness were associated with increased willingness to engage in the career-related activities of non-traditional occupations, but not traditional ones.

More recently, the research has shifted to investigating the process of career choice from a self-efficacy perspective (i.e., how decisions are made). Taylor and Betz (1983) have developed a reliable measure (coefficient alpha = .97 for internal consistency reliability) of self-efficacy expectations with regard to 50 tasks or behaviours required in career decision making. The 50 decision-making tasks included in the inventory are based on the five Career Choice Competencies postulated in Crites' (1965) model of career maturity. Therefore, the measure consists of five scales: (1) accurate self-

appraisal, (2) gathering occupational information, (3) goal selection, (4) making plans for the future, and (5) problem-solving. Normative data collected from their sample of college students indicated that students in general report considerable confidence in their ability to perform the tasks necessary to career decision making. Levels of self-efficacy did not differ significantly on the basis of gender or the category of decision-making tasks assessed. Interestingly, despite the fact that levels of self-efficacy were, on average, relatively strong, levels of self-efficacy were significantly predictive of levels of career indecision; students who indicated less confidence in their ability to complete decision-making tasks were more undecided than those who had indicated higher levels of confidence. Taylor and Betz (1983) caution that causal inferences between vocational decidedness and stronger self-efficacy cannot be inferred from correlational studies. Therefore, it remains unknown whether stronger self-efficacy expectations are a consequence of vocational decidedness or an antecedent to vocational indecision. More recently, Taylor and Popma (1990) have replicated the finding that career decision-making self-efficacy is a predictor of vocational indecision in college students; in fact it was the only significant predictor amongst occupational self-efficacy, locus of control, and career salience. Similarly, Blustein's (1989) study found that career decision-making self-efficacy, in contrast to goal-directedness, was the most prominent predictor of exploratory activity.

Unfortunately, the majority of these self-efficacy studies concentrate on university students and Lent and Hackett (1987) suggest

that it is time to extend the self-efficacy model to more diverse populations (i.e., children, adolescents), settings, and developmental tasks, as well as to at-risk populations who commonly face special internal and social barriers in the occupational realm (e.g., pregnant and parenting adolescents). "Studying a wider array of career behaviour with noncollege subjects would enhance the generalizability of findings and applied relevance of the model" (p.372).

Career salience. In addition to self-efficacy, the personal characteristic construct of career salience (and similar constructs of career orientation and career commitment) have become increasingly important within the context of understanding motivation to work (Brooks, Holahan, & Galligan, 1985; Cochran, 1983; Greenhaus, 1971; 1973; Greenhaus & Sklarew, 1981; Greenhaus & Simon, 1977; Hackett, Esposito, & O'Halloran, 1989; Komarovsky, 1982; Krau, 1989; Noe, Wiggins Noe, & Bachhuber, 1990; Stumpf & Lockhart, 1987; Super, 1982; Super & Nevill, 1984; Watson & Stead, 1990). Super (1982) has suggested that, "salience should be used as the inclusive term for the attitudinal, cognitive, and behavioral aspects of the relative prominence or importance of any role (e.g., worker)" (p. 96).

Chartrand and Camp (1991) observe that early studies of females' career development used career orientation as a dependent variable (Betz & Fitzgerald, 1987), with a distinction often drawn between career versus homemaking orientation. Recently, this distinction has given way to an assessment of the importance of career independent of other life roles and to the use of career commitment constructs, such as career salience, as either mediating or predictor variables. The construct of

career salience has been assessed via several measures developed in the early 1970's, with Greenhaus' (1971) Career Salience Questionnaire (CSQ) having the greatest impact in the literature by virtue of its continued use in research. The CSQ assesses the importance of work and a career in one's life and includes three dimensions: attitudes toward work, degree of vocationally relevant planning and thought, and the relative importance of work (Greenhaus, 1971; 1973). Adequate psychometric qualities has been documented across several studies (Greenhaus, 1973; Greenhaus & Simon, 1977; Greenhaus & Sklarew, 1981).

The development and use of reliable career salience measures are important contributions to the literature, considering the fact that career development theory has historically emphasized the increasing importance of work for adolescents as sequential career developmental tasks are confronted and new roles integrated (Krau, 1989; Nevill & Super, 1986; Super, 1980; 1982). Havighurst (1964) observed that in each life stage, there is a salient role which appears as a developmental task. Indeed, Super and Nevill (1984) have demonstrated that the developmental readiness of adolescents for the career-choice process is significantly related to their commitment to work and seems to be determined more by their career salience than by their socioeconomic status or sex. When career salience scores are low, career development may have been minimal. This finding has important implications for counselling practice, since "knowing how motivated students are to pursue the working role, and why they want to pursue it if so motivated, is basic to planning a career education program relevant to students needs and readiness" (p. 42).



Relevant to this, Greenhaus and Simon (1977) have demonstrated that low career salience is associated with a relatively high incidence of vocational indecision, and there is evidence (Greenhaus, 1973) that high career salient students are more strongly motivated to choose a fitting or congruent occupation than are low career salient students. Career salience is also positively related to participation in self-related and work-related exploration (Greenhaus & Sklarew, 1981). Similarly, Noe, Wiggins Noe, & Bachhuber's (1990) recent investigation of the correlates of career motivation confirmed that career salience was related to all three dimensions of career motivation; the greater the importance of work and career to participants the more likely they were to seek information from others concerning career goals and skill strengths and weaknesses (insight), pursue educational opportunities related to their job and career (identity), and demonstrate initiative at work (resilience). Watson and Stead (1990) demonstrated that career salience in White South African adolescents in grades 8-12 increased with grade and were greater for females; they found that socioeconomic status had no effect on salience but indicated that it was affected by the cultural milieu. Indeed, as predicted, Watson and Allan (1990) found that South African undergraduates enrolled in career-directed college programs possessed greater career salience scores than students in general degree programs.

Unfortunately, the majority of the studies demonstrating such findings are typically conducted with university students. Little is known about the career salience of middle to older adolescents in high-school, or specific populations such as "at-risk" youth (e.g., pregnant

teens and adolescent mothers). One might wonder, for instance, which is more salient to the pregnant or parenting female adolescent: career or her baby? One may argue that the baby is more salient than career in her life because it is a critical event to adjust to with implications of one's self-esteem and relationships (e.g., Barth, Schinke, & Maxwell, 1983; de Anda, 1983; Streetman, 1987). On the other hand, one may argue that career salience and vocational decidedness may be increased because the responsibility of care for an infant gives her incentive to find a way to support herself and her child. Although the need for further research of career salience and the variables that might affect it with respect to career development of females has been acknowledged implicitly in the literature, such research is lacking with pregnant teens and parenting adolescents.

#### Adolescents' Transition to Work

Thus far, this review of vocational theory and research has demonstrated that contemporary adolescent girls' management of career development tasks (e.g., identity crystallization, exploration of interests, values, and beliefs, work-role experimentation, and tentative decision-making and planning) may be a process characterized by a fluctuation between ambivalence and certitude. The degree to which the adolescent girl effectively manages career development tasks is a function of numerous factors impinging on individual adolescent's career development pathways. One prominent feature of this process that some career development theories do not explicitly address concerns the notion of transition: that process which involves preparing adolescents for post school life and easing the adjustment from a school environment

to adult life. Pertinent to transition, a burgeoning literature addresses what personal characteristics, skills and attitudes are necessary for adolescents to successfully make the transition from school to work (Duggan & Mazza, 1986; Herr & Cramer, 1988; Magnusson & Redekopp, in press; Mangum, 1987). This is a critical factor, considering the fact that 30 percent of Canadian youth drop out of high school, only 35 percent are pursuing their education beyond high school, and of the 17 percent who do enter university programs, fewer than half will graduate (Alberta Department of Education, 1989).

The transition to work is not an easy process for many adolescents, particularly disadvantaged or at-risk youth (Crawford, 1988; Herr & Cramer, 1988; Mangum, 1987). Compelling evidence from around the world indicates that working class youth do not choose careers, they find jobs (Hamilton & Powers, 1990). Drier and Ciccone (1988) observe that the process and problems of transition are different for males and females, as well as for minorities, bilinguals, and disadvantaged youth, and youth with handicapping conditions. Indeed, Miller and Oetting (1977) ascertained some thirty-seven specific barriers to work in eleven categories, which were reported by 409 economically and vocationally disadvantaged individuals in Denver. These barriers included child care, health, transportation, social and interpersonal conflicts, financial problems, legal problems, emotional-personal problems, drug and alcohol abuse problems, job qualifications, discrimination, and language and communication problems.

These specific barriers, which circumscribe career development options, are often associated with the increased difficulties of at-risk

youth, those youth who are at high risk of failing in the labor market (e.g., unemployment) or experiencing underdeveloped career life-plans. Naylor (1989) cites one of the most comprehensive profiles of what constitutes "at-risk", listing 14 factors that place youth in serious jeopardy of dropping out of high school, thus contributing to less successful experiences in the labor market: being one or more years behind in their grade level in reading or math (in grades K-8) or three or more credits behind their age/grade level in credits earned toward graduation (in grades 9-12); being chronically truant; being a school-age parent; having a history of personal and/or family drug and alcohol abuse; having parents who have low expectations for their child's success or who place little value on education; being a victim of physical, sexual, or emotional abuse; experiencing family trauma (such as death or divorce); being economically, culturally, or educationally disadvantaged; and coming from a family with a history of dropouts. Additional risk factors include certain types of handicaps and limiting conditions, low intelligence test scores, low self-concept and social maturity, and feelings of alienation. Similar profiles of at-risk youth also include being a pregnant or parenting adolescent girl as a significant factor (Dougherty, 1990; Missouri University, 1989; Tindall, 1988). Finally, psychosocial development factors of at-risk youth, as identified by Oregon Career Information System co-ordinators, included lack of goals or career options, lack of motivation, and poor image or self-concept (Tindall, 1988).

Proponents of "employability programs" advocate that skill development (e.g., employability skills, job search strategies, resume

writing, interview skills, or job maintenance skills) is the primary means for facilitating adolescents' transition and career development needs (Duggan & Mazza, 1986); however it is clear from the barriers that at-risk youth face in securing a successful transition to work that a generic skills emphasis is simplistic and inadequate. Indeed, Mangum (1987) persuasively argues that effective transitions from school to work must also take into account constraints imposed by cultural norms, labor market realities, and the stages of human development. Herr and Cramer (1988) concur that, "as much as many persons need to acquire occupation task skills, they also need assistance to clarify or strengthen self-attitudes and to change personal habits, emotional responses to life situations, attitudes toward work, planning skills, and methods of adjusting to new jobs" (p. 67). Kazanas (1978) suggests that although job skills are important, that affective work competencies (i.e., those characteristics, habits, values, or attitudes one ascribes to) are also critical to either transition or work adjustment.

A pervasive theme in the literature is that skills (the main focus of many employability programs) are not enough, and that critical variables such as self-esteem, career motivation, self-efficacy expectations, and salience for the work-role are overlooked, as is the ability to adapt to change (Herr & Cramer, 1988; Magnusson, Day, & Redekopp, 1988; Magnusson & Redekopp, in press). In fact, Magnusson and his associates (1988) clearly state that "the efficacy of skill acquisition is mediated by motivational or salience factors" (p. 3). This is congruent with Super's (1985) suggestion that, if work is not important, readiness to make occupational decisions and to cope with

vocational development tasks cannot be adequately assessed; such individuals have no reason for vocational exploration or planning, for learning to make career decisions, or for acquiring occupational information.

In summary, work-related attitudes and knowledge are cited as a major area of improvement needed in youth (Duggan & Mazza, 1986; Herr & Cramer, 1988), particularly at-risk youth who demonstrate attitudes of cynicism, disinterest or alienation from work. Mangum (1987) states that "irresponsibility is a far more serious barrier to successful youth access to the labor market than inexperience and lack of skill" (p. 7). Unfortunately, research demonstrates that traditional approaches to employment transition do not attempt to assess pre-entry attitudinal variables of potential participants, such as pregnant and parenting school-age adolescents; variables which mediate the success of designated interventions (Roosa, 1986). Indeed, Magnusson (1992) advocates that the first phase of transition programs should address salience; where salience for the transition is low, it is advisable that one develop strategies to foster transition relevance.

#### Career Development of Pregnant and Parenting Adolescents

This section contains a review of research concerning the career development status of pregnant and parenting adolescent girls, a task complicated by the fact that the research on variables considered significant to the pregnant and parenting adolescents girls' career development and employability transition process is often seen as intertwined with research on the career development and transition needs of at-risk youth. This is the case because profiles of at-risk



youth/students typically incorporate being pregnant or parenting in high school, and there is a trend for school-based programs to consider the career development and transition needs of this target population to be similar to those designed for potential drop-outs (Burge, 1987; Coyle-Williams & Wermuth, 1990; Imel & Kerka, 1990; Kerka, 1988; Roosa, 1986). This makes intuitive sense when it has been cited that eighty percent of teenage mothers drop out of high school (Ferguson & Reed, 1987).

Whether or not pregnant and parenting adolescent girls are in special programs or mainstreamed into regular classes, it is recognized that they need special support to stay in school. This support is necessarily built on the recognition that these unique students have problems (such as low self-esteem, time and stress management difficulties, or few long-term or short-term goals) that must be faced before the educational and career development process can continue effectively (Burge, 1987). However, school-based interventions are not without criticism. Indeed, Roosa (1986) suggests that school-based interventions are often designed for adolescent mothers who already have "high educational aspirations and are motivated to continue, who have strong social support networks, who have sources of free child care or who can afford other sources of childcare, and for whom transportation is not a problem.... They are the group most likely to be served by any type of intervention, and evaluations of adolescent parenting programs are most likely to be based upon this group" (p. 316). Relevant to this, it is no wonder that Burge (1987) describes such programs as being "effective", despite the fact that little research on the long-term results of such programs for single mothers and their children is

available. Longitudinal studies are needed.

Certainly many pregnant and parenting adolescent girls want to work or to resume their education after their children are born, but the obstacles they face are formidable. For instance, Archer (1985) notes that there is a naivete with regard to the ability to maintain both work and family priorities; a young mother in the 12th grade states: "I see no conflict between school or work and taking care of my kids. I'm a mother now and my mom or my sister, who has 2 kids of her own, take care of him. I'm tired at night and I don't get to do what I want for myself much, but my baby is more important now anyway" (p. 309). Archer (1985) speculates that the juggling act around critical life-roles of parent, student, and worker could result in long-term psychological and physical damage if pregnant and parenting teens are not educated about the toll that each role can take on one's time and strength. Moreover, the National Child Labor Committee (1985) reports that other obstacles pregnant and parenting girls often face include: the family being a source of tension; lack of basic literacy; ineligibility for government sponsored employability programs; unrealistic understanding of what work entails, socialization in traditional notions of "women's work" which delimit occupational aspirations and expectations; lack of personal resources needed to be self-supportive; inability to negotiate the many service systems available to reach their goals; difficulties in managing the various demands on their time; low self-confidence, feelings of powerlessness and passivity, as well as lacking the attitude to succeed. Of the latter, the National Child Labor Committee (1985) observes that what strikes many people as being a motivation problem may in fact be

resignation in the face of insurmountable odds.

Irrespective of the "rationale" for lack of self-confidence or motivation, such attitudinal constraints are powerful. Ortiz and Bassoff (1985) observe that adolescent welfare mothers are more likely to exhibit lost optimism and lowered expectations; in contrast, non-parents expressed more perceived control over their lives and were more likely to have specific career goals. Moreover, Stein, Newcomb, and Bentler (1990) note that,

it has been theorized that females lose ground in personal development and self-esteem during the early years of adulthood, since their formal preparation for successful parenthood is scant and often unrealistic... Parenthood may also preclude, at least for some women for some times, the attainment of other life aspirations and goals, such as education and career (p. 321).

Their study did confirm that those females who are not developing career or job competencies have compromised self-esteem, irrespective of having children. It was also found that the lowest-self esteem scores were for non-working or part-time working females with children. One can only speculate what implications these findings hold for adolescent girls who are confronted with the task of integrating the role of parent into their lives earlier than human development theories typically depict.

It is unknown whether reduced career or life aspirations may precede or rationalize some teenage mothers' decisions to leave school; there is little data on this point. Zellman (1981) in interviewing over 100 teenage mothers, discovered that most did not revise downward their

career aspirations, predominantly because these aspirations were already low. However, those teen mothers whose aspirations required college or postgraduate work did tend to revise their plans downwards. In adapting to the transition to parenting they planned on less education and reduced career options that promised higher immediate earnings after delivery; more "realistic choices". A few adolescent mothers did not choose to modify their career goal, but had decided to postpone the necessary advanced education, for the meantime.

Contrary to these findings, Theriot, Pecoraro, and Ross-Reynolds (1991) demonstrated that teen mothers mention goals typical of teens who are not parents: to have financial security, marriage, school, a better life, and a career. Several of the socioeconomically disadvantaged young mothers also could envision themselves in multiple/mixed roles (professional, social, single, spouse, and mother). This is contrary to Shtarkshall's (1987) previous finding that socioeconomically and educationally disadvantaged females in late adolescence project motherhood as being a dominant feature in the near future. Farber (1989) also did not find that pregnancy and parenting is associated with low aspirations. Rather,

these young mothers, regardless of class or race, recognize the value of education as a means of ensuring a "better" life--both in terms of fulfilling familial and personal expectations and as preparation for working to support themselves and their children. Such recognition indicates awareness and incorporation of mainstream values about individual responsibility for productive activity (Farber,

1989, p. 524).

Unfortunately, young mothers of different socioeconomic status who hold similar conventional aspirations still may result in disparate realities. There is no guarantee that wanting a certain standard of living commensurate with a particular occupational status is synonymous with having the ability to translate this desire into behaviour. It seems that more affluent teens are more equipped in this respect; they can project themselves into an imaginable future and can realistically assess how to go about attaining their goals. On the other hand, less affluent mothers appear to be less clear about their plans for the future and for how they will obtain their desired education or employment. This is complicated by low self-efficacy expectations; they tend to exhibit a "passive acceptance of the future, a profound doubt that they can muster the wherewithal to master their lives. They seem to believe that the future will probably resemble the present despite their best efforts to the contrary" (Farber, 1989, p. 529).

Whatever the status of occupational aspirations it is clear that:

Complex choices regarding gender role performance, dual roles, and educational and occupational attainment are not made in isolation, but together form the basis for career choices of young mothers. In other words, decisions about how dual roles of work and child care will be combined and whether females can seek positions on an equal basis with males may have an impact upon young mothers' future career choices (Kissman, 1990, p. 710).

In summary, this review of the literature suggests that there is a

considerable gap in the literature with respect to investigating how pregnancy and parenting in adolescence may influence variables recently designated by researchers as significant to the career development process, particularly with a Canadian population considered to be less disadvantaged than those typically depicted in the literature (e.g., high school drop-outs; socioeconomically disadvantaged). Moreover, although career salience, and career-decision making self-efficacy are predictors of vocational indecision with populations of college students (Greenhaus, 1971; Greenhaus & Simon, 1977; Taylor & Betz, 1983; Taylor & Popma, 1990), it is not known whether they are predictors of vocational indecision in pregnant and parenting teens or high school students. Burge (1987) apparently concurs with this critical appraisal of the research. She states that:

research designs must include exploration of the effects of age, life stage, and other situations on the career education needs of single parents... Most research has focused on the prototypical single parent (black, urban, poor, female, never married); much more information is needed on other groups of single parents, especially those who are less disadvantaged. The relative importance of home and work factors is an area of research that needs further study (p. 31).

Low, Moely, and Willis (1989) also assert that further research is necessary to explore the development of career exploration in both pregnant and non-pregnant young women in order to reveal basic developmental differences.



### Research Questions

The paucity of research literature relevant to the career development of Canadian pregnant and parenting adolescent girls has inspired several research questions. In comparing three groups of adolescent girls (pregnant teens, teen mothers, and non-pregnant and non-parenting teenage girls) the present study attempts to explore the following questions:

1. Do pregnant and parenting adolescent girls differ significantly from a comparison group of non-pregnant and non-parenting adolescent girls on personal and familial variables (e.g., parent's marital status, whether they are from single parent households; whether they live with their parents or have independent living arrangements, and their source of income)?
2. Do pregnant and parenting adolescent girls differ significantly from the comparison group on the career development variables of self-esteem, career salience, career decision-making self-efficacy, and vocational indecision?
3. Is age significantly related to self-esteem, career salience, career decision-making self-efficacy, and vocational indecision in all three groups?
4. What is the relationship between self-esteem, career salience, career decision-making self-efficacy, and vocational indecision, and can career salience, self-esteem, and career decision-making self-efficacy variables be used

to predict the vocational indecision scores of the pregnant adolescent girls, the adolescent mothers, and the comparison group?

### Hypotheses

Given the exploratory nature of this study, the following hypotheses will be tested:

#### Hypothesis #1

H<sub>0</sub> : There will be no significant differences between the pregnant adolescents, the adolescent mothers, and the comparison group of non-pregnant and non-parenting adolescent girls on personal and familial variables of parent's marital status, whether they come from single-parent households, the nature of their living arrangements, and their source of income.

#### Hypothesis #2

H<sub>0</sub> : There will be no significant differences between the pregnant girls, the adolescent mothers, and the comparison group of non-pregnant and non-parenting adolescent girls on measures of self-esteem, career salience, career decision-making self-efficacy, and vocational indecision.

#### Hypothesis #3

H<sub>0</sub> : The age of pregnant adolescents, adolescent mothers, and the comparison group subjects will not be significantly related to measures of self-esteem, career salience, career decision-making self-efficacy, and vocational indecision.

#### Hypothesis #4

H<sub>0</sub> : Pregnant girls, adolescent mothers, and the comparison group's scores on measures of career salience, self-esteem, and career decision-making self-efficacy will not significantly predict scores on vocational indecision.

## CHAPTER THREE

### METHODOLOGY

This chapter briefly describes the subjects used in the study, the procedures the researcher used to obtain the data, the self-report instruments used to assess the subjects' self-esteem, career salience, career decision-making self-efficacy, and vocational indecision, and the statistical analyses performed on the data.

#### Subjects

Participants in this study were recruited from the Louise Dean Alternative High School for pregnant and parenting female adolescents and the Ernest Manning High School, which has a special program for adolescent mothers. Both schools are located in residential neighbourhoods in Calgary, Alberta. A total of 125 subjects were recruited, with 123 agreeing to participate in the study. Three of the questionnaire booklets were considered inadequate and were not included in the statistical analyses. Therefore, data from 120 subjects (96% response rate) were used for the final analysis.

#### Demographic Data

In order to test for group differences the sample was divided into four groups based on pregnancy and parental status; 28 girls were pregnant, 39 girls were mothers, 48 girls were neither pregnant nor parenting, and 5 girls were pregnant mothers. (The latter group was dropped from several statistical analyses due to an inadequate number of subjects). The ages of the sample of high school students ranged from 15 to 21 years. It was considered important in this study to have a wide variation in age because age and life stage are considered possible

determinants of one's level of career development exploration and planning (Havighurst, 1964; Super, 1985). The mean age was 17.21 years, with a standard deviation of 1.37 years. Since familial/personal background has been linked to both teen sexuality and pregnancy and educational/career goals (Furstenberg et al., 1987; Miller & Moore, 1990; Rickel, 1989), data was also collected on the marital status of the subject's parents, whether they came from single parent households, whether or not the subjects lived at home, and the subjects' source of income. Based on the entire sample, 39 parents were divorced, 8 separated, 56 married, 13 never married, 2 widowed, and 2 were deceased; 44 subjects came from single-parent households, 75 did not, and one subject did not respond to this item. Seventy-seven subjects reported living at home with their parents, the remaining 43 had alternative independent living arrangements. Moreover, the source of income for these subjects included part-time work (n=4), social assistance (n=34), parental support (n=64), and a category designated other (n=18), which included bursaries, loans, and some assistance from relatives.

### Procedure

Arrangements were made with the principals and counsellors of the Louise Dean and Ernest Manning High Schools to recruit subjects from their career planning classes in order to fill out a battery of research inventories. Each data collection session lasted approximately one hour. Data was collected from Louise Dean on two occasions, and from Ernest Manning on three occasions.

Upon arrival the researcher provided the subjects with a brief overview of the research study. Prior to administration of the

inventories, subjects were asked to read and sign a consent form (See Appendix A); subjects who were younger than 16 years of age had already received parental consent (See Appendix B). Following administration of a questionnaire requesting demographic information (See Appendix C), the Career Decision-Making Self Efficacy Scale (Taylor & Betz, 1983), the Career Decision Scale (Osipow, Carney, Winer, Yanico, & Koschier, 1976), The Rosenberg Self-Esteem Scale (Rosenberg, 1979), and the Career Salience Questionnaire (Greenhaus, 1971) were administered in counterbalanced order. The purpose of counterbalancing the order of the questionnaires was to ensure that subjects' responses to each dependent variable were not biased by the way they responded to the previous questionnaire.

### Instruments

Vocational indecision was assessed using the Career Decision Scale (CDS; Osipow et al., 1976). The CDS, designed to measure vocational indecision in college students, consists of 18 items relevant to various aspects of vocational decision making. Responses are acquired using a 4-point Likert scale with response alternatives ranging from "exactly like me" (scored 4) to "not at all like me" (scored 1). Items 1 and 2 measure the extent to which a respondent endorses statements reflecting a definite choice of an education major (Item 1) and a career alternative (Item 2). The summation of Items 1 and 2 provides an index of vocational/educational decidedness. The sum of Items 3-18 provides an index of vocational indecision. Indecision scores may range from 16 to 64, with higher scores indicating greater degrees of vocational indecision. Test-retest reliability coefficients for the CDS were .90

and .81 for two samples of college students over a 2-week test-retest period (Osipow et al., 1976).

Osipow and his associates (1976) also conducted a factor analysis on the 16 indecision items and found that four factors accounted for over 81 percent of the variance. The first factor seemed to have two basic elements that involved lack of structure and confidence in approaching decision-making and choice anxiety. The second factor was seen as suggesting a perceived or actual external barrier to a preferred choice. Factor three was interpreted as an approach-approach conflict. The fourth factor seemed to indicate a personal conflict over making the decision. More recent studies have added to the initial support for the validity of the CDS (Rogers & Westbrook, 1983; Slaney, 1981).

After extensive research of the CDS, Osipow (1980) concluded that the Scale has the following attributes: acceptable levels of test-retest reliability; validity demonstrated in by a number of studies showing relevant changes after interventions designed to reduce career indecision; a factor structure that is stable upon replication; and construct validity by finding appropriate relationships to a variety of hypothetical constructs (e.g., high levels of indecision are associated with an external locus of control and fear of success, high career maturity is associated with low indecision), and the ability to differentiate career decided and undecided groups appropriately.

The Rosenberg Self-Esteem (RSE) Scale was used to assess self-esteem (Rosenberg, 1979). The RSE is a global measure of self-esteem composed of 10 statements, such as, "On the whole, I am satisfied with myself". Each statement is rated by the respondent on a 4-point Likert



scale, ranging from strongly agree to strongly disagree. The scores range from 10 to 40, with higher scores representing higher self-esteem. Evidence for the scale's reliability have been reported, with high test-retest reliability coefficients of .85 and .88 (for two samples of college students over a 2-week test-retest period) and acceptable internal item consistency ( $\alpha=.75$ ) (Rosenberg, 1979). The RSE also has a Coefficient of Reproducibility of 92 percent and a Coefficient of Scalability of 72 percent. Adequate convergent and discriminant validity has been documented (e.g., high self-esteem is significantly correlated with low depressive affect; low self-esteem was significantly associated with a larger number of psychosomatic symptoms; low self-esteem is significantly correlated with having difficulty in making friends, being sensitive to criticism from others, and being lonely;  $r$ 's between Rosenberg self-esteem and self-esteem measured by three other methods were .67, .83, and .56) (Rosenberg, 1965; 1979; Wylie, 1974).

In order to assess the level of career importance, the 27-item Career Salience Questionnaire (CSQ; Greenhaus, 1971) was used. The instrument is comprised of items to which responses are made on a 5-point Likert format ranging from Strongly Agree (5) to Strongly Disagree (1). The item content reflects 3 factors: (1) general attitudes toward work; (2) the depth of vocational planning; and (3) the relative importance of work. Total career salience scores are generated by summing responses to all items resulting in a potential range of scores from 27-135, with higher scores reflecting greater career salience. Greenhaus (1971) reports a coefficient alpha of .81 for both male and female samples. Thomas and Bruning (1981) also documented that

stability coefficients for the CSQ are reasonably high (.89), and that the CSQ has adequate construct validity (e.g. there were significant positive correlations with satisfaction with career choice ( $r = .42$ ) and with Attitude Toward Teaching ( $r = .34$ )). However, moderate coefficients (.40 to .45) between the CSQ and the Central Life Interests Questionnaire (Dubin, 1956) indicated that the constructs measured are probably dissimilar.

The Career Decision-Making Self-Efficacy Scale (CDMSE) (Taylor & Betz, 1983) is a 50-item scale designed to measure self-efficacy expectations with regard to career decision-making tasks. Respondents indicate their confidence in accomplishing a specific task on a 10-point scale ranging from No Confidence at All (0) to Complete Confidence (9). A total score reflecting career decision-making self-efficacy expectations is computed by summing the confidence ratings for all 50 items. Total CDMSE scores range from 0 to 450. The CDMSE scale also consists of the following 10-item subscales: accurate self-appraisal, gathering occupational information, goal-selection, making future plans, and problem solving. The maximum subscale score is 90.

The CDMSE scale has high internal consistency reliability (coefficient alpha = .97). However, the authors suggested that the CDMSE may not measure individual components of career decision-making as expected but that it may be an overall index of readiness for career choice. This is caused by the high subscale intercorrelations ( $r = .85$ ) and the existence of only a substantial general factor rather than more clearly defined factors corresponding to the rationally derived subscales. The meaning of the CDMSE was examined by correlating the

five subscales and total scale scores with the four factor scores obtained from the Career Decision Scale (Osipow et al., 1976). Taylor and Betz (1983) found that the CDMSE was most related to the CDS factor, which Osipow (1980) interpreted as that component of career indecision relevant to a lack of structure and confidence in combination with choice anxiety. Robbins' (1985) research supports this finding, and he also reports concurrent validity estimates with the CDMSE Scale ranging from  $r = .58$  for self-esteem and  $r = .24$  for anxiety to  $r = .34$  for vocational identity and  $r = .34$  for career decidedness.

Due to the fact that the CDMSE was designed for college students, selective modifications in item content were made to increase the utility of the instrument for high school students. For instance, participants were asked to rate their confidence in "Coming up with a strategy to deal with flunking out of high school", rather than "Coming up with a strategy to deal with flunking out of college".

#### Analysis of Data

Specific statistical analyses were pre-determined in order to consider each exploratory research question.

Research Question #1. Do pregnant and parenting adolescent girls differ significantly from the comparison group of non-pregnant and non-parenting adolescent girls on personal and familial variables (e.g., parent's marital status, whether they are from single parent households, whether they live with their parents or have independent living arrangements, and their sources of income)?

In order to examine the potential relationships among these nominal variables, analyses of frequencies using chi-square was

conducted. It is appropriate to use chi-square as a test of significance when the data are expressed in frequencies (Downie & Heath, 1974; Winer, 1971). Alpha was set at  $\leq .05$ .

Research Question #2. Do pregnant and parenting adolescent girls differ significantly from a comparison group of non-pregnant and non-parenting adolescent girls on the career development variables of self-esteem, career salience, career decision-making self-efficacy, and vocational indecision?

In order to determine whether potential group differences on measures of self-esteem, career salience, career decision-making self-efficacy, and vocational indecision existed 4 separate one-way ANCOVA's, with age as a covariate, were conducted. Alpha was set at  $\leq .05$ . Age was treated as a covariate to statistically increase the precision of the analysis, and to remove a potential source of bias (Winer, 1971). The 4 separate one-way ANCOVA's were considered a more appropriate statistical analysis than a 3 x 4 MANCOVA, since the MANCOVA procedure takes into account the correlations among the variables and controls for common variance among the correlated dependent variables (Winer, 1971). Since, theoretically the variables employed in the present study are measuring different constructs and are not anticipated to be highly correlated with one another 4 separate one-way ANCOVA's, which treat data as a "series of independent univariate data", are preferable to the MANCOVA which would increase the chance of a bias creeping into the analysis (Winer, 1971).

Research Question #3. Is age significantly related to self-esteem, career salience, career decision-making self-efficacy, and vocational

indecision in all three groups?

In order to examine the potential relationships between age and these variables, Pearson Correlation Coefficients analyses were conducted. Alpha was set at  $\leq .05$ . This statistical analysis was chosen due to the fact that Pearson Correlation Coefficients indicate the strength of an association between variables, as well as whether the association is positive or negative (Hedderson, 1987).

Research Question #4. What is the relationship between self-esteem, career salience, and career decision-making self-efficacy, and vocational indecision, and can career salience, self-esteem, and career decision-making self-efficacy variables be used to predict the vocational indecision scores of the pregnant adolescent girls, the adolescent mothers, and the comparison group?

In order to examine the potential relationships among these career development variables, Pearson Correlation Coefficient Analyses were conducted. Multiple Regression Analyses, using vocational indecision scores as the dependent variable and career decision-making self-efficacy, career salience, and self-esteem as independent variables, were conducted to determine whether career salience, self-esteem, and career decision-making self-efficacy are predictive of vocational indecision scores. Alpha was set at  $\leq .05$ .

This statistical analysis was considered appropriate to determine both the combined effects of a set of independent variables and the separate effects of each independent variable controlling for the others. Theoretically, the independent variables should be correlated with the dependent variable, but not with one another (Hedderson, 1987).

The present study's correlations predominantly supported this assumption.

## CHAPTER FOUR

## RESULTS

This chapter presents the results obtained from the statistical analyses of the data. The discussion is organized into four sections, based on the specific research questions and hypotheses being examined. Results were deemed significant if the probability of a Type 1 error was less than or equal to 0.05.

Testing of Hypothesis #1

$H_0$  : There will be no significant differences between pregnant girls, the adolescent mothers, and the comparison group of non-pregnant and non-parenting adolescent girls on personal and familial variables of parent's marital status, whether they come from single-parent households, the nature of the living arrangements, and their source of income.

Chi-square analyses were performed to test for differences in personal and familial variables between groups. The null hypothesis states that the groups will be independent; if this proves to be untrue pregnant and parenting adolescent girls will be likely to show evidence of coming from less stable family backgrounds, such as having divorced parents, coming from single-parent households, not living at home with parents, and relying on social assistance as a source of income.

There was a significant difference ( $X^2 = 19.60$ ,  $p = 0.05$ ) between groups on parent's marital status. From the data it would seem that more subjects in the comparison group have married parents, whereas more subjects in the pregnant and parenting adolescent girls' groups have divorced parents (See Table 1).



Table 1

Group by Parents' Marital Status

	Divorced n %	Separate d n %	Married n %	Never Married n %	Deceased n %	Widowed n %
Pregnant Teens	10 35.70	3 10.70	12 42.90	3 10.70	0 0.00	0 0.00
Teen Mothers	15 38.50	1 2.60	12 30.80	7 17.90	2 5.10	2 5.10
Comparison Group	12 25.00	4 8.30	30 62.50	2 4.20	0 0.00	0 0.00

$$\chi^2 = 19.60 \quad df = 10 \quad p = 0.05$$

The groups also differed on whether or not they came from a single-parent household ( $\chi^2 = 7.82$ ,  $p < 0.05$ ). (See Table 2). The data suggests the difference between the groups stems from the comparison group being less likely to indicate coming from single-parent households in contrast to the groups of pregnant adolescents and adolescent mothers.

Table 2

Group by Single-Parent Household Status

	Single-Parent		Not a Single-Parent	
	n	%	n	%
Pregnant Teens	15	53.60	13	46.40
Teen Mothers	16	42.10	22	57.90
Comparison Group	11	22.90	37	77.10

$$\chi^2 = 7.82 \quad df = 2 \quad p < 0.05$$

A significant difference ( $\chi^2 = 39.51$ ,  $p < 0.05$ ) was found between groups on the variable concerning whether teens live at home or have independent living arrangements. The data seems to suggest that more subjects from the comparison group live at home with their parent(s) than those subjects from the groups of pregnant and parenting adolescents (See Table 3).

Table 3

Group by Living Arrangement

	Live with Parent(s)		Not Live with Parent(s)	
	n	%	n	%
Pregnant Teens	15	53.60	13	46.40
Teen Mothers	14	35.90	25	64.10
Comparison Group	47	97.90	1	2.10

There was also a significant difference between groups on source of income ( $X^2 = 53.02$ ,  $p < .001$ ). The difference seems to stem from more subjects from the comparison group being financially supported by their parents (with whom they live) than subjects from the pregnant and parenting groups who relied more heavily on social assistance and other sources of income (See Table 4).

Table 4

Group by Sources of Income

	Part-time Work	Welfare	Other	Parents
	n %	n %	n %	n %
Pregnant Teens	0 0.00	9 32.10	11 39.30	8 28.60
Teen Mothers	1 2.60	20 51.30	5 12.80	13 33.30
Comparison Group	3 6.30	1 2.10	2 4.20	42 87.50

$$X^2 = 53.02 \quad df = 6 \quad p < 0.001$$

Testing of Hypothesis #2

$H_0$  : There will be no significant differences between the pregnant teens, adolescent mothers, and the comparison group of non-pregnant and non-parenting girls on measures of self-esteem, career salience, career decision-making self-efficacy, and vocational indecision.

The null hypothesis states that the three groups of pregnant teens, teens mothers, and non-pregnant and non-parenting adolescent girls will not significantly differ on measures of self-esteem, career salience, career decision-making self-efficacy, and vocational indecision. Results from 4 separate one-way ANCOVA's, with age as a covariate, indicated that groups did not significantly differ on self-esteem ( $F(2, 115) = 1.08, p = .36$ ), career salience ( $F(2, 115) = 0.28, p = .84$ ), career decision-making self-efficacy ( $F(2, 115) = 0.603, p = .61$ ), or vocational indecision ( $F(2, 115) = 1.43, p = .24$ ). The reason that age was used as a covariate is that the groups significantly differed on age ( $F(2, 112) = 20.55, p < .001$ ). A Scheffee post hoc test demonstrated that the adolescent mothers were significantly older than the non-pregnant and non-parenting adolescents girls.

Table 5 summarizes the cell means of the pregnant teens, the teen mothers, and the comparison group on each dependent measure. In comparison with the Career Decision-Making Self-Efficacy Scale's (Taylor and Betz, 1983) normative sample of female college students ( $M = 340.10$ ;  $SD = 52.90$ ), the cell means suggest that female high school students, on the average, report considerable confidence in their ability to perform the tasks necessary to effective career decision-making, irrespective of whether they are pregnant and parenting. Overall, relative to the Career Salience Questionnaire's (Greenhaus, 1971) sample of female college students ( $M = 87.89$ ;  $SD = 11.85$ ) the cell means also indicate that career is moderately important to all three groups, and that the vocational indecision scores are similar to those found in the normative sample of female high school students ( $M = 30.36$ ;  $SD = 8.63$ ) (Osipow,

1980). The self-esteem scores in this sample are considered to be relatively low (Rosenberg, 1965; 1979).

Table 5

Cell Means and Standard Deviations of Group by Dependent Variables

	F	Pregnant Teens (n=28) M SD	Parenting Teens (n=39) M SD	Comparison Group (n=48) M SD	Total Group (n=115) M SD
Self-Esteem	1.08	22.25 3.22	22.28 2.37	22.52 2.33	22.37 2.56
CDMSE	0.60	331.50 60.00	329.26 57.22	331.06 52.90	330.56 56.09
Career Salience	0.28	81.11 9.29	80.85 8.20	82.17 9.05	81.46 8.82
Vocational Indecision	1.43	29.11 8.93	31.21 9.76	30.94 8.42	30.58 8.98

Testing of Hypothesis #3

$H_0$  : The age of pregnant teens, teen mothers, and the comparison group subjects will not be significantly related to measures of self-esteem, career salience, career decision-making self-efficacy, and vocational indecision.

The null hypothesis states that age will not be significantly related to measures of self-esteem, career salience, career decision-making self-efficacy, and vocational indecision. The Pearson

Correlation Coefficients indicated that age did not have a significant relationship with the subjects' scores on self-esteem, career salience, career decision-making self-efficacy, or vocational indecision (See Table 6).

Table 6

Pearson Correlation Coefficients: Age with Self-Esteem, Career Salience, Career Decision-Making Self-Efficacy, and Vocational Indecision.

	Self-Esteem	Career Salience	CDMSE	Vocational Indecision
Age	-0.12 p = 0.09	-0.08 p = 0.20	-0.02 p = 0.41	-0.08 p = 0.20

#### Testing of Hypothesis #4

H<sub>0</sub> : Pregnant teens, adolescent mothers, and the comparison group's scores on measures of career salience, self-esteem, and career decision-making self-efficacy will not significantly predict scores on vocational indecision.

Firstly, correlations of the dependent variable of vocational indecision with the independent variables of self-esteem, career salience, and career decision-making self-efficacy are presented in Table 7.

Table 7

Pearson Correlation Coefficients Between Dependent and Independent Variables

	Self-Esteem	Career Salience	CDMSE	Vocational Indecision
Self-Esteem	1.00 p = 0.00	-0.20 p = 0.01	0.01 p = 0.44	-0.14 p = 0.07
Career Salience	-0.20 p = 0.01	1.00 p = 0.00	0.08 p = 0.20	0.18 p = 0.03
CDMSE	0.01 p = 0.44	0.08 p = 0.20	1.00 p = 0.00	-0.26 p = 0.002

Table 8 summarizes the results obtained from the stepwise multiple regression analysis using vocational indecision scores as the dependent variable and career decision-making self-efficacy, career salience, and self-esteem as independent variables; analyses were performed separately for each group (e.g., pregnant teens, adolescent mothers, and non-pregnant and non-parenting teens). For the group of pregnant teens, only career salience made a significant contribution to the prediction of vocational indecision ( $R = .33$ ), accounting for 11% of the variance in indecision scores. For the group of adolescent mothers, none of the variables made a significant contribution to the prediction of vocational indecision ( $R = .20$ ), accounting for only 4% of the variance in indecision scores. However, for the comparison group of non-pregnant

and non-parenting adolescents, all three variables made a significant contribution to the prediction of vocational indecision ( $R = .43$ ), accounting for 18% of the variance in indecision scores. Relative to career salience and self-esteem, career decision-making self-efficacy was the most powerful predictor.

Table 8

Regression Analyses for the Prediction of Vocational Indecision

Predictor variables	b	F	R	R Square
Pregnant Teens			0.33	.011
Constant	4.30			
Career	0.35	3.11*		
Salience	-0.019	1.74		
CDMSE	0.12	1.13		
Self-Esteem				
Adolescent Mothers			0.20	0.04
Constant	43.4			
CDMSE	-0.036	1.61		
Career	-0.051	0.83		
Salience	0.15	0.55		
Self-Esteem				
Comparison Group			0.43	0.18
Constant	57.33			
CDMSE	-0.078	10.30*		
Career	0.26	9.10*		
Salience	-0.98	8.23*		
Self-Esteem				

\* = significant at the 0.05 level.



## CHAPTER FIVE

## DISCUSSION

The purpose of this chapter is to examine the findings and implications of the present study. There are two findings that are of particular interest for this discussion. First, there were no significant differences between pregnant teens, adolescent mothers, and non-pregnant and non-parenting adolescent girls on measures of self-esteem, career salience, career decision-making self-efficacy, and vocational indecision; that is, pregnancy and parenting in adolescence does not appear to have a profound effect on early career development. Second, amongst pregnant teens only career salience was significantly predictive of levels of vocational indecision; pregnant teens reporting that career is not exceptionally important to them were more undecided than those reporting higher levels of salience. In contrast, career decision-making self-efficacy, career salience, and self-esteem were significantly predictive of non-pregnant and non-parenting adolescent girls' levels of vocational indecision, but not for the adolescent mothers' vocational indecision scores. Thus, subjects in the comparison group reporting less confidence in their ability to complete decision-making tasks, lower career salience, and lower self-esteem, were more undecided than those reporting higher levels of confidence in completing decision-making tasks, higher levels of career salience, and higher self-esteem. The following discussion is therefore based on the premise that pregnancy and parenting in adolescence may be less detrimental to the career development process of this "at-risk population" than the literature has traditionally espoused; however, many questions still

remain about what attitudinal and contextual variables do impinge upon the career development process of pregnant and parenting adolescent girls.

#### Limitations of this study

The results of this study should be interpreted with caution due to several methodological limitations. First, the fact that the sample was comprised of pregnant and parenting adolescent girls who have chosen to participate in unique and comprehensive alternative high school programmes, with services such as personal and vocational counselling, poses limits on the generalizability of these findings. Second, the career-decision making self-efficacy scale used is relatively new and it has not been used with a population of this nature before. Further refinements might be deemed necessary (e.g., shorter, less sophisticated wording) to suit the needs of a high school population. Third, it is possible that a social desirability bias affected the subjects' responses to the measures. Finally, the present study is correlational in nature and thus causal relationships cannot be inferred from the data. With this in mind, a discussion of the findings and implications of the present study is presented below.

#### Discussion

The results of the present study provide a contribution to researchers' and practitioners' limited understanding of the career development of pregnant and parenting adolescent girls. First of all, pregnant and parenting girls more frequently report coming from less stable family backgrounds; having divorced parents, coming from single-parent households, not living at home with parents, and relying on

social assistance as a source of income. This finding is consistent with previous research demonstrating that the rates of teen intercourse and pregnancy are higher for adolescent girls from single-parent homes (Furstenberg et al., 1987; Miller & Moore, 1990; Rickel, 1989), that sexually active girls who become pregnant come from more psychosocially disadvantaged backgrounds than those who never become pregnant (Stiffman et al., 1987), and that initiating childbearing during adolescence is associated with increased probability of dependence on welfare (Black & DeBlassie, 1985; Furstenberg et al., 1987; Kamerman & Kahn, 1988; Moore, Hofferth, Caldwell, & Waite, 1979).

Despite these findings, which convey an image of "disadvantage" relative to non-pregnant and non-parenting adolescent girls, there were no significant differences between pregnant teens, teen mothers, and non-pregnant and non-parenting adolescent girls on measures of self-esteem, career salience, career decision-making self-efficacy, and vocational indecision, irrespective of their age. This finding contradicts the literature's traditional endorsement of the "social stereotype" that pregnant and parenting adolescent girls are a "deviant group" experiencing high levels of distress (Anastasiow, 1982), such that these adolescents are somewhat developmentally impaired and will not function optimally as adults (Lieberman, 1980; Protinsky, Sporakowki, & Atkins, 1982).

Rather, one may speculate that the negative effects of early childbearing have been exaggerated. The lack of differences between groups seems to corroborate Furstenberg et al's (1987) conclusions based on a 17-year longitudinal study that early childbearing may be less

devastating than was earlier thought. Indeed, "teenage mothers do not do as well as women who delay childbearing. But it is less clear whether social and economic differences due to the timing of parenthood are large enough to support the widespread beliefs that early childbearing almost completely determines a woman's destiny in later life" (p. 8). Moreover, Furstenberg and his associates (1987) observe that when individual differences are taken into account that in actuality a substantial proportion of teen mothers manage to overcome the handicaps imposed by early parenthood.

An interesting point these authors make that may be relevant to the demographic profile of the pregnant and parenting adolescent girls in the present study is their recognition "that some portion of the adverse consequences presumed to be the result of early childbearing is, in fact, attributable to prior differences in the family backgrounds of early and later childbearers... the failure to take account of preexisting differences may have led to an overestimation of the impact of premature parenthood on the life course of women" (p. 9). Although a causal relationship cannot be inferred, the pregnant and parenting girls in the present study were significantly more likely to have experienced "disadvantageous preexisting conditions" such as disruption of the nuclear family, accompanied by a loss in socioeconomic status.

Alternatively, one may speculate that another reason for a lack of significant differences between the groups on the designated career development variables in the present study stems from the interventions that the three groups were exposed to. For instance, Louise Dean High School employs a comprehensive programme in which "every student is

assigned to a team, consisting of a nurse, a teacher, and a social worker. The teams, with their students, meet weekly so she will be successful in her personal goal setting" (Ruth Ramsden-Wood, personal commentary). Work experience is an integral part of the school, as is prevention of drop-outs. Ernest Manning High School also espouses a policy of drop-out prevention and a focus on meeting vocational as well as personal needs. Moreover, the comparison group of non-pregnant and non-parenting adolescent girls were exposed to the Career and Life Management Curriculum in which exploration of personal interests, aptitudes, values, and skills in conjunction with tentative career decision-making may take place.

Certainly, Osipow and his associates (1976) have demonstrated that students who are exposed to systematic interventions designed to deal with vocational and educational decision making difficulties have significantly lower scores on the indecision scale following treatment than before. Programs for pregnant and parenting adolescent girls have typically focused on enhancing self-esteem, and limited findings suggest that this can be done with some success (Browne & Urback, 1989). Perhaps, one may speculate that the reason why female high school students, irrespective of pregnancy status, report considerable confidence in their ability to perform the tasks necessary to effective career decision making and indicate that career is moderately important are attributable to systematic career exploration and decision-making interventions their programmes exposed them to. It is likely that a pre- and post-test evaluation of each programmes' effects on pregnant and parenting adolescent girls' scores on measures of career salience,

self-esteem, career decision-making self-efficacy and vocational indecision would be revealing. At this point, one can only tentatively speculate that the intense interventions at Louise Dean and Ernest Manning had a positive effect on the career development of pregnant and parenting adolescent girls. Certainly, this is an area that warrants further investigation.

Finally, another explanation for the lack of differences between the pregnant and parenting adolescent girls and the comparison group may lie in the often cited observation that early childbearers exhibit a profound perceptual gap between expectations and realities (Browne & Urback, 1989; Rickel, 1989; Sadler & Catrone, 1983). Browne and Urback (1989) assert that pregnant and parenting adolescent girls often expect that their self-esteem will increase with pregnancy and parenthood, that they have an important role to fulfil, that somebody will provide for them financially (e.g., welfare; fantasy "rich husband"), and that they expect to be self-sufficient.

Perhaps one could speculate that if pregnant and parenting subjects in the present study had a cognitive schema of unrealistic expectations that they would inadvertently respond to the various instruments in an overly positive response set with respect to a self-evaluation of their levels of confidence in self, in decision-making ability, and in level of decisiveness, as well as consideration of the importance of career. Viewing the world and themselves through "rose-coloured glasses" may also be facilitated by some adolescent girls' difficulty to cognitively envision the future, anticipate difficulties, and engage in long-term planning; as well as the fact that social

supports may increase for parenting adolescent girls around the time of birth (Barth et al., 1983). Many research studies and anecdotal discussions observe that the initial conflicts pregnancy may cause between teens and their families give way to acceptance and welcoming of the new family member (Furstenberg & Crawford, 1978; Rickel, 1989). This may be particularly true of individuals from non-white or minority cultures that demonstrate a greater reliance on extended family networks.

It may tentatively be argued that the present study's sample of pregnant and parenting adolescent girls have unrealistic expectations which have not yet been dampened by long-term, day-to-day experience in raising a child. Browne and Urback (1989) note that contrary to this population's expectations that self-esteem will increase with pregnancy and parenthood, that somebody will financially provide for them (e.g., welfare), or that they will plan to be self-sufficient (e.g., finish school, get a job), they often discover that self-esteem does not increase as adolescent girls are self-conscious of body changes, and that their baby takes attention away from them, they soon discover that welfare is not sufficient financial assistance and they are unable to manage and need to learn to budget, and they will learn that self-sufficiency via finishing school, and getting a job is difficult and takes a long time as they often do not have the energy and/or the organizational skills to continue with high school or advance to post-secondary education. Clearly, longitudinal research is necessary to resolve some of these puzzling issues. In any case, with respect to psychological rather than contextual variables, it well may be that

"rose coloured" glasses are not necessarily bad; they cushion one from stress and are conducive to experimentation with behaviours and contracting of specific goals that may not have otherwise been considered by pregnant and parenting adolescent girls. As Bandura (1977) and Hackett and Betz (1981) advocate, beliefs concerning an assessment of one's ability to engage in various career-related behaviours mediate the career development process of exploration, decision-making, and planning.

Despite the fact that there was a lack of differences between pregnant teens, teen mothers, and non-pregnant and non-parenting adolescent girls on measures of career salience, self-esteem, career decision-making self-efficacy, and vocational indecision, there were some intriguing findings unique to each group's self-esteem, career salience, and career decision-making self-efficacy scores as predictors of vocational indecision. Amongst the non-pregnant and non-parenting adolescent girls levels of career decision-making self-efficacy, career salience, and self-esteem were predictive of levels of vocational indecision; only career salience was predictive of levels of career indecision amongst pregnant teens, and none of the variables were predictive of levels of vocational indecision amongst teen mothers. The findings for the comparison group corroborate previous findings with college students that career decision-making self-efficacy is a significant predictor of vocational indecision (Taylor & Betz, 1983; Taylor & Popma, 1990).

The present findings expand upon current knowledge since both self-esteem and career salience were also found to be significant



predictors of vocational indecision amongst non-pregnant and non-parenting female high school students. Given that Donald Super (1969) advocates that developmental tasks of career exploration, career decision-making, and career planning take place during the life-stage of adolescence, and that other theorists have suggested that conditions of motivation and interest in the work-role, higher self-esteem, and higher self-efficacy expectations be in place to optimally facilitate the career development process (Bandura, 1977; Greenhaus & Simon, 1977; Hawks & Muha, 1991; Lent & Hackett, 1987; Magnusson & Redekopp, 1989; Super & Nevill, 1984) it would seem that the non-pregnant and non-parenting subjects in the present study may be at a "readiness point" for career development interventions.

In contrast, the finding that all the predictor variables were non-significant in predicting levels of vocational indecision of teen mothers, and only career salience was predictive of pregnant teens' vocational indecision, suggests that there are some other dynamics at work with this population that affects their career development status. There are some unknown psychological or contextual variables that contribute to the variance in vocational indecision scores which have not been included in the present study. Existing career development models (i.e., Astin, 1984; Farmer, 1985a; Gottfredson, 1981, 1986) are instrumental in further hypothesizing and researching what these variables might be; these models also suggest that further research of this nature be expanded to encompass pregnant and parenting adolescent girls' educational and career aspirations.

Indeed, Farmer's (1985a) social learning oriented model theorizes

that career motivation of adolescent girls develops through the three interacting variables of background variables (gender, race, social status), personal psychological variables (success attributions, intrinsic values, academic self-esteem), and environmental variables (support from teachers and parents, support for women working). Moreover, she identifies three aspects of career motivation: level of occupation chosen (aspiration), motivation to achieve a short range of challenging tasks (mastery), and degree of commitment to long-range prospects of the career (career). Similarly, Astin (1984) advocates that motivation, expectations, sex-role socialization and structure of opportunity shape the career-choice process of women. Finally, Gottfredson (1981) described how facets of one's self-concept, one's preferences, and one's range of acceptable occupational alternatives influence the development of occupational aspirations. Gottfredson also (1986) conceptualized an "at risk" framework which advocates that certain barriers are faced by special populations, creating career-choice problems. She postulates three categories of risk: factors that cause persons to be different from the general population (i.e., low intelligence, poverty, cultural segregation, low self-esteem), factors involving differences within one's own social reference group (i.e., having nontraditional interests for one's gender, social class, or racial or ethnic group), and factors involving family responsibilities (i.e., being a primary caregiver or primary economic provider).

Certainly, some findings in the research literature corroborate that some of the variables theorized by these authors are critical to career development. For instance, social support, in addition to

community programs and resources, are crucial in preparing early childbearers for future careers (Furstenberg, 1976; Kissman, 1990; Miller, 1983). Moreover, high levels of social support are correlated with positive self-concept and belief in one's ability to control aspects of one's environment (Veroff, Douvan, & Kulka, 1981). Unfortunately, Ortiz and Basoff (1985) have observed that adolescent welfare mothers tend to exhibit lost optimism and lowered expectations. Indeed, lower than normal self-esteem and a tendency toward higher depression than normal is associated with adolescent pregnancy (Barth et al., 1983). Hackett and Betz (1981) assert that high levels of anxiety, which has been linked to the non-normative event of early childbearing, is debilitating in terms of performance and efficacy expectations. Relevant to this, Greenhaus and Sklarew (1981) found that for college students of low anxiety, self-related exploration seems to result in an occupational decision that is experienced as satisfying and appropriate. Finally, Holms and Esses (1988) have found that (non-pregnant and non-parenting) high school girls who obtained higher marks in school, identified with either masculine or androgynous trait dispositions, had more liberal attitudes toward women, and were from higher socioeconomic backgrounds aspired to higher levels of education, were more highly committed to career, and aspired to more prestigious occupations.

Finally, a comment is in order on the intriguing finding that level of career salience was predictive of vocational indecision scores for pregnant adolescents, but not for the adolescent mothers. Perhaps the time during pregnancy is an optimal period for career interventions with early childbearers; pregnant adolescents may be especially

motivated to decide and plan careers as they anticipate the arrival of their child. Once they have their children their time and energy is invested in the immediate concerns of caring for a young infant, as well as coping with the adaptation to the dual roles of high school student and mother, rather than focusing on long-term career planning.

### Implications

Despite the proliferation of articles on career guidance and counselling, very little has been published on career counselling methods for pregnant and parenting adolescent girls. What is generally available in the literature tends to be piecemeal and emphasizes psychological concerns as well as life skills management and childcare. Therefore, it is anticipated that the results of the present study may suggest some tentative, generic implications for counselling pregnant and parenting adolescents.

To begin with, Super and Nevill (1984) demonstrated that career salience is directly related to career maturity and suggest that this is a crucial finding. Knowing how motivated adolescent girls are to pursue the working role, and why they want to pursue it if so motivated, is basic to planning a career education programme relevant to student needs and readiness. Given this, guidance counsellors may foster career salience, as well as positive self-efficacy expectations in pregnant and parenting adolescents, through role models and mentoring (Lent & Hackett, 1987). This may be particularly critical for this at-risk population since many come from single-parent households and are repeating the cycle, and the popular media stereotype of early childbearers is that of the "welfare mother". It is the rare occasion

when the media publicizes early childbearers who are "successes". Furthermore, it has been asserted by Hackett and Betz (1981) that there is a limited portrayal of women in the media and in educational and occupational materials, as well as few visible women actually engaging in nontraditional pursuits to begin with.

As alluded to, the good news is that interventions can compensate for these detrimental conditions. There are four primary means by which self-efficacy expectations (and salience) may be acquired and modified: personal performance accomplishments, vicarious experiences, verbal persuasion, and emotional arousal (Bandura, 1977). Lent and Hackett (1987) note that,

Examples of specific treatment components representing these sources of efficacy information might include structuring novel, incrementally graded success experiences with students (performance accomplishments); exposing students to successful peer models (vicarious experience); providing via didactic means, inspirational, supportive messages regarding students' capabilities (verbal persuasion); or desensitizing excessive career choice or performance anxiety (emotional arousal) (pp. 375-376).

Hackett, Esposito, and O'Halloran (1989) have discovered that career salience amongst 107 undergraduate women was influenced by role models. Moreover, the National Research Council (1987) note that all adolescents adopt role models that significantly influence their developing values, attitudes, and behaviour.

Providing high-risk teenagers with positive examples on

which to model their behaviour may help them form aspirations, expectations, and activity patterns that match desired norms. Role model and mentoring programs are intended to help teenagers see in others what they can become themselves. Most emphasize the importance of educational attainment, employability, and responsible sexual and fertility behaviour (National Research Council, 1987, p. 269).

Perhaps one of the most prominent examples of these interventions has been the community component of Project Redirection, in which volunteer models/mentors were not professional caseworkers but women drawn from the community. The community women assisted in communicating and reinforcing the messages of the program to pregnant and parenting adolescent girls. Some of the messages entailed the need to remain in school and graduate, and the importance of work as the key to economic and social independence (Polit, Quint, & Riccio, 1988). Although the Project Redirection evaluation does not offer definitive proof of the effectiveness of role-modelling programs, it does offer guidance counsellors and program developers with a potentially useful approach to reaching pregnant and parenting adolescent girls.

Additionally, parents are an often potent but little-used resource that may be included in career interventions such as role modelling and mentoring. Hawkes and Muha (1991) assert that parents, including minority parents, generally have high aspirations for their children and they accurately perceive the relationship between education and employability. Why not take advantage of this "natural resource" and

have parents of pregnant and parenting adolescent girls enrolled in alternative high school programmes become involved as volunteers for role modelling and mentoring initiatives? Not only could such parents assist in modifying and enhancing early childbearers' career salience and self-efficacy expectations, perhaps the integration of the parents into the programme may facilitate a more supportive relationship with their own pregnant or parenting daughter. Although there are no specific demonstrations of the efficacy of this proposed career intervention, one can tentatively speculate that it has potential merit given the findings that the media and parents' behaviours and attitudes can shape one's expectations for success (Bandura, 1977; Herr & Cramer, 1988).

Career salience may also be promoted by facilitating the discovery of the relationship between current educational experiences and future job and career possibilities. The link between skills learned in high school and post-secondary institutions and future earnings needs to be made very clear. Many early childbearers have the unrealistic expectations that someone will provide for them, that a traditional low-paying job will be sufficient to support themselves and their child, or that they can get a great paying job without much education. For example, one pregnant adolescent girl responded, "My career doesn't need my grade 12 nor do I have to go to universitie [sic]. I would be making 20 p/h [sic]. More than enough to live on, all I need is grade 10, driver's course and my learners. But I'm staying in school so I can get my grade 12 so I can tell my parent who doesn't have theirs that I got it!" Counsellors can serve as potent catalysts for creating aspirations

for nontraditional careers and higher paying jobs.

Intrinsic motivation may also arise in the process of encouraging individuals to explore their own interests, skills, aptitudes, and goals. This motivates individuals to generate knowledge for themselves rather than to reach others' expectations for them (Hawks & Muha, 1991). Of course it must be noted that this process is complicated by the fact that counsellors must begin with where the adolescent girl is, and with her issues. Often counsellors must put aside their own needs and expectations to deal with issues raised by the adolescent girl and the reality of the adolescent girl's present situation (Browne & Urback, 1989). This often means dealing with the immediate emotions and needs of each individual early childbearer, and assisting with concrete planning around health care, child care, and living arrangements (Amundson, 1989).

Relevant to this, there is a consensus in the literature that in working with early childbearers that an intense individual counselling and networking of support services is the mainstay of any program that has as its goal the adolescent girls' development and use of career planning, job readiness, and self-sufficiency. Personal and career counselling must be individualized, flexible, and creative to meet the specific needs of each early childbearer. Given that guidance counsellors cannot possibly anticipate the potential range of life experiences and obstacles that early childbearers may encounter, it would also seem prudent that these adolescent girls be taught the coping and adaptability skills necessary for successful adaptation to most life-events and transitions. Indeed, the current zeitgeist in the



literature advocates that transition and career development programs should be more holistic and multi-faceted. One should integrate critical factors like motivation, salience, self-management, adaptability training and the recognition of environmental and personal barriers with career counselling, education, and employability training and employment preparation.

This primary line of reasoning in the literature asserts that skills (the main focus of many educational interventions) are not enough and that adolescents need to be able to adjust to change (Magnusson, Day, & Redekopp, 1988; Magnusson & Redekopp, in press; Mithaug, Martin, & Agrin, 1987). Mithaug and his associates (1987) argue that programs need to enhance self-direction and teach adolescent girls to generalize problem-solving skills to the workplace through "adaptability instruction". "The efficacy of skill acquisition is mediated by motivational or salience factors, and by the degree to which the individual is able to synthesize the various skill components and integrate them into his or her reality" (Magnusson et al., 1988, p. 3). In other words, all the skill development and well-intended interventions counsellors facilitate may not be effective unless the early childbearer can successfully integrate and adapt them into her reality.

Relevant to this, perhaps one can argue that one of the most enduring sources of strength and capacity for adaptability lies in the early childbearers' self-concept or self-esteem. In Revolution From Within: A Book of Self-Esteem, Gloria Steinham (1992) notes that, "Self-esteem isn't everything; it's just that there's nothing without

it". Others lend support to this contention. Indeed, Drummond and Hansford (1991) assert that the career self-concept is an important dimension that must be considered if early childbearers are to develop mature life choices and plans. "They need to be helped to accept their feelings as real and to be encouraged to express them; to learn constructive ways of dealing with their difficulties; to be helped to maintain their self-respect while increasing their coping skills; and to be helped to restructure their environment so that it is more stable and predictable" (p. 68). Moreover, Thompson (1984) challenged counsellors to assume a more active role in facilitating exploration of how early childbearers feel about themselves, how much control they have over their lives and future goals, and how they perceive their chances for social, psychological and economic success. He urged practitioners to engage in such interventions after he discovered that 37 unwed mothers, compared with a group never having borne children, scored below the comparison group on the behavioral subscale of the Tennessee Self-Concept Scales, and were significantly more externally oriented than a national stratified sample of high school students on the Rotter Internal-External Scale.

#### Directions for Future Research

Although many directions for future research have been alluded to throughout the discussion, it is worth reiterating that to further enhance our knowledge of the career development of pregnant and parenting adolescent girls more exploratory studies are needed. Indeed, a line of inquiry that may prove fruitful to the field of career development is a qualitative study of pregnant and parenting adolescent

girls' experience of the career development process. As an exploratory tool, qualitative interviews may be productive for few specifics are known about pregnant and parenting adolescent girls' career development, and rather than "stabbing in the dark", researchers could examine themes derived from interviews which are considered by adolescent girls as being salient to their process. One may speculate that some themes which would emerge in a qualitative analysis would include the recognition of the importance of tangible emotional and financial support from family, boyfriends, teachers, counsellors, and the community. Another theme may involve a description of experimenting with various coping strategies relevant to the process of integrating competing school and family roles. Furthermore, longitudinal research examining a comprehensive range of variables (grounded in various extant theoretical models) is necessary. Indeed, research to date has not established whether pregnant and parenting adolescent girls' levels of career decision-making self-efficacy, career salience, self-esteem, and vocational indecision is predictive of their future lifestyle and occupational choices, and longitudinal study may shed some light on this.

It would also be advisable to examine more heterogeneous samples of pregnant and parenting adolescent girls, rather than relying on easily accessible samples in alternative high school programmes, so that results could be more generalizable. Therefore, future research that employ larger sample sizes recruited from more diverse backgrounds is warranted. It may be that persons in different communities, schools, and segments of society will indicate trends in career development

status that differ from those found in this study. Emphasis on cross-disciplinary research combining the efforts of both educators, social workers, nurses, sociologists and psychologists would be helpful in this regard.

### Conclusion

The results of this study were rather optimistic, perhaps reflecting the truism that "opportunity can emerge out of crisis". Although it is true that pregnant and parenting adolescent girls are considered vulnerable to delays and obstacles that may circumscribe their career development (Freeman, 1989), the results of this study suggest that pregnant and parenting adolescent girls are statistically no more "at risk" for low self-esteem, low career salience, and low career decision-making self-efficacy, and high vocational indecision than a comparison group of non-pregnant and non-parenting adolescent girls. However, given the exploratory nature of this study and its sample, the results of the present study may have created more questions than answers, serving as a heuristic for future research examining what additional variables may be particularly significant to the career development of pregnant and parenting adolescent girls. In any case, the research of the career development of vulnerable populations such as pregnant and parenting adolescent girls will continue to be a challenge to researchers and practitioners alike.

## REFERENCES

- Alberta Department of Education. (1989). Education in Alberta: Some major societal trends. Revised. (ERIC Document Reproduction Services No. ED 314 868).
- Amundson, N. (1989). A model for individual career counselling. Journal of Employment Counselling, 26, 132-138.
- Anastasiow, N. J. (1982). The adolescent parent. London: Paul H. Brookes.
- Archer, S. L. (1985). Career and/or family: The identity process for adolescent girls. Youth and Society, 16, 289-314.
- Astin, H. S. (1984). The meaning of work in women's lives: A sociopsychological model of career choice and work behaviour. Counselling Psychologist, 12, 117-126.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behaviour change. Psychological Review, 84, 191-215.
- Barth, R. P., Schinke, S. P., & Maxwell, J. S. (1983). The psychological correlates of teenage motherhood. Journal of Youth and Adolescence, 12, 471-487.
- Berger, R., & Shechter, Y. (1989). Adolescent girls in distress: A high-risk intersection. Adolescence, 24, 357-374.
- Betz, N. E., & Fitzgerald, L. F. (1987). The career psychology of women. Orlando, Fla: Academic Press.
- Betz, N. E., & Hackett, G. (1981). The relationship of career-related self efficacy expectations to perceived career options in college women and men. Journal of Counselling Psychology, 28, 399-410.

- Black, C., & DeBlassie, R. R. (1985). Adolescent pregnancy: Contributing factors, consequences, treatment, and plausible solutions. Adolescence, 20, 281-290.
- Blos, P. (1962). On adolescence. New York: Free Press of Glencoe.
- Blustein, D. L. (1989). The role of goal instability and career self-efficacy in the career exploration process. Journal of Vocational Behaviour, 35, 194-203.
- Borowski, H., & Macdonald, J. G. (1982). The adolescent mother and her child: Issues and trends. Toronto: Hospital for Sick Children.
- Brooks, L., Holahan, W., & Galligan, W. (1985). The effects of a nontraditional role-modelling intervention on sex typing of occupational preferences and career salience in adolescent females. Journal of Vocational Behaviour, 26, 264-276.
- Brown, D., Brooks, L., and Associates. (1990). Career choice and development (2nd ed). Oxford: Jossey-Bass.
- Browne, C., & Urback, M. (1989). Pregnant adolescents: Expectations vs. reality. Canadian Journal of Public Health, 80, 227-229.
- Burge, P. L. (1987). Career development of single parents. (ERIC Document Reproduction Service No. ED 290 934).
- Chartrand, J. M., & Camp, C. C. (1991). Advances in the measurement of career development constructs: A 20-year review. Journal of Vocational Behaviour, 39, 1-39.
- Chiu, L. (1990). The relationship of career goal and self-esteem among adolescents. Adolescence, 45, 593-597.

- Clarke-Stewart, A., & Friedman, S. (1987). Child development: Infancy through adolescence. New York: John Wiley and Sons.
- Cochran, L. R. (1983). Level of career aspiration and strength of career orientation. Journal of Vocational Behaviour, 23, 1-10.
- Coyle-Williams, M., & Wermuth, T. (1990). Boulder Valley Schools Teen Parenting Program. (ERIC Document Reproduction Service No. ED 326 696).
- Crawford, E. (1988). Another ounce of protection: Education and employment interventions for 9 to 15 year olds. (ERIC Documentation Reproduction Service No. ED 311 301).
- Crites, J. O. (1965). Measurement of vocational maturity in adolescence: I Attitude Test of the Vocational Development Inventory. Psychological Monographs (Whole No. 595).
- Davis, K. (1980). A theory of teenage pregnancy in the United States. Adolescent pregnancy and childbearing. U.S. Department of Health and Human Services.
- Davis, R. A. (1989). Teenage pregnancy: A theoretical analysis of a social problem. Adolescence, 93, 19-28.
- Diamond, R., Carey, S., & Back, K. (1983). Genetic influences on the development of spacial skills during early adolescence. Cognition, 13, 167-185.
- de Anda, D. (1983). Pregnancy in early and late adolescence. Journal of Youth and Adolescence, 12, 33-42.

- Donovan, J. E., & Jessor, R. (1985). Structure of problem behaviour in adolescence and young adulthood. Journal of Consulting and Clinical Psychology, 53, 890-904.
- Dougherty, J. W. (1990). Effective programs for at-risk adolescents. (ERIC Document Reproduction Service No. ED 324 572).
- Downie, N., & Heath, R. (1974). Basic statistical methods: Fourth edition. New York: Harper & Row.
- Drier, H. N., & Ciccone, J. K. (1988). Career guidance: The missing link in educational excellence and work transition. Journal of Career Development, 15, 3-19.
- Drummond, R. J., & Hansford, S. G. (1991). Dimensions of self-concept of pregnant unwed teens. The Journal of Psychology, 125, 65-69.
- Dubin, R. (1956). Industrial workers' worlds: A study of the "central life interests" of industrial workers. Social Problems, 3, 131-143.
- Duggan, P., & Mazza, J. (1986). Learning to work: Improving work employability. (ERIC Document Reproduction Service No. ED 289 987).
- Eccles, J. S. (1987). Gender roles and women's achievement-related decisions. Psychology of Women Quarterly, 11, 135-172.
- Elkind, D. (1967). Egocentrism in adolescence. Child Development, 38, 1025-1033.
- Erikson, E. (1968). Identity youth and crisis. New York: W. W. Norton.



- Farber, N. B. (1989). The significance of aspirations among unmarried adolescent mothers. Social Service Review, 518-532.
- Farmer, H. S. (1983). Career and homemaking plans for high school youth. Journal of Counselling Psychology, 30, 40-45.
- Farmer, H. S. (1984). Development of a measure of home-career conflict related to career motivation in college women. Sex Roles, 10, 663-675.
- Farmer, H. S. (1985a). Model of career and achievement motivation for women and men. Journal of Counselling Psychology, 32, 363-390.
- Farmer, H. S. (1985b). The role of typical female characteristics in career and achievement motivation. Youth and Society, 16, 315-334.
- Farmer, H. S., & Bohn, M. J. (1970). Home-career conflict reduction and the level of career interest in women. Journal of Counselling Psychology, 17, 228-232.
- Fasick, F. A. (1984). Parents, peers, youth culture and autonomy in adolescence. Adolescence, 19, 143-157.
- Ferguson, J., & Reed, J. (1987). Programs for women and girls: For teenaged parents. Vocational Education Journal, 62, 40-45.
- Fitzgerald, L. F., & Betz, N. E. (1983). Issues in the vocational psychology of women. In W. B. Walsh, & S. H. Osipow (Eds.), The handbook of vocational psychology. (pp. 83-159). Hillsdale, NJ: Erlbaum.

- Fitzgerald, L. F., & Crites, J. O. (1980). Toward a career psychology of women: What do we know? What do we need to know? Journal of Counselling Psychology, 27, 44-62.
- Forrest, L., & Mikolaitis, N. (1986). The relational component of identity: An expansion of career development theory. The Career Development Quarterly, 35, 76-88.
- Freeman, E. M. (1989). Interaction of pregnancy, loss, and developmental issues in adolescents. In N. Cervera and L. Videka-Sherman (Eds.), Working with pregnant and parenting teenage clients. (pp. 19-31). New York: Rockefeller College Press.
- Furstenberg, F. (1976). Unplanned parenthood. New York: Free Press.
- Furstenberg, F. F., Brooks-Gunn, J., & Morgan, S. P. (1987). Adolescent mothers in later life. Cambridge, MA: Cambridge University Press.
- Furstenberg, F. F., & Crawford, A. G. (1978). Family support: Helping teenage mothers to cope. Family Planning Perspective, 10, 322-333.
- Gilligan, C. (1982). In a different voice. Cambridge, MA: Harvard University Press.
- Gottfredson, L. S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. Journal of Counselling Psychology Monograph, 28, 545-579.

- Gottfredson, L. S. (1986). Special groups and the beneficial use of vocational interest inventories. In W. B. Walsch and S. H. Osipow (Eds.), Advances in vocational psychology: Assessment of interests. Vol. 1. Hillsdale, NJ: Erlbaum.
- Greenhaus, J. H. (1971). An investigation of the role of career salience in vocational behaviour. Journal of Counselling Psychology, 1, 209-216.
- Greenhaus, J. H. (1973). A factorial investigation of career salience. Journal of Vocational Behaviour, 3, 95-98.
- Greenhaus, J. H., & Simon, W. E. (1977). Career salience, work values, and vocational indecision. Journal of Vocational Behaviour, 10, 104-110.
- Greenhaus, J. H., & Sklarew, N. D. (1981). Some sources and consequences of career exploration. Journal of Vocational Behaviour, 18, 1-12.
- Grindstaff, C. F. (1988). Adolescent marriage and childbearing: The long-term economic outcome, Canada in the 1980's. Adolescence, 23, 45-58.
- Hackett, G., & Betz, N. E. (1981). A self-efficacy approach to the career development of women. Journal of Vocational Behaviour, 18, 326-339.
- Hackett, G., Esposito, D., & O'Halloran, S. (1989). The relationship of role model influences to the career salience and educational and career plans of college women. Journal of Vocational Behaviour, 35, 164-180.

- Hamburg, B. (1986). Subsets of adolescent mothers: Developmental, biomedical, and psychosocial issues. In J. Lancaster & B. Hamburg (Eds.), School-age pregnancy and parenthood. New York: Aldine de Gruyter.
- Hamilton, S. F., & Powers, J. L. (1990). Failed expectations: Working class girls' transition from school to work. Youth and Society, 22, 241-262.
- Harper, J. F., & Marshall, E. (1991). Adolescents' problems and their relationship to self-esteem. Adolescence, 26, 799-808.
- Havighurst, R. J. (1964). Youth in exploration and man emergent. In H. Borow (Ed.), Man in a world at work. Boston: Houghton Mifflin.
- Hawks, B. K., & Muha, D. (1991). Facilitating the career development of minorities: Doing it differently this time. The Career Development Quarterly, 39, 251-260.
- Hedderson, J. (1987). SPSS Made simple. Belmont, CA: Wadsworth.
- Henshaw, S. K., & Silverman, J. (1988). The characteristics and prior contraceptive use of U.S. abortion patients. Family Planning Perspectives, 20, 158-168.
- Herr, E., & Cramer, S. H. (1988). Career guidance and counselling through the life-span: Systematic approaches. London: Scott, Foresman, and Company.
- Hofferth, S. L. (1987). Contraceptive decision-making among adolescents. In S. Hofferth & C. Hayes (Eds.), Risking the future: Adolescent sexuality, pregnancy, and childbearing. (pp. 56-77). Washington, D.C.: National Academy Press.

- Holmes, V. L., & Esses, L. M. (1988). Factors influencing Canadian high school girls' career motivation. Psychology of Women Quarterly, 12, 313-328.
- Hughes, C. M., Martinek, S. A., & Fitzgerald, L. F. (1985). Sex role attitudes and career choices: The role of children's self-esteem. Elementary School Guidance and Counselling, 20, 57-66.
- Imel, S., & Kerka, S. (1990). Career education for teen parents. Trends and Issues. (ERIC Document Reproduction Service No. ED 317 846).
- Kamerman, S. B., & Kahn, A. J. (1988). Mothers alone: Strategies for a time of change. Dover, MA: Auburn House.
- Kazanas, H. (1978). Affective work competencies for vocational education. Columbus, OH: National Centre for Research in Vocational Education.
- Kerka, S. (1988). Single parents: Career-related issues and needs. (ERIC Document Reproduction Service No. ED 296 123).
- Kissman, K. (1990). Social support and gender role attitude among teenage mothers. Adolescence, 25, 707-716.
- Kokaska, C. J., & Brolin, D. E. (1985). Career education for handicapped individuals. Columbus, OH: Charles E. Merrill.
- Komarovsky, M. (1982). Female freshmen view their future: Career salience and its correlates. Sex Roles, 8, 299-312.
- Krau, E. (1989). The transition in life domain salience and the modification of work values between high school and adult employment. Journal of Vocational Behaviour, 34, 100-116.

- Ktsanes, B. (1980). The teenager and the family planning experience. Adolescent pregnancy and childbearing. U.S. Department of Health and Human Services.
- Layton, P. L. (1984). Self-efficacy, locus of control, career salience, and women's career choices. Unpublished doctoral dissertation, University of Minnesota.
- Lent, R. W., & Hackett, G. (1987). Career self-efficacy: Empirical status and future directions. Journal of Vocational Behaviour, 30, 347-382.
- Lent, R. W., Larkin, K. C., & Brown, S. D. (1986). Self-efficacy in the prediction of academic performance and perceived career options. Journal of Counselling Psychology, 33, 265-269.
- Lent, R. W., Larkin, K. C., & Brown, S. D. (1987). Comparison of three theoretically derived variables in predicting career and academic behaviour: Self-efficacy, interest congruence, and consequence thinking. Journal of Counselling Psychology, 34, 293-298.
- Lieberman, E. J. (1980). The psychological consequences of adolescent pregnancy and abortion. Adolescent pregnancy and childbearing. U.S. Department of Health and Human Services.
- Lightman, E., & Schlesinger, B. (1980). Maternity homes and single mothers: Three profiles. Journal, 23, 5-12.
- Low, J. M., Moely, B. E., & Willis, A. S. (1989). The effects of perceived parental preferences and vocational goals on adoption decisions: Unmarried pregnant adolescents. Youth and Society, 20, 342-354.

- Mackay, H., & Austin, C. (1983). Single adolescent mothers in Ontario.  
Ottawa: The Canadian Council on Social Development.
- Magnusson, K. (1992). Transitions to work: A model for program development. International Journal for the Advancement of Counselling, 15, 27-38.
- Magnusson, K., Day, B., & Redekopp, D. (1988). Skills are not enough: A concept paper on innovative strategies and services for youth in transition. Paper presented at the meeting of the Canadian Guidance and Counselling Foundation, Ottawa, Ontario.
- Magnusson, K., & Redekopp, D. (In press). The components of adaptability for transitions: Competence, self-management, and salience. Canadian Journal of Counselling.
- Mangum, G. L. (1987). Youth transition from adolescence to the world of work. (ERIC Document Reproduction Service No. ED 292 977).
- Meirer, S. T. (1991). Vocational behaviour, 1988-1990: Vocational choice, decision-making, career development interventions, and assessment. Journal of Vocational Behaviour, 39, 131-181.
- Miller, S. (1983). Children as parents. New York: Child Welfare League of America.
- Miller, B. C., & Moore, K. A. (1990). Adolescent sexual behaviour, pregnancy, and parenting: Research through the 1980's. Journal of Marriage and the Family, 52, 1025-1044.

- Miller, C. D., & Oetting, G. (1977). Barriers to employment and the disadvantaged. Personnel and Guidance Journal, 56, 89-93.
- Missouri University. (1989). At-risk students. (ERIC Document Reproduction Service No. ED 321 128).
- Mithaug, D. S., Martin, J., & Agran, M. (1987). Adaptability instruction: The goal of transitional programming. Exceptional Children, 53, 500-505.
- Montemayer, R., Adams, G. R., & Gullota, T. P. (1990). From childhood to adolescence: A transitional period. London: Sage Publications.
- Moore, K. A., Hofferth, S. L., Caldwell, S. B., & Waite, L. J. (1979). Teenage motherhood: Social and economic consequences. Washington: The Urban Institute.
- Muuss, R. E. (1988). Theories of adolescence (5th Ed.). New York: Random House.
- National Child Labor Committee. (1985). A time for transition. Teenage parents and employment. (ERIC Document Reproduction Service No. ED 282 096).
- National Research Council. (1987). Risking the future: Adolescent sexuality, pregnancy, and childbearing. Washington: National Academy Press.
- Naylor, M. (1989). Retaining at-risk students in career and vocational education. (ERIC Document Reproduction Service No. ED 308 400).



- Nevill, D. D., & Schlecker, D. (1988). The relation of self-efficacy and assertiveness to willingness to engage in traditional/nontraditional career activities. Psychology of Women Quarterly, 12, 91-98.
- Nevill, D. D., & Super, D. E. (1986). The Salience Inventory: Theory, application and research. Palo Alto, CA: Consulting Psychologists Press.
- Noe, R. A., Wiggins Noe, A., & Bachhuber, J. A. (1990). An investigation of the correlates of career motivation. Journal of Vocational Behaviour, 37, 340-356.
- Ortiz, E. T., & Bassoff, B. Z. (1985). Adolescent welfare mothers: Lost optimism and lowered expectations. (ERIC Document Reproduction Service No. ED 270 673).
- Osipow, S. H. (1980). Manual for the Career Decision Scale. Columbus, OH: Marathon Consulting and Press.
- Osipow, S. H., Carney, C. G., & Barak, A. (1976). A scale of educational-vocational decidedness: A typological approach. Journal of Vocational Behaviour, 9, 233-243.
- Osipow, S. H., Carney, C. G., Winer, J., Yanico, B., & Koschier, M. (1976). Career Decision (3rd Ed.). Columbus, OH: Marathon Consulting Press.
- Piaget, J., & Inhelder, B. (1969). The psychology of the child. New York: Basic Books.
- Polit, D. F., Quint, J. C., & Riccio, J. A. (1988), The challenge of serving teenage mothers: Lessons from Project Redirection. New York: Manpower Demonstration Research Corporation.

- Protinsky, H., Sporakowski, M., & Atkins, P. (1982). Identity formation: Pregnant and non-pregnant adolescents. Adolescence, 17, 73-80.
- Rau, D., Spooner, F., & Fimian, M. J. (1989). Career education needs of students with exceptionalities: One State's case. Exceptional Children, 55, 501-507.
- Richman, C. L., Clark, M. L., & Brown, K. P. (1985). General and specific self-esteem in late adolescent students: Race x Gender X SES effects. Adolescence, 20, 554-566.
- Rickel, A. U. (1989). Teen pregnancy and parenting. New York: Hemisphere Publishing.
- Robbins, S. B. (1985). Validity estimates for the CDMSE scale. Measurement and Evaluation in Counselling and Development, 17, 64-71.
- Rogers, W. B., & Westbrook, B. W. (1983). Measuring career indecision among college students: Toward a valid approach for counselling practitioners and researchers. Measurement and Evaluation in Guidance, 16, 78-85.
- Roosa, M. W. (1986). Adolescent mothers, school drop-outs and school based intervention programs. Family Relations, 35, 313-317.
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.
- Rosenberg, M. (1979). Conceiving the self. New York: Basic Books.

- Rotberg, H. L., Brown, D., & Ware, W. B. (1987). Career self-efficacy expectations and perceived range of career options in community college students. Journal of Counselling Psychology, 34, 164-170.
- Sadler, L. S., & Catrone, C. (1983). The adolescent parent: A dual developmental crisis. Journal of Adolescent Health Care, 4, 100-105.
- Schlossberg, N. K. (1981). A model for analyzing human adaptation to transition. The Counselling Psychologist, 9, 2-18.
- Scott, J. W. (1983). The sentiments of love and aspirations for marriage and their association with teenage sexual activity and pregnancy. Adolescence, 18, 889-987.
- Shtarkshall, R. A. (1987). Motherhood as a dominant feature in the self-image of female adolescents of low socioeconomic status. Adolescence, 22, 565-570.
- Simmons, R. G., Blyth, D. A., VanCleave, R. F., & Bush, D. M. (1979). Entry into early adolescence: The impact of school structure, puberty and early dating on self-esteem. American Sociological Review, 44, 948-967.
- Slaney, R. B. (1981). Review of the Career Decision Scale. In D. J. Kreyer & R. C. Sweeland (Eds.), Test Critiques: Volume III (pp. 138-143). Kansas City, MO: Test Corporation of America.

- Stein, J. A., Newcomb, M. D., & Bentler, P. M. (1990). The relative influence of vocational behaviour and family involvement on self-esteem: Longitudinal analyses of young adult women and men. Journal of Vocational Behaviour, 36, 320-338.
- Steinham, G. (1992). Revolution from within: A book of self-esteem. New York: Basic Books.
- Stiffman, A., Earls, F., Robins, L. N., Jung, K. G., & Kulbok, P. (1987). Adolescent sexual activity and pregnancy: Socioenvironmental problems, physical health, and mental health. Journal of Youth and Adolescence, 16, 497-509.
- Streetman, L. G. (1987). Contrasts in the self-esteem of unwed teenage mothers. Adolescence, 22, 459-464.
- Stumpf, S., & Lockhart, M. C. (1987). Career exploration: Work-role salience, work preferences, beliefs, and behaviour. Journal of Vocational Behaviour, 30, 258-269.
- Super, D. E. (1969). Vocational development theory. Counselling Psychologist, 1, 2-30.
- Super, D. E. (1976). Career education and the meaning of work. Monographs on career education. Washington, DC: The Office of Career Education, U.S. Office of Education.
- Super, D. E. (1980). A life-span, life-space approach to career development. Journal of Vocational Behaviour, 16, 282-298.
- Super, D. E. (1982). The relative importance of work: Models and measures for meaningful data. The Counselling Psychologist, 10, 95-103.

- Super, D. E. (1985). New dimensions in adult vocational and career counselling. Columbus, OH: The National Centre for Research in Vocational Education.
- Super, D. E., & Nevill, D. D. (1984). Work role salience as a determinant of career maturity in high school students. Journal of Vocational Behaviour, 25, 30-44.
- Surrey, J. L. (1985). Self-in-relation: A theory of women's development. Work in progress. Wellsly, MA: Stone Center Working Papers Series.
- Taylor, K. M., & Betz, N. E. (1983). Applications of self-efficacy theory to the understanding of the treatment of career indecision. Journal of Vocational Behaviour, 22, 63-81.
- Taylor, K. M., & Popma, J. (1990). An examination of the relationships among career decision-making self-efficacy, career salience, locus of control, and vocational indecision. Journal of Vocational Behaviour, 37, 17-31.
- Theriot, J. G., Pecoraro, A. G., & Ross-Reynolds, J. (1991). Revelations of adolescent mothers: An intensive case-study approach. Adolescence, 26, 349-360.
- Thomas, R. G., & Bruning, C. R. (1981). Validities and reliabilities of minor modifications of the Central Life Interests and Career Salience Questionnaire. Measurement and Evaluation in Guidance, 14, 128-135.
- Thompson, R. (1984). The critical needs of the adolescent unwed mother. The School Counsellor, 31, 460-466.

- Tiedeman, D. V., & O'Hara, R. P. (1963). Career development: Choices and Adjustment. New York: College Entrance Examination Board.
- Tindall, L. W. (1988). Retaining at-risk students: The role of career and vocational education. (ERIC Document Reproduction Service No. ED 303 683).
- Veroff, J., Douvan, E., & Kulka, R. A. (1981). The inner American. New York: Basic Books.
- Watson, M. B., & Allan, M. M. (1990). Work-role salience: Comparison of students in career-directed and general degree courses. Psychological Reports, 64, 699-704.
- Watson, M. B., & Stead, G. B. (1990). Work-role salience of South African adolescents. Journal of Vocational Behaviour, 36, 249-257.
- Winer, B. (1971). Statistical principles in experimental design: Second edition. New York: McGraw-Hill.
- Wylie, R. C. (1974). The self-concept. London: University of Nebraska Press.
- Youngs, G. A., Rathge, R., Mullis, R., & Mullis, A. (1990). Adolescent stress and self-esteem. Adolescence, 25, 333-341.
- Zellman, G. L. (1981). The response of the schools to teenage pregnancy and parenthood. Santa Monica: The Rand Corporation.

Appendix A  
Consent Form

Date: \_\_\_\_\_

I, \_\_\_\_\_, understand fully that the aim of the research I am participating in is an exploration of the potential effects that pregnancy and motherhood in adolescence have on the perceived importance of career, the confidence in one's self to make career decisions, the perception or value of one's self, and one's level of career indecisiveness.

I understand that my involvement in this research entails written response to a battery of inventories/questionnaires that are designed to inform the researcher about what I think about the importance of career and career decision-making. Completion of this task should last approximately one hour long.

I also understand that if, during the process of filling out the questionnaires, I become emotionally distressed and/or need further exploration of the issue I am discussing, the researcher is prepared to assist me in a referral to a counselling service for this purpose.

I understand that the results of this research may be published or reported to government agencies, funding agencies, or scientific groups, but my name will not be associated in any way with any published results.

Having read the above and understanding it to be true, I am consenting to participate in this study. I am aware that should I choose to withdraw from this research at any time, I can do so without penalty. I also acknowledge the right of the researcher to terminate my involvement at any time without penalty.

I understand that if at any time I have questions, I can contact the researcher at 220-5925.

I hereby consent to participate:

Signature: \_\_\_\_\_

Witness: \_\_\_\_\_

## Appendix B

## Consent Form for Subjects Under 16 Years.

I hereby consent to allow my minor child \_\_\_\_\_ to participate as a subject in the research project at (school name) entitled "The Career Development Status of Pregnant Teens and Parenting Adolescents" conducted by M. Paseluikho under the supervision of Dr. K. Magnusson, of the Department of Educational Psychology at the University of Calgary.

I understand that the study will involve the following general procedures: At a time during the school day agreed upon by the principal and teacher(s), my child will respond to a battery of inventories/questionnaires designed to inform the researcher about what my child thinks about the importance of career and career decision-making. Completion of this task should last approximately one hour long. The research project is exploratory and is expected to enhance psychologists' understanding of the potential effects that pregnancy and motherhood in adolescence has on the perceived importance of career, the confidence in one's self to make career decisions, the perception or value of one's self, and one's level of career indecisiveness amongst female adolescents.

I understand that my child's participation is completely voluntary, and the refusal to consent will not result in any penalty for myself or my child. Furthermore, should permission to participate be given, my child is still free to withdraw from the study at any time, without penalty for myself or my child.

The general plan of this study has been outlined to me, including any possible risks. I understand that this project is not expected to involve risks or harms greater than those encountered in daily life. I also understand that it is not possible to identify all potential risks in any procedure, but that all reasonable safeguards have been taken to minimize the potential risks.

I understand that the results of this project will be coded in such a way that my child's identity will not be physically attached to the final data that I produce. The key listing my identity and the group-subject code number will be kept separate from the data in a locked file accessible only to the project director, and it will be physically destroyed at the conclusion of the project.

I understand that the results of this research may be published or reported to government agencies, funding agencies, or scientific groups, but my child's name will not be associated in any way with any published results.

I understand that if at any time I have questions, I can contact the project director at 220-5925.

\_\_\_\_\_  
(Signature, parent or guardian)

\_\_\_\_\_  
(Participant's name, printed & signed if possible).



## Appendix C

Personal History

For the purpose of this research study it is necessary to have some background information about you. Read each item with care and do not omit any of the questions. Fill in the appropriate blanks and circle the appropriate numbers corresponding to your answer for each question.

1. My age \_\_\_\_\_
2. Are you pregnant?  
Yes \_\_\_\_\_  
No \_\_\_\_\_
3. Is this your first pregnancy? Please check one of the following:  
Yes \_\_\_\_\_  
No \_\_\_\_\_; How many times have you been pregnant? \_\_\_\_\_  
Not applicable \_\_\_\_\_
4. What trimester in your pregnancy are you currently in?  
First trimester \_\_\_\_\_  
Second trimester \_\_\_\_\_  
Third trimester \_\_\_\_\_  
Not applicable \_\_\_\_\_
5. Are you planning to raise your child or are you planning to put your infant up for adoption? Please check one:  
Parenting \_\_\_\_\_  
Adoption \_\_\_\_\_  
Not applicable \_\_\_\_\_
6. If you already have a child how old is she or he? \_\_\_\_\_  
Not applicable \_\_\_\_\_
7. Do you live at home with your parents? Yes \_\_\_\_\_  
No \_\_\_\_\_
8. Are your parents:
  1. Divorced
  2. Separated
  3. Still married
  4. Never married
  5. Deceased
  6. Widowed

9. Are you from a single-parent family? Yes \_\_\_\_ No \_\_\_\_
10. If you live with only one of your parents is there another adult in the home?
- Yes \_\_\_\_
- No \_\_\_\_
- Not applicable \_\_\_\_
11. If you live at home, the annual income of your parent (s) is:
1. 0-10,000
  2. 11,000-20,000
  3. 21,000-30,000
  4. 31,000-40,000
  5. 41,000-50,000
  6. 51,000-60,000
  7. 60,000 and up
  8. Not applicable; My annual income is \_\_\_\_.
12. If you do not live at home do you live with someone else?
- No \_\_\_\_
- Yes \_\_\_\_; With whom do you live \_\_\_\_.
- (e.g., boyfriend, aunt, grandparents, friend, etc.)
13. If you do not live at home what is your source of income?
1. Full-time work
  2. Part-time work
  3. Social assistance (e.g., welfare)
  4. Other (please specify): \_\_\_\_
  5. Not applicable
14. The last grade that I completed in school was:
1. grade 6
  2. grade 7
  3. grade 8
  4. grade 9
  5. grade 10 (min. 35 credits)
  6. grade 11 (min. 70 credits)
  7. grade 12 (over 70 credits)
  8. I have my high school diploma

15. My race/ethnicity:
1. European
  2. Black
  3. Native American
  4. Asian
  5. Latin American
  6. Middle Eastern
16. What is your mother's educational background?
1. less than a high school diploma
  2. high school diploma
  3. 2 year college degree (e.g., S.A.I.T.)
  4. Bachelor's degree
  5. Master's degree
  6. Doctorate degree
  7. Not sure
17. What is your father's educational background?
1. less than a high school diploma
  2. high school diploma
  3. 2 year college degree (e.g., S.A.I.T.)
  4. Bachelor's degree
  5. Master's degree
  6. Doctorate degree
  7. Not sure