

IDENTITY AND INTIMACY DEVELOPMENT ACROSS
ADOLESCENCE: A CROSS-SECTIONAL STUDY

BY

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A Thesis
Submitted to the Faculty of Graduate Studies
In Partial Fulfillment of the Requirements
For the Degree of

DOCTOR OF PHILOSOPHY

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**A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University
of Manitoba in partial fulfillment of the requirements of the degree
of
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ABSTRACT

The purpose of this study was to empirically investigate the course of identity and intimacy development across adolescence in light of Erikson's Theory of Psychosocial Development and the Self-in-Relation model of women's development (Jordan, 1997; Jordan et al., 1991). A cross-sectional design was used with males and females at 13, 16, and 20 years of age. Measures included The Measures of Psychosocial Development (Hawley, 1984); the Fundamental Interpersonal Relations Orientation - Behavior (Schutz, 1978); the Bem Sex Role Inventory (Bem, 1974); the Adolescent Sex Role Inventory (Thomas & Robinson, 1981); and the Identity Status Interview (Marcia, 1966). Overall, there was lower identity development for both males and females in mid adolescence relative to early and late adolescence. As well, females demonstrated higher intimacy levels at both early and late adolescence. The results provide support for the self-in-relation model of women's development. In addition, there was evidence that both males and females take others into consideration when making identity decisions. There was no evidence that participants' gender roles affected their identity and intimacy development.

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INTRODUCTION

The development of an individual's identity and their development of intimacy in relationships with others are important components of personality development. How the individual accomplishes these tasks, and when he or she does so, has been the subject of debate. Erik Erikson (1902-1994), in his theory of psychosocial development, presented the first model that explicitly addressed these questions. His theory has been tremendously influential during the last four decades and the model of psychosocial development he advanced is often presented as the definitive model of how identity, in particular, evolves in both males and females (e.g., Atkinson, Atkinson, Smith & Bem, 1990).

Empirical attempts to support Erikson's theory in relation to identity and intimacy development, however, have produced equivocal results. A number of theorists and researchers (Miller, 1976; Gilligan, 1982; Hodgson & Fischer, 1979, Marcia, 1993c; Archer, 1993a, Jordan, 1997) now assert that Erikson's theory concerning the development of identity and intimacy better describes male development than it does female development. These theorists are drawing attention to gender differences in the accomplishment of these developmental tasks and developing

new theories to describe female, as well as male, development of intimacy and identity.

Other researchers (Archer, 1993b, Marcia, 1993c, Waterman, 1993) are examining the development of specific areas of identity formation. They are also beginning to explore what they describe as the relational components of identity development. As well, these researchers are interested in examining the perspectives (similar as well as different) that males and females may bring to this process.

The first purpose of this study is to examine the empirical support for two models of identity and intimacy development in adolescence. The first is Erikson's model, which is part of his theory of psychosocial development. The second is the "self-in-relation" or "being in relation" model of women's development (Miller, 1976; Gilligan, 1982; Jordan et al., 1991,1997). The latter model focuses on differences in female development that emerge due to the differing socialization experiences of females and males. This model asserts that as they develop, girls remain connected to and move toward interconnection with, important others in their lives. Due to these differences between females and males, they then achieve identity and intimacy through different mechanisms and with differing

results.

Where self-in-relation theorists differ, however, is in their conceptualization of when differences between boys and girls emerge. Gilligan (1982) postulates that intimacy development for girls and boys diverge during adolescence. Further, she asserts that for girls, the development of identity and intimacy are intertwined. Miller (1976) postulates that differences between boys and girls in relation to intimacy development emerge earlier than adolescence. She argues this on the basis of different kinds of interpersonal relationships that boys and girls experience at earlier points in their development.

The second purpose of the study is to examine changes in identity status in particular identity domains across adolescence and to determine the frequency with which relational factors enter into identity decisions.

The present study will present Erikson's theory of psychosocial development with particular emphasis on Stage 5, Identity versus Identity Confusion and Stage 6, Intimacy versus Isolation. It will review the theoretical and empirical literature on identity and intimacy development in general and then focus on the literature exploring gender differences in the achievement of these tasks. Erikson's theory and his psychosocial model will then be

contrasted to those of the "self in relation" model of women's development. The veracity of these models will be evaluated by examining identity and intimacy development in a cross-sectional study with male and female young adolescents, middle adolescents and late adolescents/young adults.

Erikson's Model of Psychosocial Development

Erik Erikson's psychosocial theory focuses on the development of the ego as an individual interacts with the ever-widening domains of the family, community, and society. Personality is thought to develop throughout life as the result of the interaction between three realms: (1) irreversible inner laws of development, (2) cultural influences that dictate socially desirable rates of development and selectively favor particular aspects of development at the expense of others, and (3) the unique way in which the individual responds to society's demands (McAdams, 1990).

During each of eight stages, from infancy to late adulthood, the individual is physically, emotionally, and cognitively challenged by particular tasks as specific psychosocial issues become important and as the individual becomes capable of meeting them. How these issues are addressed by the individual and significant others in the

individual's life at this time will influence the person's future development.

Each psychosocial issue was conceived by Erikson as a dichotomy between two alternative attitudes associated, in their extremes, with healthy and unhealthy development. Erikson cautioned, however, that the stages are not resolved by the "achievement" of a positive attitude, such as identity or intimacy, to the total exclusion of any identity confusion or isolation. Rather, what is acquired at a given stage is a "ratio between the positive and the negative, which if the balance is toward the positive, will help (the individual) meet later crises with a better chance for unimpaired total development" (1959/1980, p. 181).

In Erikson's formulation individuals encounter the eight life stages in a fixed order. Each individual has their own timetable however, that is affected by individual factors such as maturational rate, and cultural determinants, such as socially sanctioned rites of passage. During each stage a particular developmental issue is "in ascendancy" (Erikson, 1959/1980) or at its time of particular importance. How this issue is addressed and resolved has implications for the resolution potential of subsequent issues because each stage builds upon those

previous to it. Erikson (1959/1980) borrowed the term "epigenesis principle" from embryology to describe this process. The epigenesis principle states:

anything that grows has a ground plan, and out of this ground plan the parts arise, each part having its time of special ascendancy, until all parts have risen to form a functioning whole (p. 53).

Erikson stresses that in this way, from the beginning of the life cycle, the individual contains the rudimentary origins of each of the eight psychosocial stages of development (including those of identity, intimacy, generativity, and integrity). It is only during the "critical period" of a particular stage, however, that the individual is best equipped to address and resolve the issue in question.

Figure 1 is a diagram of the psychosocial stages to illustrate the way in which the stages progress horizontally through time as well as diagonally, such that each successive stage has roots in, and builds on, all previous ones. In this way, each stage exists in some form before its critical time arrives and in the less developed "earlier versions" of the present stage (Erikson, 1959/1980; 1982).

Following its period of ascendancy, each ego strength

or virtue will develop further, and can be altered by life circumstances, but it will be subordinate to those that are subsequently in ascendancy. Ultimately, "the whole ensemble depends on the proper development in the proper sequence of each item" (Erikson, 1982, p. 29).

In this model, difficulties resolving a stage issue can represent specific situational problems concerning the present task or an exacerbation of earlier difficulties arising from previous stages. As well, each crisis or conflict is never completely resolved, but during its period of ascendancy is most pronounced. For example, difficulties resolving identity issues in adolescence may be related to existing situational factors or to less than optimal resolution of previous stage issues (such as trust versus mistrust). Failure to resolve previous stage issues does not, however, preclude the possibility of developing a firm sense of identity in adolescence. Nor does it preclude the possibility of being reworked later in subsequent re-definitions of identity, but it can hamper resolution of the present developmental task.

In Erikson's terminology, "crisis" denotes "decisive turning points where integrative development is mandatory" (1959/1980, p. 51) rather than a period of emotional

emergency. "Versus" refers to the tension that exists on the continuum between the positive and negative poles of each developmental dimension. It also connotes the tension that Erikson believed continually drives the individual toward further development (Erikson, 1959/1980 p. 51).

Identity Development

Erikson's Conceptualization of Identity Development

In Erikson's conceptualization, identity development involves the synthesis of the myriad roles, skills, attributes and attitudes the adolescent has previously been exposed to, into a unique configuration. It also includes a subjective feeling of "wholeness" (1964, p. 91) that includes comfort with decisions concerning issues of vocation, sexuality and social connectedness. As well, it involves presenting oneself to others and being seen by them in a way that is consistent with this internal wholeness. Erikson thus defined ego identity as "the accrued confidence that one's ability to maintain inner sameness and continuity . . . is matched by the sameness and continuity of one's meaning for others" (1959/1980, p. 94) and "the capacity of the ego to sustain sameness and continuity in the face of changing fate" (1964, p. 95). He also stated that:

identity includes, but is more than the sum of, all successive identifications of those earlier years when the child wanted to be, and often was forced to become, like the people he depended on. Identity is a unique product, which now meets a crisis to be solved only in new identifications with age-mates and leader figures outside of the family" (1964, pp. 91-92).

According to Erikson (1959/1980), identity development has both conscious and preconscious as well as unconscious aspects. Early in the process, when the individual is most preoccupied with his self-image ("self-conscious"), he is most aware of his developing identity. Later, an increasing sense of identity is experienced as a preconscious feeling of well-being, of "being at home in one's body (and as) knowing where one is going" (p. 127). At the unconscious level, identity development is an on-going "striving for a continuity of personal character" (p. 109).

Erikson also asserted that identity development occurs within two contexts: as part of the individual's personal psychosocial development, and in the interface between the individual's readiness to assume a personally relevant role in society and in the readiness (or not) of society to provide a meaningful role for the young person. As well,

he made explicit the importance he ascribed to cultural identity, or an individual's feeling of being part of a cultural group, as a component of one's identity (1959/1980; 1968).

In Erikson's view, self-esteem is different from identity but contributes to identity development. It was seen by Erikson as a subjective feeling of validation individuals experience when they receive genuine positive feedback from the environment about their performance in particular areas. This feedback was seen to strengthen the individual's identity if it derived from "wholehearted and consistent recognition of real accomplishment, that is, achievement that has meaning in their culture" (1959/80, p. 95)

Further, according to Erikson, identity development includes not only choosing who one wishes to become, but accepting who one has no choice but to be. He states:

The individual's mastery . . . begins where he is put in a position to accept the historical necessity which made him what he is . . . when he can choose to identify with his own ego identity and when he learns to apply that which is given to that which must be done. Only thus can he derive ego strength . . . from the coincidence of his one and only life cycle with a

particular segment of human history (1968, p. 74).

The roots of individual identity development, according to Erikson, are found in the first psychosocial stage of life, in the tension between the child's development of trust versus mistrust in the parenting adults in his/her life. Erikson stated that the development of trust "forms the basis in the child for a sense of identity which will later combine a sense of being "all right", of being oneself, and of becoming what other people trust one will become" (1959/1980, p. 65).

In Erikson's view, the attitudes towards oneself as an independent person that are developed during the stage of Identity versus Identity Confusion become the precursors to establishing intimacy with another in the next stage. As well, the self-esteem one has accrued in this stage and in the previous ones translates into the belief that one is capable of mastering the tasks one is confronted with. When these accomplishments are then acknowledged by important others the individual develops the confidence that they are "learning effective steps toward a tangible future" (p. 95). This development of a future direction is critical to the formation of identity (Erikson 1959/1980).

In Erikson's view, adolescents who are unable to integrate a central identity will experience Identity

Confusion, which he defined as "an acute state of symptomatic upset" (1959/1980, p. 183). This upset is primarily due to "the inability to conceive of oneself as a productive member of one's society" (Engler, 1991, p. 180). Identity Confusion is primarily a response to the inability to settle on an occupational identity. Identity confused adolescents will consequently experience problems in a number of areas. Individuals who feel that the environment is depriving them of the freedom to develop their identities will strongly resist these restrictions through such activities as banding together in cliques and gangs as they desperately seek to belong somewhere (1959/1980, p. 95).

Adolescents who feel overwhelmed by the pressure of making important decisions that both define them and restrict future possibilities may attempt to avoid making choices. In so doing they may feel a sense of "outer isolation and . . . inner vacuum" (p. 133). Others who have not established a more positive than negative sense of industry in the previous stage, may have particular difficulty seeing themselves as having a place in the economic structure of their society. They may become excessively fearful of competition and further blocked in their formation of an occupational identity (p. 193).

Still other identity conflicts may be expressed through the adoption of a negative identity. Erikson (1959/1980) defined this as

an identity perversely based on all those identifications and roles which, at critical stages of development, had been presented to the individual as the most undesirable or dangerous, and yet also as the most real (p. 141).

He stated that the individual is drawn to this resolution as an attempt to achieve mastery in a situation where "the available positive identity elements" (p. 142) seem unattainable with the individual's present means.

In Erikson's conceptualization, a healthy resolution of Identity vs. Identity Confusion is evident in individuals who know who they are and have formulated their basic beliefs and values. These individuals have developed an ideological point of view, a direction for the future, and an answer to the question: "What do I want to make of myself, and what do I have to work with?" (Erikson, 1968, p. 314). They are individuals who have developed the ego quality "Fidelity". Erikson defined this as "a higher level of the capacity to trust - to trust oneself - but also the claim to be trustworthy and to commit one's loyalty to something" (1982, p. 60).

In Erikson's view, identity development is, however, limited by two factors he termed cultural and historical relativity. Cultural relativity refers to the cultural values that are reinforced by significant others in one's life as the individual is forming his or her identity. He stated that as identity forms, an individual develops an increased sense of inner unity . . . an increase of good judgement, and an increase in the capacity to do well, according to the standards of those who are significant to him. . . who . . . may think he is doing well when he "does some good"; or when he "does well" in the sense of acquiring possessions; or . . . in the sense of learning new skills or new ways of understanding or mastering reality; or when he is not much more than just getting along (pp. 52-53).

Historical relativity refers to the influence of one's "historical time and place" (1982, p.9) on one's perception and interpretation of individual processes, including identity development, as well as on more general societal issues and events. In relation to the potential limits that history places on identity development, Erikson stated:

A child has quite a number of opportunities to identify himself, more or less experimentally, with

real or fictitious persons of either sex, with habits, traits, occupations, and ideas. Certain crises force him to make radical selections. However, the historical era in which he lives offers only a limited number of socially meaningful models for workable combinations of identification fragments (1959/1980, p. 25).

In Erikson's writings, the impact of cultural and historical relativity on identity development is presented primarily in relation to potential problems faced by minority youth (1968) or to the impact of particular historical events on the identity development of youth of a particular era (1959/1980). He also applied these insights, in some of his writing, to identity development in women (1964, 1968). In the present cultural and "historical time and place" his comments have particular relevance to a discussion of the societal limitations that have historically been placed on women. They are also particularly relevant to the study of Erikson's model as it relates to female development.

Gender Differences in Identity Development

Erikson 's model posits that for both males and females, adolescence is the time during which the "identity crisis" occurs. By devoting a separate chapter to female

identity development, however, Erikson (1964, 1976, 1968) made it clear that he identified gender differences in this process. In this single chapter (originally appearing in 1964, slightly modified in 1968, and re-appearing in its original form in 1976) he suggested that these differences are due to a number of factors. Through his emphasis on a woman's "inner space" or maternal potential, he asserted that biology is an important part of female destiny. He stated:

The stage of life crucial for the emergence of an integrated female identity is the step from youth to maturity, the state when the young woman, whatever her work career, relinquishes the care received from the paternal family in order to commit herself to the love of a stranger and to the care to be given to his and her offspring (1968, p. 265).

In most of his writing about female identity development, as evident above, Erikson stressed the maternal, relational, and generative aspects of female development while minimizing the vocational. At times, however, he did place these biologically driven components in the larger historical and social context. For example, he stated:

I have only reiterated the physiological rock-bottom

which must neither be denied nor given exclusive emphasis. For a human being, in addition to having a body, is somebody, which means an indivisible personality and a defined member of a group . . . In other words: anatomy, history, and personality are our combined destiny (1968, p. 285).

As well, while he stated that a woman holds parts of her identity "in abeyance" until she is joined by her husband and children, and that other parts are defined by her attractiveness and the kind of partner she seeks, he added:

This of course, is only the psychosexual aspect of her identity, and she may go far in postponing its closure while training herself as a worker and a citizen and while developing as a person within the role possibilities of her time" (p. 183).

At other times, however, Erikson seemed not to acknowledge the impact of external conditions on female identity formation. At such times he stressed biological determinism and seemed to suggest that women are also in some way to blame for social limitations encountered. He stated for example: "Women have found their identities in the care suggested in their bodies and in the needs of their issue, and seem to have taken it for granted that the

outer world space belongs to the men" (1968, p. 274).

In another context, when discussing identity development more generally, Erikson (1968) wrote that it was essential that there be some youthful "rebels" who refuse to accept the social conditions as they are. Without these individuals, he stated, "psychosocial evolution would be doomed" (p. 248).

In his discussion of female identity development, however, Erikson seemed instead to suggest that women's identity options are bound by the social conditions of the times. Where he did suggest that women could have a vital role to play in the larger social order, he assigned internal attributions to their not already having done so. He stated

Maybe if women would only gain the determination to represent publicly what they have always stood for privately in evolution and history (realism of householding, responsibility of upbringing, resourcefulness of peacekeeping, and devotion to healing), they might well add an ethically restraining, because (sic) truly supranatural, power to politics in the widest sense (p. 262).

In summary, in Erikson's writing, it is clear that he viewed female identity development as different from male

identity development, primarily for biological reasons. His psychosocial model, however, makes no provisions for this difference. Further, it places this developmental task for both males and females in the adolescent years. If women do not consolidate their identities until they have a partner and children, as he suggested, this task will continue into the next two stages of Intimacy versus Isolation and Generativity versus Stagnation. The female path, then, is different from the one he proposed for men, but was not incorporated into his model.

Erikson explicitly acknowledged the limitations that cultural and historical relativity have traditionally placed on female development. Nonetheless, he continued to place greater emphasis on the maternal components of identity development for women. Further, there was no comparable emphasis on the paternal role in male identity development. Thus, in his writing, Erikson's position was that identity development for males and females has different foci.

Further Development of the Identity Construct

James Marcia (1966) proposed a paradigm to examine Erikson's concept of ego identity development, that has been "useful and productive" (Flum, p. 489, 1994) for three decades. From his perspective, Marcia (1993b) asserts that

identity can be considered from three social-interactional perspectives: structural, phenomenological, and behavioral. The structural, or intrapsychic aspect of identity formation refers to its connection with other psychodynamic processes embedded in psychoanalytic theory and Erikson's theory of psychosocial development. From this perspective identity development is seen as a component of ego growth and thus, as identity formation occurs, there is an accompanying increase in overall ego strength. Other ego functions such as the ability to delay gratification, to think under stress, and to develop mutuality in interpersonal relationships, show increased development as well (Marcia, 1993b).

The phenomenological aspect of identity formation refers to the feeling that "one has a core, a center that is oneself, to which experience and action can be referred" (p. 7). There are two types of identity that may be experienced. The first is conferred identity - the elements of self an individual gradually comes to know as he or she becomes progressively aware of his or her basic characteristics and place in the world. These elements may include aspects of one's temperament, one's skills, one's membership in a particular family, one's citizenship in a specific country. Self-constructed identity includes

elements over and above those of conferred identity that the individual has chosen as the result of a decision-making process. They may include beliefs and values an individual has decided to adopt or occupational goals one has chosen (Marcia, 1993b).

The behavioral aspects of identity formation are (a) the domains in which identity seems to manifest itself and (b) whether or not an individual is committed in these areas. Marcia initially identified the domains of occupation and ideology as most salient to identity formation but has since suggested that these areas "can change with social conditions and historical eras". Evidence of commitment to a domain, however, is a necessary behavioral indicator of identity formation in this view.

For Waterman (1985), identity refers to the establishment of a "clearly delineated self-definition . . . comprised of those goals, values, and beliefs which the person finds personally expressive, and to which he or she is unequivocally committed" (p. 6). In this perspective, which he now calls "eudaemonist" (1993a), "the task of identity formation is to discover, or recognize, the character of the daemon (or true self), that is, one's own intrinsic character" (p. 151). Thus for Waterman, as well as for Marcia and Erikson, committing oneself to something,

be it beliefs, a self-chosen occupation, or the daemon is essential to identity formation.

According to Raeff (1994), ego identity formation is compatible with social cognitive theory and research regarding self-concept development. Referencing Damon & Hart, 1982, Raeff defines self-conceptualization as "a life-long developmental progression whereby the different constituents that make up a self-concept are increasingly integrated into a systematic whole" (p. 224). This is compatible with Erikson's model. Though he places the identity crisis at the end of adolescence, he states "identity formation neither begins nor ends in adolescence: it is a lifelong development" (1959/1980 p. 122).

Erikson's view of the ego as the aspect of the self that organizes and integrates experience (1959/1980) is also compatible with the social cognitive view of the "I" as the organizing element. As well, aspects of "me", that are identified as part of the self-concept (the material self, the social self and the spiritual self) (Raeff, 1994) have also been discussed by Erikson as relevant to identity formation. The most salient difference, however, is that while Erikson saw the ego as mediating between the id and superego, in addition to the other "me" elements, in the social cognitive view, these psychoanalytic elements are

not included.

Ego identity is seen as both a cognitive and affective process (Willemsen & Waterman, 1991). An aspect of identity development is also seen by these writers as related to individuation, as conceived by Mahler, Pine, & Bergman (1975). Identity development is seen from a cognitive-developmental perspective as the time in which, due to the emergence of formal operations, there is increasing differentiation of the adolescent's self-concept into domains and roles. At the same time, there is a need to integrate these self-concepts into a consistent theory of self (Harter, 1990).

As well, as adolescents become more independent and less threatened by differences they perceive between themselves and their families they also become freer to act on the different attitudes and beliefs they are developing (Scarr, Weinberg, & Levine, 1986).

Marcia's Identity Statuses

Erikson has been seen as the most influential writer on identity in the past four decades and therefore empirical investigation of his theory has focused on this psychosocial task. Marcia's (1966; 1980; 1989; 1993b) work on demarcating four identity statuses arose from his efforts to operationalize Erikson's concepts for empirical

study.

During the last 25 years more than 300 studies have been completed on the identity statuses. These studies have examined the relationship between the different identity statuses and individual personality characteristics, developmental aspects, gender and sex role differences, and cross-cultural issues (Marcia, 1993c).

The four statuses are ordinal, discrete levels of ego identity achievement. They are: Identity Achievement, Foreclosure, Identity Diffusion, and Moratorium (Marcia, 1966; 1980; 1993b). They differ in terms of the processes underlying identity development. Specifically, they differ in the presence or absence of "crises" or exploratory periods (exploration) and the degree of personal investment (commitment) the adolescent has made concerning particular identity domains.

In Marcia's conceptualization, there are two high identity, or mature identity statuses. They are Identity Achievement and Moratorium. Individuals with Identity Achievement status are those who have seriously questioned their late childhood or early adolescent plans and values. They have then either committed themselves to new plans or to "variations on (the) previous themes" (Marcia, 1993b, p. 10). In either instance, following a period of active

exploration they have committed themselves to their self-chosen plans and values. Individuals with Moratorium status are those who are currently exploring alternatives but have yet to make a firm commitment, although a more vague commitment may be present.

The two low identity, or less mature statuses are Foreclosure and Diffusion. Individuals in Foreclosure status are those who have not experienced a period of exploration, but have committed themselves to life directions and values shared or promoted by their parents or other significant persons in their lives. Those with Identity Diffusion may or may not have begun to explore alternatives and have not committed to particular values and plans. The defining criteria of the identity statuses are presented in Table 1.

Table 1

The Identity Statuses

		EXPLORATION	
		YES	NO
COMMITMENT	YES	IDENTITY ACHIEVEMENT	FORECLOSURE
	NO	MORATORIUM	DIFFUSION

Identity statuses are assessed through the Identity Status Interview developed by Marcia (1966) (e.g., Marcia, 1989; Archer, 1985, Dellas, 1990); or by questionnaires such as the Extended Objective Measure of Ego Status (EOM-EIS2) developed by Adams et al. (1979) (e.g., Adams et al, 1987, cited in Marcia, 1993b; Jones & Streitmatter, 1987); or the Identity Achievement Scale (IAS) (Simmons, 1970) revised by Tan et al. (1977).

Concerning the history of research on the identity statuses, Marcia (1993b) reports that in the initial studies, the focus was on establishing the validity of various outcomes of adolescent identity formation. This research was conducted with college-aged men and the identity domains in which exploration and commitment were assessed were ideology and vocation. When validity was established, interest then expanded to include childhood antecedents of the statuses as well as adult consequences (Marcia, 1993c).

In addition, there was increased interest in the underlying process variables of exploration and commitment, and less emphasis on the statuses as fixed outcomes. The identity domains of interest were also expanded to include relational domains such as sexuality (Marcia & Friedman, 1970; Schenkel & Marcia, 1972); sex role orientation

(Matteson, 1977); and family versus career priorities (Waterman, 1980; cited in Marcia, 1993c). As well, women's identity development began to be studied (Marcia, 1993c).

As research in the area continued, it became clear that rather than having one identity status in all identity domains, most individuals obtained a mixture of status designations, although one usually predominated. Researchers began to focus on identity status within content domains rather than overall identity status as they explored the various components of identity development (e.g., Waterman, 1985).

As the statuses began to be studied from a developmental, longitudinal perspective it also became clear that individuals changed statuses - both during adolescence, while they consolidated their identities, and after consolidation as well. Marcia citing Stephen et al. (1992) and Waterman & Archer (1990) states

The current approach to identity is a life-span developmental one, in which the identity integration at late adolescence is seen as an initial formulation, to be subject to reformulation and reintegration throughout the life cycle (p. 21)

Of particular relevance to the present study is research on the direction and timing of movement within the

statuses during adolescence and early adulthood; and gender differences in movement between the statuses.

Adolescent Development and the Identity Statuses

The earliest age at which movement within the identity statuses from less mature to more mature status has been seen, was in a study of seventh and eighth graders using the (EOM-EIS) (Streitmatter, 1988). Cross-sectional studies of identity development within the high-school years, using questionnaires, have revealed "small differences, (that are) sometimes statistically significant" (Waterman, 1993b). Wagner (1987), for example, found significantly higher identity scores with increasing age for both males and females aged 10-12 and 16-18. LaVoie (1976), using the same measure with high school sophomores, juniors and seniors, found only a nonsignificant increase with increasing grade level for both males and females.

In three cross-sectional studies using the identity status interview (Archer, 1982, 1985; Meilman, 1979) movement from less mature to more mature identity status was evident. Meilman's (1979) participants were males aged 12, 15, and 18. The domains assessed were vocation, religion, politics, and avocation. Archer's (1982, 1985) participants were males and females in grades 6, 8, 10, and

12. In the first study the domains covered were vocation, religion, politics, and sex-role attitudes. In the second study the domains assessed were vocation, sex-role attitudes, and family roles.

In each of the studies, the youngest participants were primarily in the Foreclosure and/or Diffusion statuses, depending on the identity content domain. A significant increase in the frequency of the Identity Achievement status with increasing age was found in all three studies (Archer, 1982, 1985; Meilman, 1979) with the increase distributed across the various content domains in the interview.

The only gender effect obtained was a grade by gender interaction for the Moratorium status reported in Archer's second study. In that study the Moratorium status was consistent for males across the four age groups. The twelfth-grade females, however, were significantly higher in the use of this status. This interaction was attributed by Archer (1985) to the inclusion of the family roles domain in the interview.

It is during the university years that the greatest gains in identity formation appear to occur (Waterman, 1985, 1993b). Cross-sectional studies using a variety of paper-and-pencil measures yield a consistent pattern of

findings, with high scores associated with advancing age or year in university (e.g., Whitbourne, Jelsma, & Waterman, 1982; Fry, 1974).

The results of three longitudinal studies of American college students using the identity status interview (Adams & Fitch, 1982; Waterman & Waterman, 1971; Waterman, Geary, & Waterman, 1974; Waterman & Goldman, 1976) demonstrated an increase in the Identity Achievement status and decrease in Moratorium and Identity Diffusion statuses in the vocational domain. More equivocal findings were evident in the areas of religious beliefs and political ideology. Waterman (1993b) suggests that these latter findings indicate that the college experience tended to undermine traditional religious beliefs and political ideology without assisting the individual develop alternate beliefs.

Gender Differences in the Identity Statuses

In his review of the research on the development of the identity statuses in young men, Marcia (1980) reported that Identity Achievement and Moratorium males tended to score higher on measures of self-esteem, moral reasoning, autonomy, and intimacy than did Foreclosure and Identity Diffusion individuals. He concluded that for young men, Identity Achievement and Moratorium were the most positive statuses.

Marcia (1993c) reported that of eight studies conducted prior to 1977 applying the identity status constructs to college women, a different pattern was evident. Marcia and Friedman (1970), for example, found that the Foreclosure status, rather than Moratorium, was most like Identity Achievement and the Moratorium status was most like Identity Diffusion. This Achievement-Foreclosure, Moratorium-Diffusion pattern was also found in six of the other seven studies.

Since 1977, of sixteen studies applying the identity statuses to women in which patterns could be seen, four showed the earlier grouping and the remaining 12 "conform to theoretical expectations underlying the identity statuses" (p. 38). That is, for women as well as men it was found that Identity Achievement and Moratorium were the more mature statuses and Foreclosure and Diffusion were the less mature statuses (Marcia, 1993c). These changes, which now result in the conclusion that there are no gender differences in overall identity status, seem likely to be the result of social changes that have taken place since the Women's Movement began (Archer & Waterman, 1988; Marcia, 1993c) and in particular to increased social support for women's achievement and identity formation (Freilino & Hummel, 1985).

Research using the ISI that has examined identity development in relation to specific identity issues addressed by the individual, however, has revealed gender differences. The specific domains assessed by the Identity Status Interview (ISI), for example, now typically include "agentic" areas such as vocational plans, and religious and ideological beliefs as well as "communal" areas such as family roles and sex-role attitudes (Waterman, 1993b).

Hodgson & Fischer (1979) examined both within-gender and between-gender differences in identity status (i.e., Mature: Identity Achievement-Moratorium vs Immature: Foreclosure-Diffusion) in relation to agentic and communal domains. They identified different patterns by which both males and females addressed the two domains. Respondents of both genders in the mature statuses on the agentic domain but in the immature statuses on the communal domain were seen as following the "masculine pathway". Respondents of both genders in the mature statuses on the communal domain but in the immature statuses in the agentic domain were referred to as following the "feminine pathway". Respondents in mature statuses on both domains were referred to as following an "androgynous pathway"; those low in both were labeled "no pathway".

The researchers found lower self-esteem among women

classified as no pathway or masculine pathway, but higher self-esteem among women in the feminine or androgynous pathways. From this finding Matteson (1993) concludes that identity achievement in traditionally masculine areas . . . does not in itself lower women's self-esteem. It appears that women can find support for identity achievement if they do so in a distinctly feminine way . . . if (they) do not neglect the communal areas (p. 83).

In another study, Grovetant and colleagues (Grovetant, Thorbecke, & Meyer, 1982; Thorbecke & Grovetant, 1982) specifically examined gender in the communal (or interpersonal) domain of identity development. The findings indicate that the communal area seems to be important to both males and females. However, they tended to approach this area from different perspectives. Males tended to view interpersonal relations "as arenas for competition and mastery, and use friendship to facilitate achievement goals" (Matteson, 1993, p. 83). For females, commitment to friendship was negatively correlated with competitiveness (Matteson, 1993).

The Sequence of Identity Domains Addressed in Adolescence

Waterman (1985) investigated the idea that the developmental concerns assessed by the identity domains

would be addressed and resolved to different extents at different times. To test this model, he conducted a composite analysis of 8 cross-sectional studies with 5 groups of adolescents ranging from pre-high school (Grades 6 through 8) to college upper class years (Juniors and Seniors) using the ISI (Marcia, 1966).

The results of the study supported Waterman's hypothesis that the issues were generally addressed sequentially with religion and morality issues dealt with first, vocational issues dealt with next, and political issues addressed last. The results also indicate that these issues were dealt with gradually over the five age groups.

Waterman also reported that no overall gender differences were evident. Concerning vocational choice, no gender differences for the frequency of the identity statuses were evident for any of the samples covering the sixth to the twelve grades. A significant gender difference was found for only one of the six college samples. In that study, Hodgson and Fischer (1979) reported that males were more frequently in the identity achievement status, while females were more frequently in the foreclosed or diffusion statuses. In neither of two studies assessing religious beliefs were gender differences

detected. The results concerning political ideology were equivocal with some studies (e.g., Grotevant, 1981 cited in Waterman, 1985); Adams & Fitch, 1982; Hodgson and Fischer, 1979) reporting males to be more frequently in the identity achievement status and females more often in the moratorium or foreclosure statuses. Other studies detected no gender differences in this domain.

Archer (1985) examined the fourth identity dimension, sex role orientation and family/career priorities, with twelve-to-eighteen year olds. Sex role identity was defined as one's selection and internalization of personally expressive values, beliefs, and goals perceived as appropriate to one's gender. One's sex role orientation was defined as the content of these values, beliefs, and goals considered appropriate because one is female or male. In the sex role domain, no significant gender differences were found in the frequency of identity statuses. A significant number of both males and females were foreclosed in relation to this domain. This finding suggests that having a commitment to a sex role is of particular importance to this age group. It also suggests that adolescents tend to accept the first models of sex role behaviour presented to them without considering whether other models are more personally expressive.

In the family/career priorities domain, significant gender differences were evident. Males were more than twice as likely to be diffuse about priorities whereas females were somewhat more likely to be foreclosed and almost four times more likely to be in the mature (moratorium or identity achievement) statuses. These results suggest that issues related to integrating the two future roles of family and career were far more salient to the female adolescents than they were to the males.

These findings have also been interpreted by a number of researchers (e.g., Waterman, 1993b; Archer, 1990) as indicating that identity development is more complex for females because there are more areas of their lives that must be integrated into a stable identity.

A previous study conducted by Battle (1994), using another identity measure, provides additional support for the research on overall status achievement reported above. In this study, which assessed the relationship between family environment and psychosocial development of male and female undergraduates, no gender differences were detected in identity development as assessed by the Measures of Psychosocial Development (MPD).

These results, taken together, suggest that when overall identity as a broad construct is assessed, gender

differences are not evident. Rather, the similarities in the identity development of males and females are evident. Similarly, when specific, agentic identity domains, such as the vocational and religious domains are assessed, gender differences, again, tend not to emerge. However, in the specific, communal or interpersonal domain, gender differences are likely to be evident. Here, qualitative differences as well as quantitative differences in the way relational factors impact on identity development for males and females are highlighted and suggest the need for further examination.

For the present study identity, as defined by Erikson was assessed by two instruments developed to operationalize his constructs. One of the instruments assessed overall identity development as well as overall intimacy development. This instrument surveyed attitudes about self-definition, and clarity of goals that were drawn from Erikson's writing.

The Identity Status Interview (ISI) was also used to assess identity status within both agentic and communal domains, and to determine the extent to which relational considerations entered into identity decisions.

Intimacy Development

Erikson's Conceptualization of Intimacy

In Erikson's model, subsequent to an individual's forging his personal identity during adolescence, the desire for intimacy becomes important in early adulthood. Erikson defined intimacy as "the capacity to commit oneself to concrete affiliations which may call for significant sacrifices and compromises" (Erikson, 1982, p. 70).

In his view, only if one has a strong sense of identity, can he or she risk losing themselves in a mutual, shared identity (Erikson, 1964). Central to Erikson's definition of intimacy is mutuality, commitment and the forging of a partnership from which children can be created and nurtured. Erikson clearly distinguishes this intimacy from infatuation in adolescence that assists with adolescent identity development. He also distinguishes it from "playful intimacy" evident in friendships (Erikson, 1964, 1968). In this way he stressed the connection between the stages of intimacy and generativity. He seemed to conceptualize intimacy as more closely related to its transformation in generativity than to its roots in the earlier stages.

Erikson believed that individuals who are unable to achieve intimacy in relationships with others often feel

alone and alienated. They may be unable to tolerate closeness with others because they fear losing themselves in the relationship. They may also be emotionally distant in their relationships and either self-absorbed or indiscriminately social and superficial (Erikson, 1982). The responsibilities and commitments inherent in an intimate relationship may be seen as too confining or limiting to their personal freedom and they may avoid this involvement (Muuss, 1982).

In some of his work, Erikson (1959/1980) referred to this resultant isolation as "distantiation . . . the readiness to repudiate, to isolate and if necessary, to destroy those forces and people whose essence seems dangerous to one's own" (p. 101). At a societal level Erikson saw this "more mature and efficient repudiation" (p. 101) evident in politics and war. He also saw it evident at an earlier stage, in the prejudices of the adolescent. He suggested that in youths' search for identity, they are particularly sensitive to differences between what is familiar and what is foreign and particularly intolerant of the unfamiliar.

Distantiation may also be seen in the "pursuer - distancer" dynamic evident in some couples. In this dynamic, one partner craves greater closeness and pursues

the other, who attempts to distance him or herself further because he or she fears loss of identity. Distancing individuals will likely also have difficulty as they face the next developmental task of guiding the growth of the next generation. An individual who is unable to establish genuine and lasting intimacy will, according to Erikson, feel loneliness through the rest of the life cycle.

In Erikson's conceptualization, the healthy resolution of Intimacy vs. Isolation is evident in individuals who achieve an appropriate balance between sharing themselves with others and maintaining their identity in the relationship. Individuals who have successfully resolved this issue will develop the ego quality "Love" and transform the love they received as children to care for others (Erikson, 1964).

Gender Differences in Intimacy Development

In Erikson's view, as noted above, the psychosocial stages of identity and intimacy are intertwined for women. He also asserted that once young men and women commit themselves in an intimate relationship, there is a polarization of their differences and dispositions. This polarization of masculinity and femininity prepares both for the division of labor that is necessary for the tasks of raising children.

Due to their "inner space" and their maternal potential, Erikson stated that women also have "a biological, psychological, and ethical commitment to take care of human infancy" (1968, p. 266). Thus for women more so than for men, Erikson stressed the parenting role in his writing about intimacy development.

Erikson based his conclusions about differences in female and male development primarily on a study he conducted between 1939 and 1941 with children between 10 and 12 years of age. In this study, he provided each of the children, individually, with a selection of toys and requested that they construct "an exciting scene out of an imaginary (movie)." He reported that the girls tended to use the toys to represent the interior of a room with a circle of furniture within it. The boys, in contrast, tended to construct towers and other structures. Based on these differences Erikson concluded that the girls emphasized "inner space" and qualities of openness versus closedness. The boys, on the other hand, concentrated on "outer space" and the qualities of highness and lowness (Erikson, 1958).

Erikson generalized his conclusions to hypothesize that a woman's development is influenced by her awareness of her reproductive capacity. He further hypothesized that

a woman's maternal potential is a key determinant of her personality. Erikson concluded that "a woman's productive inner space is an inescapable factor in her development whether social, historical, and other conditions lead her to build her life around it or not" (Engler, 1991, p. 190).

Criticisms of Erikson's Theory

Erikson's conclusions and subsequent assumptions concerning gender differences in psychosocial development have been criticized on both empirical and theoretical grounds. Empirically, evidence has emerged which suggests that his study with 10 to 12 year olds does not unequivocally demonstrate that the differences he observed are biologically based (Caplan, 1975; Janeway, 1971; Millett, 1970; Penfold & Walker, 1983). Further, when the study was replicated by McKay, Pyke & Goranson (1984), these researchers failed to find significant differences in the ways in which the boys and girls used their play materials or in the materials they chose. Their failure to replicate Erikson's findings suggests that the differences he reported were due to socialization effects that diminished in the 40-year interval between the two studies and not to inherent differences between males and females. Alternatively, the researchers' suggest, Erikson's psychoanalytic beliefs may have influenced his

interpretation of his findings.

These specific conclusions as well as his theory as a whole, have been criticized for equating male development with child development and for implying that women's differentness is deficiency. One of the central critiques of Erikson's theory concerns issues of autonomy, identity and intimacy: the notion that personality development evolves through stages of "ever increasing levels of separation and spheres of mastery and personal independence" (Jordan, et al., 1991, p. 1).

It is now argued that Erikson's theory in relation to identity and intimacy development is more applicable to male development than it is to female development (Miller, 1976; Gilligan, 1982; Hodgson & Fischer, 1979, Marcia, 1993c, Matteson, 1993, Jordan, 1997). Therefore, differences between the psychosocial development of males and females reflect the failure of the theory to adequately account for these variations, rather than to limitations in female psychosocial development (Forisha-Kovach, 1983).

Intimacy Development as Conceptualized by Other Theorists

Intimacy has been defined by Timmerman (1991) as "a quality of a relationship in which the individuals must have reciprocal feelings of trust and emotional closeness toward each other and are able to openly communicate

thoughts and feelings with each other" (p. 19).

According to Timmerman, in order of importance, the four necessary conditions for intimacy are trust, closeness, self-disclosure, and reciprocity. They can be operationally defined as follows: Trust is a feeling of safety one experiences when sharing personal thoughts and feelings with another and feeling assured that the other will be accepting of these thoughts and feelings (Meize-Grochowski, 1984).

Closeness within a relationship is the degree to which the people involved are interdependent. It is also the degree to which they influence each other, have an impact on each other, and are committed to the relationship (Kelly et al., 1983; Timmerman, 1991).

Self-disclosure within an intimate relationship is the reciprocal sharing of sensitive, personal information (Timmerman, 1991). It has been found to be a significant covariate of intimacy in married relationships. In one study, for example, self-disclosure accounted for 71.7% of the variance in intimacy ratings between the couples (Chelune et al., 1984).

Reciprocity refers to feelings of mutuality in relation to shared experiences in the relationship (Barnhart, 1969). The other conditions - trust, closeness,

and self-disclosure - must be mutual for the relationship to be intimate. However, the degree to which each person in the relationship experiences these conditions need not be equal for the relationship to be reciprocal. One person may be more self-disclosing than the other, but if both feel that there is sufficient reciprocity in the relationship, it can be considered intimate. However, the more each person in the relationship perceives that trust, closeness, and self-disclosure in their relationship are high, the more they will perceive the level of intimacy in their relationship to be high as well (Timmerman, 1991).

In the literature on adolescent and young adult friendships, intimate friendships are usually seen as those emphasizing affective components such as trust, loyalty, dependence, self-disclosure, emotional closeness (Orosan & Schilling, 1992); and empathy (Katz, 1963). Behavioral manifestations of intimacy involve being trustworthy, sensitive and responsive to the other's feelings, making a commitment to the relationship, striving for equity and mutuality, and working to communicate effectively (Paul & White, 1990).

Paul & White (1990) assert that these characteristics represent a mature form of intimacy and suggest that intimacy can best be viewed as a developmental process that

develops gradually over time. Schultz & Selman (1990) in their theory about the importance of perspective-taking ability in relationships suggest a similar process.

Intimacy Development During the Life Cycle

Harry Stack Sullivan (1953), in his theory of interpersonal development, proposed that intimacy follows a developmental sequence. In his view intimacy develops through stages, from childhood through adulthood. Each stage is marked by a particular interpersonal need experienced by the individual with the stages becoming more complex and mutual over time. This model also proposes that the satisfaction of the dominant interpersonal need at each stage provides a firm foundation for satisfaction of the central need at the next stage.

Sullivan proposed that the beginnings of an individual's interpersonal needs are evident in infancy. At this stage, the infant's needs are met through regular physical contact with others, particularly the primary parenting figures. In childhood (which for Sullivan begins with the appearance of speech and ends with the child's desire for playmates) the interpersonal need is for adult participation in games, activities, and increasingly, in verbal play. The next stage, the juvenile era, extends through most of the elementary school years and is marked

by the child's need for same-age peers and for acceptance by these peers.

Preadolescence is seen by Sullivan (1953) as "an exceedingly important but chronologically rather brief period" (p. 33) (between the ages of 8 1/2 and 12 years) during which the child's interpersonal needs shift from a generic interest in peers to a specific interest in a particular peer of the same sex. It includes the need for an intimate relationship with this person. Through this relationship with a best friend, the preadolescent begins to develop sensitivity to what matters most to this friend, and a desire to contribute to the friend's happiness. This is, according to Sullivan, the beginning of the ability to love. During this important stage of interpersonal development, within an increasingly intimate relationship with a best friend, the child also receives (and gives) consensual validation. This is validation by the friend, of all aspects of the individual's personal worth. In Sullivan's view, validation is essential to the individual's self esteem.

The transition to early adolescence is marked by puberty and the youth's growing interest in the opposite sex. At this point the adolescent still needs intimate friendship and the acceptance of his or her best friend.

In addition, however, the youth seeks a loving relationship with a member of the opposite sex (Sullivan, 1953).

The transition to late adolescence is not marked by further biological maturation, but by the development of more mature "genital behavior" (p. 312) and integration of sexuality into one's life. Sullivan proposed that at this point the adolescent becomes integrated into adult society. The individual then enters the last stage of interpersonal development, maturity. In this way, Sullivan conceptualized intimacy as a stage of interpersonal development that begins to emerge during preadolescence and continues to develop through adolescence until one establishes a collaborative or mutually sensitive relationship with at least one other person in adulthood (Sullivan, 1953).

While Sullivan's theory provides the most comprehensive theoretical framework for discussing the development of intimacy, there are limitations to the theory. The first limitation is, as Sullivan makes clear: this is a theory of male development. When describing the preadolescent stage, for example, he states: "by this time the deviations prescribed by the culture make it pretty hard to make a long series of statements which are equally valid for the two sexes" (p. 249). His theory of

interpersonal development is usually taken, however, as a theory of human and not just male, development. Further, no provisions are made in his theory for possible differences in the interpersonal development of females.

The second limitation is his belief that non-heterosexual relationships represent a departure from normal intimacy development and reflect problems in interpersonal development. Thus Sullivan's theory of interpersonal development is limited to heterosexual relationships, and best describes male development.

The Roots of Intimacy

As Sullivan suggests, and as Erikson and other theorists, such as Bowlby would agree, the roots of an individual's ability to establish intimacy can be found first in the quality of the individual's attachment to significant others in their lives during infancy. Erikson (1959/1980), for example, would propose that the trust an infant learns to have that others will care for him or her - in essence the extent to which the infant decides that others are trustworthy - will lay a foundation for the ability to develop trusting relationships with others later in life.

The roots of intimacy can then be traced to the friendships that preschool and school-age children develop.

During this period, engaging in mutually enjoyable activities becomes important and continues to be an essential component of these relationships throughout adolescence (Clark & Ayers, 1993).

Children's interactions and friendships with age-mates then become the precursors of deeper and more intimate relationships in adolescence and adulthood.

This developmental process - from attachment to significant others in infancy to friendships with peers that gradually deepen into intimate relationships from preadolescence to adulthood - appears, overall, to be the same for females and males. Within this overall process there is a large body of research demonstrating qualitative differences in the friendship patterns of the two sexes during childhood and adolescence that impact intimacy development (e.g. Maccoby & Jacklin, 1974; Alexander & Hines, 1994; Benenson, 1993). This research will be discussed further in the next section.

Erikson's conceptualization of intimacy development differs in one major respect from Sullivan's. Both theorists saw intimacy as a developmental process. However, Erikson's theory explicitly focused on the more adult form of intimacy inherent in a committed, romantic relationship. Sullivan was referring to the feelings of

mutual closeness that begin to be established through a special friendship earlier in the life cycle. Thus, while in Erikson's model the development of intimacy is primarily the psychosocial task of young adulthood, following the establishment of identity in adolescence, Sullivan sees intimacy development as an important developmental task throughout preadolescence and adolescence as well.

For the present study, aspects of both these broad definitions of intimacy were utilized. One of the instruments used to assess this construct was based on Erikson's theory. It surveyed attitudes about commitment, self-disclosure, and trust that were drawn from Erikson's writing. This instrument assessed the degree to which the precursors to Erikson's mature intimacy can be seen as emerging in a younger population.

The second measure of intimacy was based on Sullivan's conceptualization of interpersonal relationships and pertains more to the development of affection and inclusion in relationships. In addition, this measure attempted to measure participants' perceptions of how they act in interpersonal relationships.

Taken together, intimacy in the present study was concerned with the affective components of intimacy as outlined by Timmerman, Erikson and other researchers as

outlined above. It was, however, also seen from a developmental perspective as an interpersonal orientation that develops over time.

Empirical Research on Gender Differences in the
Development of Intimacy

Empirical research supports the assertion that there are gender differences in the way boys and girls interact with their peers (Benenson, 1993) and that these differences are stable and have implications for later relationships (Golombok & Fivush, 1994).

From the time children become interactive with peers and move beyond "parallel play", at approximately two years of age, they begin to prefer interacting with same-gender peers (Fagot, 1987; Maccoby & Jacklin, 1987; Serbin, Moller, Powlishta, & Gulko, 1991 cited in Golombok & Fivush, 1994). This preference persists into late childhood and adolescence (Feiring & Lewis, 1991; Maccoby & Jacklin, 1987). Children appear to prefer same-gender as opposed to opposite-gender playmates because these peers share the same pattern of interaction (Maccoby & Jacklin, 1987; Alexander & Hines, 1994). That is, they tend to interact with each other in ways that are familiar and enjoyable.

Research has demonstrated that from the age of

approximately 3 years, two broad gender differences in children's interaction styles develop and thereafter remain relatively stable. First, males as a group tend to engage in more active play (Eaton & Enns, 1986), and to demonstrate higher frequencies of rough-and-tumble play (Blurton-Jones & Konner, 1973; DiPietro, 1981) than do females. Second, females as a group tend to be more nurturant and vocal in their play than are males (Maccoby & Jacklin, 1987; Pitcher & Schultz, 1983) and to favor toys such as dolls, whereas boys favor construction and transportation toys (Connor & Serbin, 1977; Liss, 1981).

In addition, boys tend to play in large groups, outdoors, while girls tend to play indoors, in pairs (Benenson, 1993). These different styles of play then lead to further social differences between boys and girls. For example, boys' games are likely to have leaders and to emphasize rules, competition, and cooperation between team members (Golombok & Fivush, 1994; Lever, 1976; Sheldon, 1990). Boys engaged in these types of activities gain practice negotiating in the interest of maintaining their game and managing leadership issues. Friendships thus tend to be structured by shared interests and activities and time spent with friends may be largely activity-focused. This style of interaction, first evident in childhood,

tends to be maintained and remains the prototype of many male-male friendships (Auckett, Ritchie, & Mill, 1988; Barth & Kinder, 1988; Jones, Bloys, & Wood, 1990).

Girls, on the other hand, while spending more time interacting with one best friend, or more generally in dyadic interaction (Benenson, 1993), demonstrate more turn-taking behaviour during conversations and tend to reach agreement through discussion more so than do boys (Maccoby & Jacklin, 1987). Girls engaged in this type of activity gain experience in interpersonal communication that is more likely to be experience and emotion-based than activity-based. This style of interaction, for females, is maintained as well, and becomes the prototype for female relationships (Auckett, Ritchie, & Mill, 1988; Barth & Kinder, 1988; Jones, Bloys, & Wood, 1990).

These differences in interaction style appear to develop through a complex interaction of biological and socialization factors that begin early in development. For example, girls exposed prenatally to levels of androgens typically associated with male development show enhanced preferences for masculine play styles (Berenbaum & Hines, 1992; Ehrhardt & Baker, 1974). As well, gender differences have been documented in the response of infants 1- to 2-days old, to the distress cries of other infants with girls

showing more distress (Sagi & Hoffman, 1976; Simmer, 1971, as cited in Jordan, 1997)..

In addition, from the first few weeks of life, parents engage in more face-to-face interaction with their daughters than with their sons (Goldberg & Lewis, 1969; Parke & Sawin, 1980; Power & Parke, 1982). Golombok & Fivush (1994) suggest that this difference is due to two factors. First, male infants, on the average, are more active and irritable than are female infants. They are therefore more likely to be held close to the parent's body, often against the parent's shoulder, and patted and bounced to be soothed. This position, while preferred by the infant, is not conducive to face-to-face interaction.

Female infants, in comparison, tend to be quieter and better able to sustain an awake, alert state earlier in development. They are more likely, therefore, to be held cradled in the parent's arms in such a manner that parent and child are able to maintain face-to-face communication.

Golombok & Fivush (1994) suggest that this "small biologically determined temperamental difference between male and female infants ... lead(s) to more vocal interaction with females than males (p. 124)" and thus to differences in interaction style from the earliest months of life.

Second, parental stereotypes and expectations about male and female infants may then lead parents to interact differently with their daughters and sons. There is no evidence that parents talk to their daughters more than to their sons (Maccoby & Jacklin, 1972). There is evidence, however, that these expectations may lead parents to engage in rougher, more active play with their sons than with their daughters (Moss, 1967; Rubin, Provenzano, & Luria, 1974; Yarrow, Rubenstein, & Pedersen, 1967 cited in Greenglass, 1982).

Golombok & Fivush (1994) suggest that because female infants have engaged in more face-to-face communication from the beginning of their development, they may learn to highly value this type of interaction. Similarly, because male infants have, from the beginning, engaged in more active interaction with parents, they may tend to more highly value this type of interaction.

The friendship patterns of elementary school-age boys and girls tend to maintain these patterns. Tannen (1990), for example, analyzed videotapes of 2nd, 6th, and 10th grade best friends conversing. The second grade girls were already engaged in long conversations about personally significant events in their lives. In comparison, the second grade boys found little to talk about, and the

conversations tended to focus on trying to decide on an activity in which to become engaged. A similar pattern was noted with sixth grade boys and girls. In the tenth grade, however, fewer gender differences were noted. Males at this age were more likely to discuss issues and problems with their best friend. However, the pattern of discussion was different for males and females. Between males, one friend tended to downplay or diminish the other's problem. Between females, each friend tended more to provide support and understanding to the other. This research suggests that as they mature males are more likely to move from discussion of external events and activities to greater discussion of their inner world. It also suggests, however, that there continue to be differences in male and female styles of interaction and that these differences may be carried into later relationships.

In the transition between childhood and adulthood, friendships in adolescence deepen and become increasingly important. As well, the gender segregation that predominated their friendships to this point diminishes (Jones, Bloys & Wood, 1990; Barth & Kinder, 1988; Auckett, Ritchie, & Mill, 1988).

Building on their previous experiences, females continue to develop more intimate friendships with both

male and female friends. They tend to discuss their emotions and their personal concerns more than do males. Males also report more intimate conversations with female friends than with male friends. Males' same-gender conversations seem to follow the pattern established earlier, and be more activity/event focused. In addition, both males and females report that they would seek out a female friend over a male friend to discuss a personal problem or if they were in need of emotional support (Auckett et al., 1988).

Golombok & Fivush (1994) conclude that though males are capable of participating in deep, emotional self-disclosure (intimacy) they tend to do so far more in relationships with females. The authors suggest that this may be the case because males as a group have had much less experience engaging in this style of interaction. They may therefore be better able to participate when they have more expert (female) interaction partners.

Because of these apparent gender differences in intimacy, some researchers (e.g., Douvan & Adelson, 1966) have concluded that for females the major developmental task of adolescence is intimacy development, through the establishment and maintenance of relationships with others. For males, the central task is seen as the development of

independence.

Recent research by Battle (1994) and colleagues would suggest, however, that the situation is more complex. In a study concerning the psychosocial development of first year university students, males and females were found to have achieved the same level of identity development as assessed by the Measures of Psychosocial Development (Hawley, 1984). The females as a group, however, also obtained higher levels of intimacy, while the males obtained higher autonomy levels. These findings suggest that adolescent female development, while more strongly associated with intimacy development than the development of autonomy, is more than simply intimacy development. Identity development is a crucial task shared by both females and males.

In addition, the relationship between intimacy development and other aspects of development appear to be different for male and female adolescents. For example, Lobel & Winch (1988) report that for males, all aspects of self-concept were related to their intimacy development. For females, intimacy was related to the behavioral and interpersonal aspects of self-concept, but not to the identity and self-satisfaction aspects. Identity development, in comparison was positively associated with

self-concept for both male and females. These results provide support for the idea that identity and intimacy development are both important during adolescence. They also provide further support for the idea that there are gender differences in the way intimacy develops.

The Self-in-Relation View of Intimacy Development Theorists at the Stone Centre for Developmental Services and Studies at Wellesley College, have developed a model of women's development that they are calling "self-in-relation", "being in relation", or most recently, "relational being". Of central importance to this conceptualization is the belief that the organizing principle in women's lives is relational growth.

They suggest that for women, development does not proceed as it does for men, along a continuum from connection with a care provider in early childhood, through successive steps of autonomy and separateness toward independence. Instead, for women, development of capabilities and self-knowledge occurs within the context of important relationships. Further, relational connectedness remains crucially important to women as they move toward interdependence (Jordan, et. al., 1991).

Surrey (1991) suggests that dynamic relationships in a woman's life are the motivating force that propel

psychological growth and that her development can be traced through her participation in these specific relationships and relational networks. Kaplan & Klein (1991) add that a woman's self-esteem and feelings of competence are more often connected to the relational aspects of a situation than to other aspects of the situation.

Miller (1991), in her critique of Erikson's first four psychosocial stages, generally supports his emphasis on the relational focus for both male and female infants during the first stage of life. She would argue, though, that the infant is a more active participant in the interactional process than Erikson suggested. During the second stage, however, when the child is developing a greater sense of her ability to influence her world, Miller believes that she does so only because of her actions and feelings in the relationship with her primary careproviders not because she is becoming separate from these relationships. Through Erikson's next two stages, Miller does not dispute that girls are also involved in learning about the world and developing their skills. She believes, however, that Erikson neglected to account for the relational aspects of girls' development. When boys are seen to engage in competitive games and to dispute the rules, this is interpreted as their preparing themselves for competition

later in life. When girls are reported to be "just talking" - about their families, their friendships and themselves "in relationship" - this activity is apparently not seen as important preparation for sustaining relationships later in life.

Miller (1991) and other theorists (Gilligan, 1982; Kaplan & Klein, 1991) conceive of the greatest differences between women and men as emerging in adolescence and young adulthood, during Erikson's stages of identity and intimacy. Miller suggests that for a young woman, using all her capabilities within a context that will fulfil her need to be a "being-in-relationship" with significant others is of primary importance. By this she means that the young woman attempts to develop all aspects of herself within her relationships with others. For a young man, developing himself and his independent identity are of primary importance. In terms of relationships, Miller (1976) suggests that by this time the young man has also adopted the societal expectation that the young woman he is involved with should adapt to him. Gilligan (1982) articulates the essence of the difference between men and women as she sees it when she states that

while for men identity precedes intimacy and generativity in the optimal cycle of human separation

and attachment, for women these tasks seem instead to be fused. Intimacy goes along with identity, as the female comes to know herself as she is known, through her relationships with others. (p. 12)

These theorists suggest that for women, development takes place within a context of affiliation with and attachment to others. They suggest further that for women, identity develops through intimate relationships with others, not prior to intimacy with others. Miller (1976) suggests that as they develop, boys are rewarded for developing their power and skill and that gradually these aspects of their lives become as important as and then supersede the importance of affiliations. Girls, on the other hand, are socialized to remain attached to others and to transfer their connection from their families to men as they grow older.

Gilligan (1991), in her study of female development, suggests that as they approach adolescence, at approximately 11 years of age, young women face a relational crisis. They are faced with the choice between being, in essence, true to themselves at the expense of their relationships with important others such as parents, or denying their own feelings and desires to remain connected to these important others.

In her longitudinal study of girls at the Emma Willard School, Gilligan (1991) reported that girls resist this state of disconnectedness, and tend to opt for being "nice", not hurting others' feelings, and being ingenuine to maintain their relationships. In this way girls trade their authentic involvement with others in a relationship for being unauthentic because they fear losing the relationship. She adds that this central paradox "the taking oneself out of relationship for the sake of relationships" (p. 26) has negative implications for young women. She postulates that these may include such symptoms as lower levels of self-esteem, and a marked increase in episodes of depression and higher incidence of eating disorders and poor body image that develop disproportionately in young women during adolescence (Gilligan, 1991).

Gilligan suggests that this relational crisis for girls in preadolescence is analogous to that experienced earlier by boys as they separate from their mothers to develop their gender identity. She speculates that this may be why boys have more mental health problems than do girls until adolescence when the opposite trend emerges (Brown & Gilligan, 1992).

Erikson and the self-in-relation theorists would

concur, then, that there are different paths young men and women take in their development of identity and intimacy. Erikson would also agree that for young women the tasks are intertwined while for young men identity precedes intimacy. Differences emerge, however, when they explain this divergence. Erikson attributed these differences largely to the biological differences between the sexes. He also implicitly suggested that the male path was the "right" one by presenting this path in his theory of psychosocial development. The self-in-relation theorists attribute the differences primarily to the ways in which females and males are differentially socialized and develop their gender identity. They also suggest that the path at present more typical for females, is characterized by positive human characteristics which have traditionally been undervalued because they are associated with women (Kimball, 1994). Further, they suggest that these characteristics would be beneficial for males, to develop as well.

Erikson, as well as the self-in-relation theorists, differ in their conceptualization of when the differences between males and females emerge. As noted above, Erikson (1959/1980) postulated that females do not consolidate their identities at the same time males do, but do so after

they have established intimate relationships with males by adopting aspects of the males' identities. Thus in his conceptualization, identity and intimacy development are intertwined for females, with intimacy development somewhat preceding identity consolidation.

Gilligan (1982) postulates that intimacy and identity development for females are fused and not sequential. In her view, young women develop their identities within the context of their relationships with others. In contrast, Miller (1976, 1991), while agreeing with both Erikson and Gilligan that the greatest differences between males and females become evident during adolescence, suggests that the differences are evident far earlier in their development.

The Relationship Between Identity and Intimacy Development in Adolescence

Many clinicians (e.g. Johnson & Alford, 1987) and researchers (e.g. Moore & Boldero, 1991; Romig & Bakken, 1992) have suggested that both intimacy and identity development are important processes during adolescence. As Johnson & Alford (1987) state "the search for identity and quest for intimacy are simultaneous, parallel tasks [for adolescents]" (p. 55). Romig & Bakken (1992) point out that by the time they reach adulthood, both males and

females are expected to be able to form committed, intimate relationships with others. Adolescence, then, is a critical time during which individuals prepare for this eventuality. Just as through their identity development adolescents "try on" different ways of being, they do the same thing in their relationships with same-sex and opposite-sex peers.

Erikson (1959/80) recognized the importance of the peer group in an adolescent's development, and that issues related to one's sexuality must be addressed at this time. He framed these tasks, however, explicitly within the context of identity rather than intimacy development. Further, he seemed to stress the autonomous nature of one's decisions about these issues rather than the interpersonal nature of the issues as Sullivan (1953) and the self-in-relation theorists (Jordan, 1997) do.

It is important to reiterate, however, that while in Erikson's developmental scheme, the establishment of a committed, intimate relationship is the focus of the next stage of development (a notion with which Sullivan would agree), the epigenetic principle suggests that intimacy development would also have been taking place in a tertiary, less mature form throughout the other stages of the life cycle, and thus during adolescence as well.

Adolescence is a critical period for the development of close relationships in many ways. During this stage, intimate relationships with same-sex peers provide affirmation and assistance with self-exploration and self-confirmation tasks (Lempers & Clark-Lempers, 1993, Sullivan, 1953). In this way, same-sex friends help each other with identity formation and self-concept enhancement (Craig-Bray, Adams, & Dobson, 1988). They also assist in the adolescent's striving for independence by diverting emotional dependence away from parents, and by providing age-appropriate models. Further, they provide opportunities to practice interpersonal behaviors the adolescent will use in later opposite-sex relationships (Lempers & Clark-Lempers, 1993). Specifically, they provide the social environment necessary to develop intimacy skills such as collaboration and empathy (Buhrmester & Furman, 1986), self-disclosure, reciprocity, compromise, and mutual support (Moore & Boldero, 1991) and opportunities to practice conflict negotiation (Lempers & Clark-Lempers, 1993).

Research indicates that reciprocal friendships, those in which individuals have mutual liking for each other, are more beneficial to adolescent development than nonreciprocal friendships (Clark & Ayers, 1993).

Adolescents with reciprocated friendships, for example, express a higher level of commitment to the relationships (Clark & Ayers, 1988). In addition, the number of reciprocated friendships the early adolescent female is involved in, is positively related to feelings of emotional support (Frankel, 1990).

Several studies indicate that adolescent girls view close friendships as more important than do adolescent boys (e.g., Moore & Boldero, 1991; Eaton, Mitchell, & Jolley, 1991). Research on emotional expressiveness also indicates that females are more confident expressing feelings of fear and sadness than are males to either male or female friends (Blier, & Blier-Wilson, 1989). This research suggests that females may be more willing and able to be vulnerable in a close relationship. This greater degree of self-disclosure then leads to greater intimacy within their relationships.

Research Using the Identity Status Paradigm to Examine the Relationship Between Identity and Intimacy Development

Matteson (1993) reports that research has demonstrated a clear connection between identity and intimacy, particularly for men. High status in one is associated with high status in the other. Other studies, however, have demonstrated that for women, high intimacy status can also be associated with low identity status (Schiedel &

Marcia, 1985; Hodgson & Fischer, 1979). In addition, a longitudinal study conducted by Adams and Fitch (1981, 1982, 1983) found no evidence to support the identity - intimacy progression for women.

To investigate this finding further, Matteson (1993) reanalyzed data from other studies assessing both intimacy and identity. He reports that when the identity statuses of individuals in the two highest intimacy statuses (as assessed by the Intimacy Status Interview) were compared, approximately 30% of the participants were able to attain high intimacy levels without having mature identity scores. Approximately 35% of these participants were female and approximately 27% were male. Matteson concludes that "regardless of gender, identity does not seem to be a prerequisite for intimacy" (p. 85).

Research on the relationship between identity and intimacy development and gender roles has helped to shed more light on this issue. While Erikson assumed that masculinity and femininity were polar opposites and stressed role differentiation between the sexes, empirical studies (e.g. Block, 1973; Bem, 1974) have demonstrated their independence.

Persons who demonstrate high levels of masculine-typed traits which "focus on the sense of agency" may also

demonstrate high levels of feminine-typed traits, which involve "a sense of communion" (Bakan, 1966 cited in Matteson, 1993). These individuals are labeled androgynous. Individuals who obtain low scores in both areas are undifferentiated. Those who obtain high scores on the scale that corresponds with their gender are gender-typed. Those who obtain high scores on the scale opposite to their gender are cross-gender typed.

The addition of gender type has provided important information about how intimacy and identity are related. Dyk & Adams (1990) found that for males, both those obtaining high masculinity scores and those obtaining high femininity scores, identity formation predicted intimacy development, as Erikson postulated. They found the same pattern as well, however, for those females who also obtained high masculinity scores. Identity and intimacy were fused only for the group of females who obtained high femininity scores.

This finding suggests that it may not be gender alone that is important to determining the pattern of identity and intimacy development that individuals follow.

The Relational Roots of Identity

Recent research on identity development has begun to explore its relational roots (Marcia, 1993a). Previous

research was criticized for equating identity with autonomy, self-sufficiency, and independence rather than interdependence (e.g., Gilligan, 1982; Josselson, 1988). Instead, these theorists have presented narrative accounts of women's experiences that have served to emphasize the importance of relatedness to women's lives.

Archer (1993b) has also questioned the division of Identity Status Interview (ISI) content domains into intrapersonal (agentic) and interpersonal (communal domains). She asks "Having established a methodological dichotomy . . . Have we obscured rather than measured the impact of significant others on identity formation?"

She also argues that even those domains that have been defined as intrapersonal, such as religious beliefs and vocation, may have an interpersonal component. She suggests that it is important to examine the degree to which identity formation takes place in isolation as opposed to in the context of relationships with significant others for both sexes.

Archer (1993b) proposes that by incorporating several additional questions into the ISI, in each domain, information about this quality of identity development may be obtained. The issues to be examined are: a) who is involved in the decision-making process; and b) who is

affected by the decisions. This suggestion will be incorporated into the present study.

In a previous study, Battle (1994), using different research instruments, examined the psychosocial development of 205 female and 181 male university undergraduates between the ages of 18 and 24. It was predicted that males and females would differ in their achievement of developmental tasks related to identity and intimacy. The results indicated that males and females differed in their achievement of intimacy with females reporting higher levels of intimacy and resolution of intimacy versus isolation and males reporting higher levels of isolation. No gender differences were detected in the achievement of the identity dimension.

The finding that females and males differed in their achievement of intimacy provides additional support for the suggestion made by theorists such as Miller (1976) Gilligan (1982) and Jordan et al., (1991, 1997) that Erikson's theory of psychosocial development does not fit males and females equally well. Thus, in the establishment of intimacy males and females appeared in this study to be following somewhat different paths.

The question that arises, however, is whether the females studied were following the sequence of stages

proposed by Erikson or whether their development was different than Erikson proposed. It may have been that the females were moving through the psychosocial stages in the sequence Erikson proposed but had accomplished the tasks associated with intimacy more quickly than had the males studied.

Alternatively, it may have been that the young women were following a different developmental path. It could be, as Gilligan (1982) suggested, that for women the development of identity and intimacy are fused and not sequential. The findings were consistent with the view that women develop their capabilities and self knowledge - their identity - within the context of intimacy. It could also be, as Miller (1976) postulated, that the intimacy suggested by "being in relation" precedes the development of identity in women, as well as the accomplishment of earlier developmental tasks such as initiative and industry.

The finding that males and females did not differ in their accomplishment of identity provides support for Erikson's assertion that the establishment of individual identity is the task of adolescence regardless of one's gender. For males, this finding also provides support for Erikson's view that the establishment of identity is the

precursor to the establishment of intimacy. For females, however, Erikson's view was not clearly supported. While the establishment of identity may indeed precede the achievement of intimacy, for young women there are other possible explanations as well. The tasks associated with intimacy may be accomplished at an earlier point in development as girls remain relationally connected to important others in their lives while they simultaneously accomplish earlier stage tasks. Alternatively, girls may develop their identities while simultaneously establishing intimacy with others. Thus, through the establishment of close relationships with others and their experiences of these relationships young women may be also be defining themselves.

The finding that gender differences were not evident provides further empirical support for the position outlined above, that when identity as a broad construct is assessed, gender differences do not emerge.

Exploratory analyses in the Battle (1994) study also revealed that for both males and females, higher levels of identity development were associated with higher levels of intimacy. For males, this finding supports Erikson's contention that intimacy follows from the achievement of identity. Those young men who had achieved identity then

seemed to engage in their next developmental task, the establishment of an important, close relationship with another person. These findings also suggest, however, that the process of identity and intimacy development may be fused for women as Gilligan (1982) suggested.

Pilot Study

A number of questions raised by the previous research were addressed in a pilot study conducted by Battle (1995). The focus of this study was on when the differences between male and female intimacy development begin to emerge. The questions asked were: Do these differences emerge at some point during adolescence which Gilligan (1982) suggests when she postulates that for females identity and intimacy are fused? Or does it happen earlier, as Miller (1976) postulates and as the research on children's' styles of interaction in play would seem to suggest?

On the basis of the theoretical and empirical literature reviewed, three possible patterns of intimacy and identity development were postulated.

- (1) Support for Erikson's theory would be obtained if a) gender differences were not evident in identity scores, and b) if identity scores for males and females increased from 12-18 years or if c) the males obtained higher identity scores than did the females.

(2) Support for Gilligan's theory would be obtained if a) the females obtained higher intimacy scores than did the males at 10 years of age but not at 12 years of age.

(3) Support for Miller's theory and that of the researchers examining children's play would be obtained if a) the females obtained higher intimacy scores than did the males at both age levels, suggesting that the differences in intimacy originate prior to adolescence and b) there were no differences in identity development.

The subjects were 50 female and 50 male 12 year old, grade 7 students attending two junior high schools in the Fort Garry School Division of Winnipeg, Manitoba, and 205 female and 181 male 18 year old introductory psychology students at the University of Manitoba. All subjects completed The Measures of Psychosocial Development (MPD) and a modified version of the Erikson Psychosocial Inventory (EPSI).

The results indicated that on the intimacy subscales of both the MPD and the EPSI there were group main effects with 18 year-olds, both males and females, demonstrating higher levels of intimacy than the 12 year-olds ($F= 20.54$, $p < .0001$). On the MPD there was also a gender main effect with females obtaining higher intimacy levels than males at both ages ($F= 46.65$, $p < .0001$). Surprisingly, no

differences were evident between the early and late adolescents on the Identity subscale of the MPD.

The results of this pilot study provide support for Miller's assertion that gender differences in intimacy development do not develop during adolescence, (as Gilligan suggested) but are evident prior to adolescence. Further research is needed to determine how much prior to age 12, these differences emerge. Unfortunately, tools such as the MPD and the EPSI are not appropriate for use with younger children.

The finding that differences were not evident in identity development was most surprising. There are at least two possible explanations for this finding. The first is that power for this analysis was .53, and it may have been due to chance that a significant finding was not obtained. The second possible explanation is that the instrument used was not sensitive enough to changes in identity development. The present study addressed these issues by including another, potentially more sensitive measure of identity development, the Identity Status Interview (ISI) (Marcia, 1966). Use of the ISI also permitted exploration of the relational aspects of identity as suggested by Archer (1993a).

The results of the pilot study suggest that for this

group of early and late adolescents, the development of intimacy does not follow the pattern suggested by Gilligan or Erikson. Instead, it provides support for Miller's suggestion that differences in this intimacy level develop prior to adolescence. The present study further investigated this finding by adding another measure of intimacy development to the two previously used. It further examined the pattern of identity and intimacy development by including a group of middle adolescents and explored the degree to which participants' gender roles mediated this pattern.

Current Study

Rationale for the Present Study

The purpose of the present study was to examine the development of identity and intimacy in young adolescents, middle adolescents, and late adolescents/young adults. It specifically assessed whether gender differences in the development of identity and intimacy were evident. It also identified the pattern of intimacy and identity development across these ages. As well, it investigated the relational components of identity development for both males and females and the degree to which gender roles mediated the development of identity and intimacy. Identity development was assessed using the Identity Status Interview (ISI) and

The Measures of Psychosocial Development (MPD). Intimacy development was assessed by the MPD and the Fundamental Interpersonal Relationship Orientation- Behavior (FIRO-B). Gender roles were assessed by the Bem Sex Role Inventory (BSRI) for the middle and older adolescents/young adults, and the Adolescent Sex Role Inventory (ASRI) for the young adolescents.

The present study extended research on the development of identity and intimacy in the following ways. First, it provided empirical data concerning the pattern of development of intimacy and identity for females and males from early adolescence through young adulthood. Second, it provided empirical data to provide differential support for the competing theoretical positions concerning the development of identity and intimacy outlined above. Third, it explored the relational roots of specific identity domains. Fourth, it investigated the impact of gender roles on the pattern of identity and intimacy development across adolescence.

Hypotheses

Hypothesis 1

It is predicted that for both females and males there will be evidence of significant developmental change in identity across the three age groups.

Hypothesis 2

It is predicted that at all three ages, females will have significantly higher intimacy scores than will the males.

Hypothesis 3

It is predicted that for both females and males there will be a significant positive correlation between intimacy and identity.

Exploratory Analyses

1. The possible mediating influence of gender role on identity and intimacy development will be explored.
2. Descriptive Statistics will be presented to explore the reported occurrence of participants' involving others in their decision-making in the four domains of identity development.

METHOD

Participants

Part 1

The participants classified as Young Adolescents were boys ($n = 52$) and girls ($n = 63$) between the ages of 13 and 15 ($M=13.75$, $SD = .72$) who were drawn from Grade 8 and 9 classes at a junior high school in the Fort Garry School Division of Winnipeg, Manitoba. The Middle Adolescents were young men ($n = 51$) and young women ($n = 73$) between the ages of 16 and 19 ($M =16.85$, $SD = .88$) who were drawn from Grade 11 and 12 classes at a high school in the same school division. The Late Adolescents/Young Adults were men ($n = 54$) and women ($n = 87$) between the ages of 19 and 24 ($M = 20.77$, $SD = 1.07$) who were drawn from psychology classes at The University of Manitoba and The University of Winnipeg.

Part 2

From the original group of participants, 20 males and 20 females were randomly selected from each of the three age groups to participate in the Identity Status Interview (ISI).

Measures

(1) Demographic Information Questionnaire

This questionnaire was developed for the present study to obtain information concerning subject age and gender

(see Appendix A).

(2) Measures of Psychosocial Development

Four subscales of the Measures of Psychosocial Development (MPD) were used to assess participants' identity and intimacy development. This instrument was developed by Hawley (1984; 1988) to translate the constructs of Erikson's theory into an objective measure. The full MPD is a 112-item, self-report inventory that consists of 27 scales, representing the attitudes and dynamics outlined in Erikson's framework. Eight Positive Scales measure an individual's level of Trust, Autonomy, Initiative, Industry, Identity, Intimacy, Generativity, and Ego Integrity. Eight Negative Scales measure an individual's level of Mistrust, Shame and Doubt, Guilt, Inferiority, Identity Confusion, Isolation, Stagnation, and Despair. Eight Resolution Scales are calculated by subtracting an individual's negative subscale score from their corresponding positive subscale score. The resolution scales assess the degree to which the individual has resolved each of the stage issues (i.e., Trust vs Mistrust, Autonomy vs Shame & Doubt, Initiative vs Guilt, Industry vs Inferiority, Identity vs Identity Confusion, Intimacy vs Isolation, Generativity vs Stagnation, Ego Identity vs Despair). Three Total Scales (Total Positive,

Total Negative, and Total Resolution) may also be used to assess overall psychosocial adjustment.

For this study, Cronbach alpha coefficients were first calculated for the Identity, Identity Confusion, Intimacy, and Isolation subscales of the MPD using the test items that were summed to produce these subscale scores. Alpha coefficients for the Identity and the Identity Confusion subscales ranged from .67 to .79 for the sample overall. Alpha coefficients for the Intimacy and Isolation subscales were .76 for the sample overall. These alpha coefficients were not consistently above .80, (for the sample, overall or for each of the three age groups) indicating inadequate scale reliability for this sample.

Alpha coefficients were then calculated for the Identity vs Identity Confusion and Intimacy vs Isolation subscales. Cronbach's alpha coefficients for the Identity vs Identity Confusion subscale were .83 for the subjects overall, and .76 for the junior high school students, .83 for the high school subjects, and .88 for the university subjects. Cronbach's alpha coefficients for the Intimacy vs Isolation subscale were .84 for the subjects overall; and .83 for the junior high school students, .81 for the high school students, and .87 for the university students. The two resolution subscales were therefore used to assess

identity and intimacy development. Scores on these subscales were also normally distributed, and met assumptions of linearity and homogeneity of variance.

In the MPD, each positive and negative scale contains seven statements that reflect the seven subconstructs that Hawley (1984) identified as contributing to each of Erikson's stages. Table 2 shows the items contributing to the Intimacy and Isolation subscales.

A high score on the Intimacy subscale, in combination with a low score on the Isolation subscale, would yield a high Resolution of Intimacy vs Isolation score. This would indicate that the individual is in a more positive than negative position in relation to intimacy development.

Similarly, a high score on the Identity subscale, in combination with a low score on the Identity Confusion subscale would yield a high Resolution of Identity vs Identity Confusion score. This would indicate that the individual is in a more positive than negative position in relation to identity development. Table 3 shows the items contributing to the Identity and Identity Confusion subscales.

Table 2

Items Comprising the Intimacy and Isolation Subscales of
the MPD

Intimacy	Isolation
1. Warm and understanding	1. Prefer doing most things alone
2. Share my most private thoughts and feelings with those close to me	2. Keep my feelings to myself
3. Others share their most private thoughts and feelings with me	3. No one seems to understand me
4. Comfortable in close relationships	4. Emotionally distant
5. Willing to give and take in my relationships	5. Avoid commitment to others
6. Others understand me	6. Many acquaintances; no real friends
7. There when my friends need me	7. Wary of close relationships

Table 3

Items Comprising the Identity and Identity ConfusionSubscales of the MPD

Identity	Identity Confusion
1. Have worked out my basic beliefs about such matters as occupation, sex, family, politics, religion, etc.	1. Not sure of my basic convictions
2. Clear vision of what I want out of life	2. A bundle of contradictions
3. Stand up for what I believe, even in the face of adversity	3. Wide gap between the person I am and the person I want to be
4. Found my place in the world	4. Uncertain about what I'm going to do with my life
5. Others see me pretty much as I see myself	5. Haven't found my place in life
6. Appreciate my own uniqueness and individuality	6. A mystery - even to myself
7. Content to be who I am	7. In search of my identity

The 28 descriptive statements that were used in this

study were presented in a Likert scale response format. Participants were asked to indicate whether each statement was (0) not at all like me, (1) not much like me, (2) somewhat like me, (3) like me, or (4) very much like me

The MPD has been normed for males and females separately in four age groupings: 13-17 (adolescents), 18-24 (young adults), 25-49 (adults), and 50+ (upper-aged adults). T scores and percentiles may be used to produce a profile of MPD scores but are not required and were not used in this study. Instead, raw scores were used in the data analyses.

Based on data obtained during the construction and validation of the MPD, the test-retest reliability coefficients for the 16 scales (eight positive and eight negative) over a 2-13 week interval were found to range from .67 to .89. Positive scale coefficients ranged from .75 (Trust) to .85 (Initiative) and those for the negative scales ranged from .67 (Inferiority) to .89 (Identity Confusion). The overall positive test-retest reliability coefficient was .83 and the overall negative reliability coefficient was .91 (Hawley, 1984, 1988).

For the positive scales, Cronbach Alpha coefficients ranged from .65 (Trust) to .84 (Industry). The coefficients for the negative scales ranged from .69

(Guilt) to .83 (Identity Confusion). Trust and Guilt were the only two alpha coefficients that failed to reach .70. The MPD also has adequate content, construct and discriminant validity (Hawley, 1984, 1988) (see Appendix B).

(3) Fundamental Interpersonal Relations Orientation-Behavior

Two subscales of The Fundamental Interpersonal Relations Orientation-Behavior (FIRO-B) were used as an additional measure of interpersonal relatedness, or intimacy. This instrument was developed by Schutz (1967/1978) as a personality assessment tool to determine the degree to which individuals (adolescents and adults) experience what he postulates are the three basic interpersonal needs for inclusion, control, and affection.

In each of these three interpersonal areas the instrument assesses a) the way the individual **believes he or she behaves towards others** and b) the way the individual **wants others to behave towards him or her**.

In Schutz's (1966) conceptualization, the need for affection construct is most closely related to intimacy as defined by Erikson, Timmerman and others. It includes aspects of emotional closeness, feelings of attachment and trust, and behaviour described by Schutz as conducive to

"confiding innermost anxieties, wishes and feelings" (p. 24).

The interpersonal need for Affection is described behaviorally by Schutz (1966) as the need to establish and maintain personally satisfying levels of love and affection in relationships with others. This need is met specifically in dyadic relationships and refers to the psychological comfort one experiences initiating close, personal relationships with others as well as the degree to which one is open to others' initiating these types of relationships. It involves being able to love others to a satisfactory degree and feeling loved by others to a satisfying degree. The desire, in a dyadic relationship, to love, to be emotionally close, and to be personal and intimate are all aspects of the interpersonal need for affection. An individual who does not feel this need is being met may describe themselves as disliked, emotionally distant or cut-off, or empty (Schutz, 1966).

The two subscales assessing how respondents believe they express affection to others and how they want others to express affection to them were used as an additional measure of intimacy in this study.

The FIRO-B is a 54-item, self-report inventory that consists of 6 Guttman scales with 9 items in each,

measuring expressed behaviour (E) and wanted behaviour (W) in each of the three interpersonal dimensions: Inclusion, control, and affection.

A Guttman scale is one in which statements expressing gradually increasing strength of agreement to a particular issue are listed. Thus a respondent has nine opportunities to respond to variations of each of the six basic questions. For example, Table 4 shows the items that contribute to the Expressed Affection Subscale and the type of response requested.

For 30 of the questions, respondents were asked about the types of behaviors they thought they engaged in and how often they wanted others to engage in these behaviors. They were asked to respond to these items by choosing one of six responses ranging from (1) never to (6) usually. For 24 of the questions, respondents were asked about the strength of their responses by indicating the number of people they engaged in these behaviors with and the number they wanted to behave this way toward them. They were asked to respond to these items by choosing one of six responses ranging from (1) nobody to (6) most people.

The measure is scored comparing participants' responses to the acceptance-rejection cutoff points Schutz

Table 4

Items Comprising the Expressed Affection Subscale of the
FIRO-B

For the first three statements, participants are asked to indicate if this is true of them 1 (never) to 6 (usually)

1. I try to have close relationships with people.
 2. I try to have close, personal relationships with people.
 3. I try to get close and personal with people.
-

For the next 6 statements, participants are asked to choose from 1 (nobody) to 6 (most people).

4. I try to be friendly with people.
 5. My personal relations with people are cool and distant.
 6. I try to have close relationships with people.
 7. I try to get close and personal with people.
 8. I act cool and distant with people.
 9. I try to have close personal relationships with people.
-

(1966) established for each item based on his validation studies. Any response given on one side of the cutoff is scored as rejection of the item and receives "0"; any

response given on the other side of the cutoff is scored as acceptance of the item and receives "1" (Ryan, 1970/1989). For example, Item 1 in Table 4 would be scored "1" if the respondent selected 6(usually) or 5(often); and "0" if the respondent selected 4 (sometimes), 3 (occasionally), 2(rarely) or 1 (never).

This measure leads to 6 scores: expressed inclusion behaviour (E_i), wanted inclusion behaviour (W_i), expressed control behaviour (E_c), wanted control behaviour (W_c), expressed affection behaviour (EA), and wanted affection behaviour (WA). Only the latter two scores were used in this study. Scores range from 0-9 for each scale and represent the number of items a respondent accepts from the group of nine comprising each scale. In general (but not always), acceptance of an item is counted if a respondent chooses more extreme responses: 6 (usually) or 5 (often) to positive statements and 1 (never) or 2 (rarely) to negative statements. The closer a respondent's score is to the extremes of 0 or 9, the more applicable are the general behavioral descriptions Ryan (1970/1989) has developed.

According to Ryan (1970/1989) affection is concerned with the need for deep, or intimate relationships, rather than superficial ones. Respondents who obtain low Expressed Affection scores are generally indicating that

they are cautious about initiating close, intimate relationships. Respondents who obtain high Expressed Affection scores are generally indicating that they readily become involved in intimate relationships with others.

Low Wanted Affection scores generally indicate that respondents are very selective about whom they establish deep relationships with, while high Wanted Affection scores indicate that respondents want others to initiate close, intimate relationships with them (Ryan, 1970/1989).

Ryan (1979/1989) reports that 0 and 1 are extremely low scores and may be interpreted to mean that the behaviour described above may be somewhat compulsive in nature. Two and 3 are low scores and indicate a marked tendency to behave in the manner described above. Four and five are moderate scores and indicate that the respondent may demonstrate a tendency toward the behaviour described for high and low scores. Six and 7 are high scores and suggest that the behaviour is likely to be noticeably characteristic of the individual; 8 and 9 are extremely high scores and suggest that the behaviour may be somewhat compulsive in nature.

According to Schutz (1966) moderate Expressed and Wanted scores (4-6) are desirable in each of the areas. On the Expressed Affection subscale they indicate that the

respondent tends to be friendly, tries to have close, personal relationships with other people, and does not generally have cool, distant relationships with others. On the Wanted Affection subscale they indicate that the respondent generally likes others to act friendly, close and personal with him or her, and does not like others to act cool and distant towards him or her (Ryan, 1970/1989).

The FIRO-B has been used successfully in research on the compatibility of various types of dyads including marital partners (Ryan, 1970/1989) and therapist-client pairs (Sapolsky, 1965; Lindahl, 1973; cited in Schutz, 1967/1978), parole officers and their assigned parolees (Peoples, 1975) co-workers, and teacher-student pairs (Vargo & Schafer, 1975; cited in Gluck, 1983). It has also been used to assess the compatibility of group members (Rosenfeld & Jessen 1972), and the development of groups (Schutz, 1966). In addition it has been used by Ryan (1970/1989) in clinical interpretations that are the result of 250,000 FIRO-B administrations in research, clinical and teaching settings with a variety of populations. These include members of different occupational groups such as police officers, fire-fighters, high school and university students, teachers, and nurses as well as with clinical groups such as young offenders and in marital therapy

(Ryan, 1970/1989).

Reliability of the FIRO-B scales was determined during the construction of the measure and reported by Schutz (1966) to be adequate. Because the scales of the FIRO-B are ordinal level, Guttman scales, the appropriate statistic for measuring consistency of the scales is the coefficient of reproducibility. This coefficient represents the predictability of an individual's response to a scale item from knowledge of responses to previous items on the scale (Gluck, 1983). According to Guttman (1974), "an acceptable approximation to a perfect scale has been arbitrarily set at 90 per cent reproducibility" (p. 159). On the FIRO-B, Schutz (1966) reports that the coefficients of reproducibility were .94 for all the scales but expressed Control (Ec) which was .93.

Gluck (1983) completed extensive study of the statistical properties of the FIRO-B and tested split-half reliability of the measure using the Kuder-Richardson formula. This method examines the mean split-half coefficients for every possible division of the test into two parts. As such, it is a more stringent measure of the consistency/inconsistency of performance on test items and according to Gluck is particularly applicable to Guttman scales. Internal consistency and precision ranged from

moderate to high for all scales except Wanted Affection and Gluck (1983) concluded that they "hover in a moderate range well within accepted reported values" (p. 12).

Coefficients of stability for all scales over a two to four week period ranged from .72 to .85 ($X=.79$) for junior high school students (Hutcherson, 1965); and .71 to .82 ($X=.77$) for adults (Schutz, 1978).

For the present samples, Cronbach alpha coefficients for items contributing to the Expressed Affection scale were .81 for the junior high students, .81 for the high school students, and .84 for the university students. Alpha coefficients for the Wanted Affection scale were .80 for the junior high students, .83 for the high school students, and .86 for the university students.

The FIRO-B is reported to have adequate content validity (Gluck, 1-983) and adequate predictive validity (Gard and Bendig, 1964). Correlations between the interpersonal behaviour of psychiatric patients predicted by the FIRO-B scores and that observed by their staff were moderate, ranging from .38 to .54 ($X=.44$). Vraa (1971) also demonstrated that the behaviour of group members was consistent with their scores on the FIRO-B.

Of particular importance to this study, the FIRO-B Expressed and Wanted Affection scores have been found to

demonstrate adequate concurrent validity. They were found by Kikuchi and Gordon (1966) to correlate with several factors on the Survey of Interpersonal Values. Expressed Affection correlated negatively with independence and positively with benevolence. Wanted Affection also correlated negatively with independence and positively with support.

Gluck (1983) also reports that the FIRO-B has adequate construct validity. In a study conducted by Kramer (1967) and replicated by Gluck (1983) undergraduate students were told about the FIRO-B and asked to predict their results prior to taking the test. Correlations between the predicted and actual scores in both studies were significant at the .01 level on all scales except for wanted Control in Kramer's study, which was significant at .05. In addition, Exline and Messick (1967) found a relationship between dependency-independency and the trait Control as measured by the FIRO-B.

As well, in support of Schutz's (1966) Postulate of Relational Continuity that states "an individual's expressed interpersonal behaviour will be similar to the behavior he experienced in his earliest interpersonal relations, usually with his parents . . ." (p. 81), Connors (1963) found that Expressed and Wanted Affection scores on

the FIRO-B could discriminate single and first-born children from children in other birth orders.

In summary, adequate reliability and validity for the FIRO-B was been demonstrated and it appears to be a measure appropriate for assessing perceived behaviour relevant to intimacy for the adolescents and young adults in this study (see Appendix C).

(4) Bem Sex Role Inventory

The Bem Sex Role Inventory (BSRI) was developed by Sandra Bem (1974) to measure psychological androgyny. Prior to Bem, personality attributes that were deemed "masculine" (such as assertiveness and competitiveness) or "feminine" (such as compassionate and affectionate) were conceptualized as aspects of two separate dimensions. On instruments that measured these constructs, individuals who obtained high scores on one type of behavior automatically received low scores on the other. Bem introduced the idea that a single individual could demonstrate high levels of both masculine and feminine behaviors depending on which was most appropriate in a given situation.

The original form of the inventory contains 60 personality characteristics. Twenty of the characteristics are "stereotypically feminine". That is, in the development of the measure, these characteristics were

judged by both women and men to be more desirable in American society for women to possess than for men to possess. Examples include "affectionate", "gentle", "understanding", "sensitive to the needs of others". Twenty of the characteristics are "stereotypically masculine"; judged to be more desirable for men than for women to possess in American society. Examples include "ambitious", "self-reliant", "independent", "assertive". This form of the BSRI also contains 20 gender-neutral items (e.g., truthful, happy, conceited) which are not used in scoring. The BSRI was developed for use with individuals over 14 years of age.

The personality characteristics are presented in a 7-point Likert format and respondents are asked to indicate how true each characteristic is of them. The scale is anchored by 1 ("Never or Almost Never True") and 7 ("Always or Almost Always True").

To score this measure, subjects' responses to the feminine items are summed and the average is calculated. This average is the respondent's Femininity Score. Masculinity Scores are calculated in the same way for each respondent. The Femininity and Masculinity Scores are then converted to standardized T-scores using a table provided by Bem (1981) and the difference between the two

standardized scores (Femininity Standard Score minus Masculinity Standard Score) becomes the respondent's Androgyny Score.

Respondents who obtain a positive Androgyny score greater than 10 are classified as Feminine (regardless of their biological gender). These respondents indicate that they are high on the feminine dimension and low on the masculine dimension. Respondents who obtain a negative Androgyny score greater than -10 are classified as Masculine (again regardless of their gender). These respondents indicate that they are high on the masculine dimension and low on the feminine dimension. Respondents whose Androgyny scores fall between -10 and +10 are classified as either Androgynous or Undifferentiated.

To determine which respondents in this study were Androgynous and which were undifferentiated, the median femininity and masculinity scores for the three age groups were calculated. Following Bem's (1981) recommendations, those respondents whose femininity and masculinity scores were **both** above their respective group medians were classified as Androgynous. Those respondents who had one or both scores at or below the medians were classified as Undifferentiated.

A shorter form of the BSRI was developed by Bem (1981)

and was used by the high school students in this study because of classroom time constraints. This form contains half of the original BSRI items. Based on factor analyses and item-total correlations, the 10 masculine and 10 feminine items that correlated most highly with the total masculinity and femininity scores respectively were retained in the Short BSRI. Those items included in the shorter version were also those with the highest social desirability ratings. The variance in social desirability of the feminine and masculine items are comparable. Ten neutral items were also retained in this version as background for the target items.

Correlations between the Original and Short BSRI reported by Bem (1981) range from .85 for females on the Femininity Scores to .94 for males and females on the Masculinity Scores and indicate that the two forms are highly correlated. As well, alpha coefficients calculated for this study on both versions are comparable (.81 Original BSRI and .91 for the Short BSRI for the femininity scale; and .85 and .81 respectively for the masculinity scale). However, in scoring, to compensate for the difference in item number, different tables are used to determine the T-Scores for the Femininity and Masculinity Scores and T-Scores for the Femininity minus Masculinity

difference for the two versions.

Both the Original BSRI and the Short BSRI (from analyses based on rescoring of the Original Form) have been reported to have adequate psychometric properties. Alpha coefficients calculated for two samples of university students ranged from .75 for females on the femininity scale of the Original Form to .87 for females on the masculinity scale of the same form. On the short form, alpha coefficients range from .84 for females on the femininity scale to .87 for males on the masculinity scale. Test-retest reliabilities range from .76 for males' Masculinity Scores on both the Original and Short BSRI to .94 for females' Masculinity Scores on the Original BSRI.

The only difficulty that has been reported in the literature concerning the comparability of the two versions is a difference in the relative proportion of scores falling into the gender-typed (Masculine or Feminine) categories and those falling into the Androgynous and Undifferentiated categories. Some respondents who are classified as Masculine or Feminine on the Original BSRI are classified as Androgynous or Undifferentiated when their responses are rescored on the Short BSRI.

Using the 1978 Normative Sample, and the recommended median-split procedure, Bem (1981) reports the following

changes in percentage of participants falling into the four groups. Table 5 presents these changes.

Table 5

Changes in Gender-role Designation for Participants
Classified by the Original and Short Forms of the BSRI

	Classification							
	Feminine		Masculine		Androgynous		Undiff.	
	Orig.	Short	Orig.	Short	Orig.	Short	Orig.	Short
Female	39%	24%	12%	16%	30%	37%	18%	24%
Male	12%	16%	42%	33%	20%	24%	27%	28%

that the percentage of females classified as Feminine on the Original BSRI fell from 39.4% to 23.8% when the data was rescored using only the items contained in the Short BSRI. The percentage of males in that classification rose from 11.6% to 16%. Similarly, the percentage of males classified as Masculine on the Original BSRI fell from 42% to 32.6% when only the Short BSRI items were scored, while the percentage of females in this category rose slightly from 12.4% to 15.6%.

In contrast, the percentage of both females and males

classified as Androgynous on the Original BSRI rose from 30.3% to 37.1% and 19.5% to 23.9% respectively on the Short BSRI. Similarly, the percentage of females and males classified as Undifferentiated on the Original BSRI rose from 17.9% to 23.5% and 26.9% to 27.5% respectively.

The reason for this shift appears to be related to two factors: the removal from the Original BSRI of some feminine items that had low social desirability; and the removal of some feminine and masculine items that correlated in factor analyses more with the respondent's gender than with the other scale items (Bem, 1981).

The impact of this difficulty on the present study is that classification of the high school students into sex-role groups cannot be compared to the classification of the junior high and university students. However, comparisons between males and females within each of these age groups, and in relation to identity and intimacy development within the groups can be made (see Appendices D and E).

(5) Adolescent Sex Role Inventory. The Adolescent Sex Role Inventory (ASRI) was developed by Thomas & Robinson (1981) as a downward extension of the BSRI for use with young adolescents between the ages of 10 and 14. Synonyms, either words or phrases, which would be better understood by participants in this age group, were generated to

replace the 60 personality characteristics from the Original BSRI. The ASRI items are presented to participants in the same order as are the Original BSRI items; the instructions are the same; and the measure is scored in the same way. Examples of comparable items on the BSRI and the ASRI are: "Conscientious"/"Care about the things you do"; "Aggressive"/"Go after what you want"; "Sensitive to needs of others"/"Aware of other people's feelings".

On the basis of their validation studies, Thomas & Robinson (1981) report that the factor structures of the BSRI and ASRI are "essentially the same" (p. 199). They also report that the coefficient alphas for the feminine and masculine scales of the BSRI and the ASRI calculated for two university samples were similar. For one sample of 133 students, alphas for the masculine scores on the BSRI and the ASRI were .88 and .86 respectively. For the same sample, alpha coefficients for the feminine scores were .73 and .76. For the second sample of 364 university students, the alpha coefficients for the masculine and feminine scores on the BSRI and ASRI were .86 and .83; and .73 and .76 respectively.

In this study Alpha coefficients for the masculine items on the ASRI were .86 and on the Original BSRI were

.85. Alpha coefficients for the feminine items on the ASRI were .83 and on the Original BSRI were .81.

The ASRI has been used successfully with the Original BSRI in other studies of gender typing with younger and older adolescents (e.g., Sime, 1995; Sime, Koverola & Battle, 1997) and is thus seen as an appropriate measure for this study as well (see Appendix F).

(5) Identity Status Interview

The Identity Status Interview (ISI) was developed by Marcia (1966) to operationalize Erikson's conceptualization of identity development. Specifically, this semi-structured interview was developed to assess 1) the amount of exploration an individual has engaged in and 2) the degree of commitment an individual has made as he or she makes decisions critical to identity development.

On the basis of their responses to interview questions probing the issues of exploration and commitment concerning particular areas of identity development, a respondent is assigned to one of four identity statuses. Individuals who have neither actively explored alternatives relevant to an area of identity development (such as vocation), nor made a commitment to a particular alternative are classified as **Identity Diffusion**. Those who have not seriously explored different alternatives but have nonetheless committed

themselves to a particular plan are classified as **Foreclosure**. Those who are in the process of deciding between two or more alternatives but have not yet committed themselves to one are classified as **Moratorium**. Those who have actively questioned their options and then committed themselves (behaviorally as well as verbally) to their chosen idea are classified as **Identity Achievement**. Table 6 shows the four identity statuses in relation to exploration and commitment.

Table 6

The Four Identity Statuses

		Exploration	
		YES	NO
Commitment	YES	Identity Achievement ^a	Foreclosure ^b
	NO	Moratorium ^a	Diffusion ^b

Note. ^a Identity Achievement and Moratorium are also known as the mature statuses. ^b Foreclosure and Diffusion are also known as the immature statuses.

Using this semi-structured interview format to probe the processes by which individuals made their identity decisions, Marcia originally assessed identity development in the areas of vocation and ideology (e.g., religious and political views). He developed a scoring manual for categorizing participants by identity status and the manual and interview were then modified until interscorer reliabilities of between 80 and 85 percent could be predictably obtained (Marcia, 1993b).

Marcia (1993b) reports that concurrent validity for the ISI was established by developing another measure of overall identity development, the Ego Identity Incomplete Sentence Blank (EI-ISB). This measure contained identity-relevant stems that respondents were asked to respond to. The EI-ISB yields a continuous scale of identity scores that were positively correlated with the identity statuses. The highest EI-ISB identity scores were obtained by subjects classified as Identity Achieved on the ISI, followed by Moratorium, Foreclosure, and Diffusion subjects respectively.

The most significant change that has been made in the ISI since its inception has been the introduction of interpersonal content areas (or identity domains) to the interviews. These interpersonal identity domains have

included the Role of Marriage and Spouse, the Role of Parenting, and Career-Marriage Conflicts. The interview has also been revised for use with participants of different ages. Typically, researchers include at least 3 domains in the interview, and use the form of interview most appropriate for the age of participants.

In this study two interpersonal identity domains were probed in addition to vocation. They were: 1) Marriage and the Role of Spouse and 2) The Role of Parenting. Thus three domains were surveyed and two forms of the ISI were used: The Identity Status Interview: Early and Middle Adolescent Form (Archer & Waterman, 1993) was used with the junior and senior high school students; and The Identity Status Interview: Late Adolescent College Form (Marcia & Archer, 1993) was used with the university students (see Appendix G). The interviews took approximately 30 minutes for the young adolescents and between 45 minutes and one hour for the older participants.

The interviewers. Based on the guidelines presented by Marcia et al. (1993), the researcher trained 10 advanced undergraduate psychology students to administer and rate the ISIs. The 9 female and 1 male interviewers received a half-course credit for participating in the research. As part of their training, the interviewers read chapters of

Marcia et al.'s handbook on the scoring criteria for the two forms of the ISI being used. They also attended 8 hours of in-class interview practice in which they received

1) instruction on general interview techniques 2) instruction on conducting the semi-structured interview 3) in-class opportunities to practice the interview and 4) feedback on their performance. Prior to beginning their interviews with study participants, they also successfully conducted an interview in which their performance was observed and evaluated against a criterion checklist (see Appendix H).

Each interviewer conducted 11 interviews. Each was assigned four interviews at each of two age groups and three interviews at the third. Most of the interviewers also conducted an equal number of interviews with male and female participants.

The raters. As part of their interview training, the interviewers were also taught to rate the interviews. This was included because as Matteson (1993b) has reported, this ensures that the interviewers learn to obtain the information required to make identity status designations.

Following completion of each interview, the researcher assigned the interview tape to another of the interviewers to rate independently. While the raters could identify the

voices of the interviewers on the tapes, the interviewers were identified officially only by number on the audio cassettes. Each rater was assigned a variety of interviewers' tapes and interviewers who were close friends were not assigned each other's tapes. Each rater evaluated an approximately equal number of male and female tapes at each of the age levels.

For each tape, the raters were required to assess the Identity Status (Identity Achievement, Moratorium, Foreclosure, or Diffusion) of the interviewee in each of the three identity domains: Vocation, Marriage and the Role of Spouse, and Role of Parenting. Thus, for each participant, three identity status designations were made.

To assist with decision-making, the raters used a rating flow chart devised by the researcher, that was based on the operational definitions of Exploration and Commitment developed by Waterman (1993) and Archer (1993b) (see Appendix I). The raters also completed a rating form devised by the researcher to summarize their decisions (see Appendix J). Each rater, who was identified only by letter on the form, independently scored the interviews and returned the summary sheet with the taped interview to the researcher.

The researcher also trained an additional two senior

undergraduate psychology students to assist with rating the tapes. These students also received a half-course credit for their participation. They assisted the researcher in re-rating all of the interviews to ensure inter-rater reliability and validity of identity status assignment. All of the undergraduate students who assisted with the interviewing and interview rating were blind to the study's hypotheses.

As part of their training, these two additional raters read the materials the interviewers had read; listened to tapes with the researcher, discussed the rating of these tapes, and then independently rated a number of the same tapes using the flow chart and rating forms that the other interviewer/raters had used. In the event of discrepancies between the raters, those sections of the tapes were listened to by both raters and the researcher and agreement was reached through discussion. These training tapes, most from the university sample, which were anticipated to include the most difficult, were excluded from the inter-rater reliability calculations.

Following re-rating of the remainder of the tapes by the researcher and the two raters, the three identity status designations for each subject were compared. In the event of a discrepancy between the ratings on one domain,

that section of the interview was re-rated by another rater. If there was more than one disagreement, the entire tape was independently re-rated. On the few occasions where there was still disagreement, the section in dispute was listened to again and the designation was determined by a third rater, usually the researcher. For each domain of every tape, however, at least two raters agreed upon the identity status that was assigned.

Cohen's Kappa (k) (Sattler, 1992) was calculated for each of the three identity domains in each of the three age groups to determine the inter-rater reliability of the identity status ratings. Kappa, which ranges from +1.00 to -1.00, is a conservative estimate of the percentage of agreement between raters because it corrects for the possibility of chance agreements between the raters. Kappas greater than .70 generally indicate an acceptable level of agreement (Sattler, 1992). Table 7 presents the three Kappa coefficients for the three age groups in each Identity Domain.

A limitation of k for this study is that the formula requires that the number of raters be constant. As noted above, the majority of the tapes were rated by two raters. There were, however, some tapes that were independently rated by three raters. To include these tapes the

Table 7

The Three Inter-rater Reliability Coefficients (and n) for
Each Identity Domain and Age Group

	Vocation		
	Not-researcher	researcher	3 raters
Junior high	.66 (21),	.62 (31)	.51 (39)
High School	.61 (21)	.67 (24)	.63 (32)
University	.82 (16)	.81 (21)	.59 (30)
Marriage and the Role of Spouse			
Junior high	.80 (21)	.80 (31)	.68 (39)
High School	.81 (21)	.85 (24)	.63 (32)
University	.56 (16)	.68 (21)	.54 (30)
Role of Parent			
Junior high	.92 (21)	.88 (31)	.79 (39)
High School	.71 (21)	.76 (24)	.63 (32)
University	.60 (16)	.69 (21)	.41 (30)

researcher used the following procedure: The ratings assigned by the first interviewer/rater were always included. A coin was then tossed to determine which of the other two ratings would be included in the calculation.

This method, while allowing the inclusion in the reliability calculations, of tapes that would otherwise not

have been used, was also costly from a reliability point of view. First, the tapes that required 3 raters were often the most difficult to rate and had the most disagreements. Second, some second ratings that concurred with the original ratings were excluded from the calculations (because they were eliminated in the coin toss) and thus the kappas in this study are an even more conservative estimate of inter-rater agreement than they typically are.

An additional complicating factor in this study is that the researcher also served as one of the original raters and as a re-rater. Therefore, three Kappa's were calculated for each domain and each sample. The first k was calculated on the interviews rated by two raters, neither of whom was the researcher. The second k was calculated on the group of interviews already rated, with the addition of those interviews the researcher rated. The third k was calculated with the addition as well of the interviews that had originally been rated by three raters following the random exclusion of one set of ratings. The third kappa reported, therefore, is the most conservative measure of inter-rater reliability.

In this study two additional questions were also posed to the participants in each of the three domains. Participants were asked 1) whether anyone had influenced

their decision-making in this area, and if so whom; and 2) whether they thought anyone would be affected by their decision, and if so, whom. To measure inter-rater agreement on their responses, a kappa coefficient was also calculated for the first part of each question for each sample. Table 8 shows the Kappa Coefficients for participants' reports that others influenced or would be affected by their identity decisions.

Table 8

Inter-rater Agreement on Participants' Report of Relational Aspects of Identity Decision-making

	Vocation	
	Others' Influenced	Others Affected
Junior high	.81	.81
High School	.74	.70
University	.85	.81
	Marriage and the Role of Spouse	
Junior High	.76	.63
High School	.73	.81
University	.81	.78

Role of Parent

Junior High	.67	.70
High School	.66	.59
University	.58	.61

A smaller number of this portion of the tapes had been rated by three raters so for the calculations these third ratings were all excluded.

Procedure

Group 1: Young Adolescents

The researcher attended a number of Grade 8 and Grade 9 Language Arts classes at a junior high school in the Fort Garry School Division of Winnipeg to tell students about the project and to ask for volunteers. Students were informed that participation would involve completing four questionnaires and could also involve an individual interview that would be scheduled during a lunch hour. Those students who were interested in participating were given information packages and asked to take the packages home to read with their parents.

The packages contained an information sheet about the study (See Appendix K) and two consent forms (one each for the parent(s) and the student) (see Appendix L). The information sheet requested that the parents sign an enclosed form indicating whether they did or did not consent to having their son or daughter participate. When the students returned the packages, regardless of their decision about participating, they received a small chocolate bar.

Potential participants and their parents were informed that the study was examining the personality development of adolescents. They were also informed that participation involved completion of four questionnaires during a Language Arts class and could involve a forty minute interview as well.

The researcher returned to the school and group-administered the questionnaires in a counter-balanced order. Names of participants for the interviews were randomly selected from those who completed the questionnaire packages until 20 males and 20 females had been interviewed. The participants selected for the interviews were contacted by the assigned interviewers and the interviews were scheduled during a mutually convenient lunch hour. The interviews were conducted in unoccupied

classrooms at the school and each was audio-taped. When all participants had been interviewed, further written information about the purpose of the study (see Appendix M) was given to the students and they were asked to share this information with their parents as well.

To balance the research credits that the university students received for participating, at the end of their interview, each student was given a coupon from 7-eleven for a Slurpee. Upon completion of the study a written summary of its findings was given to the students through their home room teachers.

Group 2: Middle Adolescents

The researcher attended a number of Grade 11 and 12 English classes at a high school in the same Winnipeg school division and used the procedure described above to recruit participants.

Group 3: Late Adolescents/Early Adults

Males and females between the ages of 19 and 24 were recruited from Psychology classes at The University of Manitoba and The University of Winnipeg. The researcher informed potential participants that the study was examining the personality development of late adolescents/early adults. They were informed that participation involved group administration of four

questionnaires and possibly a 1 hour interview. Following completion of the interviews, debriefing sheets were given to participants through their course instructors. Upon completion of the study a summary of the study's general findings was given by telephone to those participants who indicated on their consent forms that they wished to receive this feedback.

RESULTS

Sample Description

There were three groups of participants: Junior high school students, high school students, and university students. Table 9 shows the distribution of ethnic origins reported by participants in the three groups. Table 10 presents the percentage of students at each age.

Junior High Subjects

The mean age of the females ($n = 63$) was 13.8 ($SD = .74$). The mean age of the males ($n = 52$) was 13.7 ($SD = .70$).

High School Subjects

The mean age of the females ($n = 73$) was 16.8 ($SD = .79$). The mean age of the males ($n = 51$) was 16.9 years ($SD = 1.0$).

University Subjects

To determine if there were differences between the sub-samples derived from the two university populations (data U of M: $n = 44$ male, 76 female; data U of W: $n = 10$ male, 11 female), they were compared in terms of age and ethnicity based on the demographic data from the Background Information Sheet.

Between the two sub-samples, there were no significant differences in age, $t = -.55$; $p > .05$, although there were

differences in ethnicity, $\Phi = .40$, $p > .001$. Nonetheless, because age was the variable of particular interest, the sub-samples were combined for all subsequent analyses. The possible effect of the difference between sub-samples is that it decreases the power of subsequent analyses to detect differences between the university group and the other two age groups.

The mean age of the university females ($n = 87$) was 20.7 ($SD = .97$). The mean age of the males ($n = 54$) was 20.9 ($SD = 1.2$).

Table 9

Percentage of Ethnic Origins Reported by the Adolescents

	Caucasian	Asian	Black	Other
Junior High	66%	9%	4%	20%
High School	76%	7%	2%	15%
U of Manitoba	77%	10%	3%	11%
U of Winnipeg	55%	10%	30%	5%

Note. Rows do not total 100% due to rounding error.

A series of tests was conducted to determine whether there were significant differences between males and females in each group, or between the groups, on each of the demographic variables. A series of t-tests indicated there were no significant differences in mean age between

males and females within each of the three age groups,

$t_{\text{junior high}} = .75, p > .05$; $t_{\text{high school}} = -.99, p > .05$; $t_{\text{university}} = -.69, p > .05$.

Table 10

Age Distribution of Participants in the Three Groups

Junior High		
	Females ($n = 63$)	Males ($n = 52$)
	$M = 13.8 (.74)$	$M = 13.7 (.70)$
13	40%	44%
14	41%	42%
15	19%	14%
High School		
	Females ($n = 73$)	Males ($n = 51$)
	$M = 16.8 (.79)$	$M = 16.9 (1.0)$
16	44%	43%
17	34%	29%
18	22%	18%
19	0%	10%
University		
	Females ($n = 87$)	Males ($n = 54$)
	$M = 20.7 (.97)$	$M = 20.9 (1.2)$
19	5%	9%
20	46%	35%
21	26%	32%
22	18%	13%
23	5%	7%
24	0%	4%

As can be seen in Table 10, there was age overlap for high school and university males. The 19 year-old high school males were retained in the sample nonetheless, for the following reasons: First, it was desirable to maximize the number of male participants in that group. Second, their presence did not create mean differences between males and females in the high school age group. Third, researchers such as Archer (1982, 1985) have used grade, rather than age to delineate group membership. It seemed likely, therefore, that these males could be considered to be developmentally part of the high school cohort rather than the university cohort.

Chi-square tests detected no significant differences in ethnicity between males and females within the three groups, $\Phi_{\text{junior high}} = .15, p > .05$; $\Phi_{\text{high school}} = .29, p > .05$; $\Phi_{\text{university}} = .19, p > .05$. As well, there were no significant differences between the three groups in ethnicity, $\chi^2 = 3.49, p > .05$. As planned, there was a significant difference between the groups in age, $\Phi = 1.40, p < .001$. Given the absence of differences between groups on all but the variable of interest, age, the samples were assumed to be appropriate for comparison.

Test of Assumptions

The data was examined for within group outliers,

defined as scores falling greater than three standard deviations from the mean on each of the dependent measures. Based on the recommendations of Tabachnick and Fidell (1996) one subject was deleted from the junior high group on the MPD intimacy measure on the assumption that this subject was not from the same population. This subject scored greater than three standard deviations below the mean.

For the FIRO-B Expressed and Wanted Scales, visual inspection of the normal probability plots suggested that the distributions were normal for each of the age groups. The K-S (Lilliefors) indicated, however, that it was not likely that the scores came from a normal distribution. Tabachnick and Fidell (1996) suggest that if the shape of the distribution appears normal and the sample size is sufficiently large, even if the sample is skewed it may not make a realistic difference in the analyses, and a transformation of the variable may not be required. In this instance, it was decided not to transform the variables.

For the MPD subscales, the BSRI Original and Short forms, and the ASRI, both the Lilliefors statistic and the normal probability plots indicated that it was likely the scores are distributed normally.

The Kolmogorov-Sminov statistic (the Lilliefors equivalent for smaller samples) indicated that the distributions for the three identity domains of the ISI were not normally distributed. The scores were positively skewed, with the larger proportion of scores in the less mature (Identity Diffusion and Foreclosure) statuses, and a smaller proportion of scores falling into the more mature (Moratorium and Identity Achievement) statuses. The fewest scores across groups (and in all three domains), therefore, were in the Identity Achievement status. Due to the skewness of the distributions, the type of data collected and the small sample size, nonparametric statistical techniques were employed with the ISI data.

Hypothesis 1

The first hypothesis predicted that for both males and females there would be a significant increase in identity development across the three age groups.

Measures of Psychosocial Development Data

Table 11 shows the means and standard deviations for the Resolution of Identity vs Identity Confusion Scores on the MPD. Figure 2 plots the Resolution of Identity vs Identity Confusion Scores for males and females across the three ages.

Table 11

Means (and Standard Deviations) for Resolution of Identity
vs Identity Confusion

	Junior High	High School	University
Female	5.93 (8.66)	4.56 (9.72)	8.65 (8.87)
Male	8.67 (6.48)	5.71 (7.36)	7.60 (8.77)

Comparisons in identity development between the three age groups were planned and so, following the recommendation of Glass and Hopkins (1996), 3 t-tests were used to compare the mean Resolution of Identity vs Identity Confusion Scores across the three age groups. Significant differences were detected between the junior high and high school groups, $t(215) = 1.88, p < .05$; and between the high school and university groups $t(252) = -2.90, p < .01$. No difference was detected between the junior high and university groups, $t(233) = -.96, p < .34$.

Due to the pattern of results evident in figure 2, a trend analysis was also conducted to determine whether the means formed a pattern across adolescence. Trend analyses are, in fact, special applications of planned orthogonal

contrasts, and could have been used instead of planned comparisons (Glass & Hopkins, 1996). They are used when there is a continuum underlying the categories of the independent variable (e.g., age group) and they provide more information about the relationship between the levels of this variable and the dependent variable than is provided by multiple comparisons alone. There was evidence of a quadratic trend, $F(1,352) = 7.66, p < .01$. This indicates that the relationship between identity development and age is not linear (i.e., with identity levels becoming higher across adolescence). Instead, the data are better characterized by a v - or u - shaped line, demonstrating in this case that there is a drop in identity resolution level in high school.

Given the appearance of possible gender differences in figure 2, though such differences were not hypothesized, an exploratory analysis was conducted. The groups were divided by gender, and two One-way ANOVAs were performed. Here a significant difference was detected only for females, $F(2,204) = 4.01, p < .02$. Table 12 shows the results of these ANOVA. Scheffe post hoc tests were then conducted to control the alpha level for these unplanned comparisons. Differences were detected between high school and university females, $Mean\ Difference_{high\ school - university} = -$

4.09, $p < .05$. No differences were detected between the other groups, $Mean\ Difference_{junior\ high - high\ school} = 1.37$, $p < .71$; $Mean\ Difference_{junior\ high - university} = -2.72$, $p < .23$.

Table 12

Analysis of Variance for Resolution of Identity vs Identity Confusion Scores Across Age and Gender

Source	df	MS	F
<u>Female</u>			
Between Groups	2	332.63	4.01 *
Within-group error	204	83.06	
<u>Male</u>			
Between Groups	2	105.27	1.79
Within-group error	143	58.70	

* $p < .02$.

Identity Status Interview Data

A series of Kruskal-Wallis tests (the non-parametric equivalent to ANOVA) were used to investigate this hypothesis with the ISI data. Following the procedure used by Hodgson and Fischer (1979) and Streitmatter (1998), for each of the three domains (Vocation; Marriage and the Role

of Spouse; Parenting), the 4 possible identity statuses were collapsed into two: Mature (Identity Achievement and Moratorium) and Immature (Identity Diffusion and Foreclosure). Comparisons were then made between mature and immature status, in each of the three domains, for each of the three age groups. This procedure, while increasing the number of subjects in each cell (by reducing the number of cells) assumes that the statuses are ordinal level scales ordered from Diffusion as the least mature status, through Foreclosure and Moratorium to Identity Achievement as the most mature status.

Following the recommendation of Clark-Carter (1997), overall differences between the three groups were first investigated using the Kruskal-Wallis test. The overall significant difference was then further investigated using Mann-Whiney U tests for pairwise contrasts.

Vocation Domain

For the Vocation Domain, the Kruskal-Wallis test revealed that there was a significant difference between the groups, $\chi^2(2, n = 120) = 6.41, p < .05$. Mann-Whiney U tests revealed that university students had more mature identity statuses than did the junior high students (M Rank_{junior high} = 35; M Rank_{university} = 46) ($Z(1, 79) = -2.5, p <$

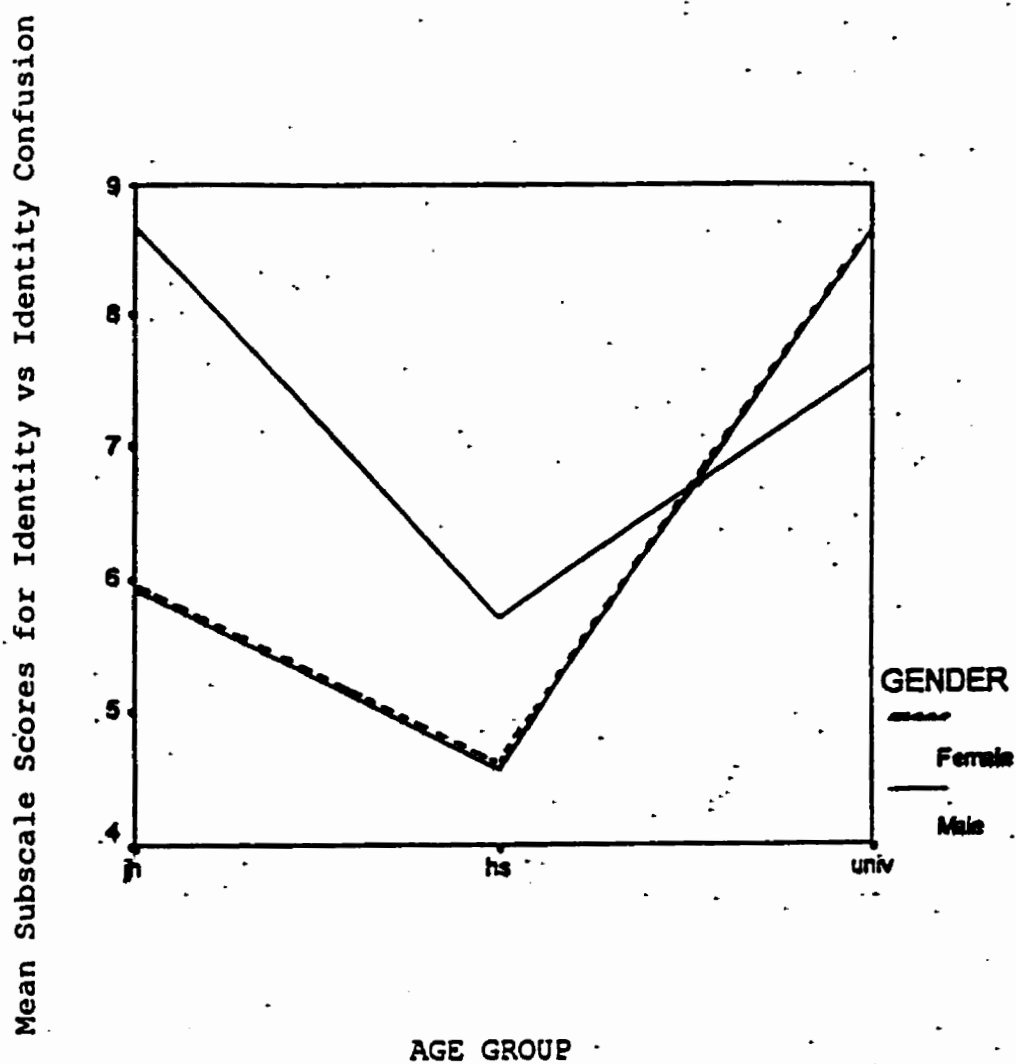


Figure 2. Resolution of Identity vs Identity Confusion Scores.

.01). There were no differences detected between each of these groups and the high school students, $M \text{ Rank}_{\text{junior high}} = 37$, $M \text{ Rank}_{\text{high school}} = 44$, $Z(1,79) = -1.65$, $p < .10$; $M \text{ Rank}_{\text{high school}} = 39$, $M \text{ Rank}_{\text{university}} = 43$, $Z(1,79) = -.89$, $p < .38$.

Marriage and the Role of Spouse Domain

For the Marriage and Role of Spouse Domain, no overall differences in identity status were detected, $M \text{ Rank}_{\text{junior high}} = 60$, $M \text{ Rank}_{\text{high school}} = 60$, $M \text{ Rank}_{\text{university}} = 62$, $\chi^2(n = 120) = .171$, $p < .92$.

Role of Parent Domain

Similarly, no significant differences were detected between the groups for the Role of Parent Domain, $M \text{ Rank}_{\text{junior high}} = 63$, $M \text{ Rank}_{\text{high school}} = 60$, $M \text{ Rank}_{\text{university}} = 59$, $\chi^2(n = 120) = 1.20$, $p < .55$.

Table 13 presents the Mean Ranks for the junior high, high school, and university students in each of the three identity domains.

In the event that the assumption of ordinality was not valid for this particular sample, the frequency of participant classification in each of the four statuses, for each of the three domains was also calculated. Chi-squares were then used to evaluate whether significant differences were evident in these frequencies across the

three age groups, in each domain. Using this strategy,

Table 13

Kruskal-Wallis For Identity Status Across Adolescence

Identity Domain	Mean Ranks			χ^2	Mann-Whitney U
	Age Groups				
	JH	HS	Univ.		
Vocation	52	62	68	6.41*	-2.51** jh/univ
Marriage	60	60	62	.17	
Parenting	68	62	59	1.20	

$p < .05$, ** $p = .01$.

no significant differences were detected in identity status across adolescence in any of the domains. Table 14 presents these frequencies and the Chi-Square Results.

Hypothesis 2

The second hypothesis predicted that the females would demonstrate higher intimacy levels than would the males at all three age levels.

Table 14

Frequency of Identity Statuses Across Age Groups and χ^2 s

Identity Status	Domain Age Group			χ^2
	Junior High	High School	University	
	<u>Vocation</u>			
Diffusion	16	13	11	.95
Foreclosure	14	10	8	1.75
Moratorium	8	10	13	.54
Identity Achievement	2	7	8	3.64
	<u>Marriage and the Role of Spouse</u>			
Diffusion	27	29	19	2.24
Foreclosure	9	7	16	4.19
Moratorium	4	2	3	.67
Identity Achievement	0	2	2	.00
	<u>Role of Parent</u>			
Diffusion	21	19	19	.14
Foreclosure	13	17	18	.88
Moratorium	4	3	2	.67
Identity Achievement	2	1	1	.50

Note. There were 40 participants in each of the three age groups.

Measures of Psychosocial Development Data

Because the comparisons between females and males were planned, three t-tests, one for each age group, were conducted using Resolution of Intimacy vs Isolation Subscale scores of the MPD. As predicted, the females obtained higher resolution scores than did the males in junior high school, $t(106) = 3.02, p < .01$, and university, $t(139) = 2.96, p < .01$. However, no significant differences were detected between high school females and males, $t(118) = 1.62, p < .11$.

Given the appearance of possible age differences in intimacy development in figure 3, though such differences had not been hypothesized, an exploratory One-way ANOVA was also conducted. There was a significant age group effect, with a significant linear trend, $F(2,363) = 7.26, p < .001$. This trend indicates that intimacy scores became higher across adolescence. This trend was evident for both males and females, $F(1,363) = 19.52, p < .001$). Table 15 shows the means and standard deviations for Intimacy vs Isolation scores on the MPD. Figure 3 plots the Resolution of Intimacy vs Isolation Scores for males and females from junior high school to university.

Table 15

Means (and Standard Deviations) for Resolution of Intimacy
vs Isolation Scores

	Junior High	High School	University
Female	11.42 (7.76)	10.53 (7.82)	14.74 (8.32)
Male	6.44 (9.15)	8.29 (7.21)	10.15 (8.64)

Fundamental Interpersonal Relations

Orientation - Behavior Data

Following the recommendation of Glass & Hopkins (1996), the FIRO-B data, though ordinal, was evaluated using interval data methods because the scales met the assumptions for ANOVA: normal distribution, equal variances, and independence of observations. Comparisons between genders at each age level were planned, and so three t-tests were performed for each of the two subscales. Table 16 shows the means and standard deviations for Expressed and Wanted Affection.

As predicted, significant differences were evident between females and males in Wanted Affection in each of the three groups $t_{\text{junior high}} (113) = 3.77, p < .001$; $t_{\text{high school}}$

Table 16

Means (and Standard Deviations) for Expressed and Wanted Affection Scores Across Adolescence

	Expressed Affection		
	Junior High	High School	University
Female	4.83 (2.59)	4.88 (2.56)	5.24 (2.51)
Male	3.56 (2.56)	4.06 (2.39)	4.28 (2.75)
	Wanted Affection		
	Junior High	High School	University
Female	5.61 (2.44)	6.08 (2.22)	6.34 (2.37)
Male	3.87 (2.57)	4.48 (2.69)	5.21 (3.06)

(122) = 3.67, $p < .001$; $t_{\text{university}}(92) = 2.20$, $p < .05$.

However, there were mixed results for Expressed Affection.

There was a significant difference between females and males in junior high school, $t(113) = 2.65$, $p < .01$, but no significant differences between females and males in the other two groups, though there was a trend in the expected direction, $t_{\text{high school}}(122) = 1.87$, $p = .06$; $t_{\text{university}}(139) = 1.92$, $p < .06$. Figures 4 and 5 present the patterns of Expressed and Wanted Affection scores for males and females across the three age groups.

The possible existence of age group effects was also examined on the basis of the developmental change evident

with the other measures. Since these analyses were unplanned, two One-way ANOVAs with trend analyses were performed. Significant linear effects were evident for both Expressed Affection, $F(2,377) = 3.89, p < .05$, and Wanted Affection, $F(2,377) = 11.07, p < .01$. These effects indicate that there were higher Expressed and Wanted Affection scores over time. Table 17 shows the results of the two Trend Analyses.

Table 17

Trend Analyses for Expressed and Wanted Affection Scores

Source		df	MS	F
<u>Expressed Affection</u>				
Between Groups	Linear	1	26.51	3.89*
	Quadratic	1	.16	.02
Within Group error		377	6.81	
<u>Wanted Affection</u>				
Between Groups	Linear	1	76.84	11.06***
	Quadratic	1	2.19	.00
Within Group error		377	6.94	

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

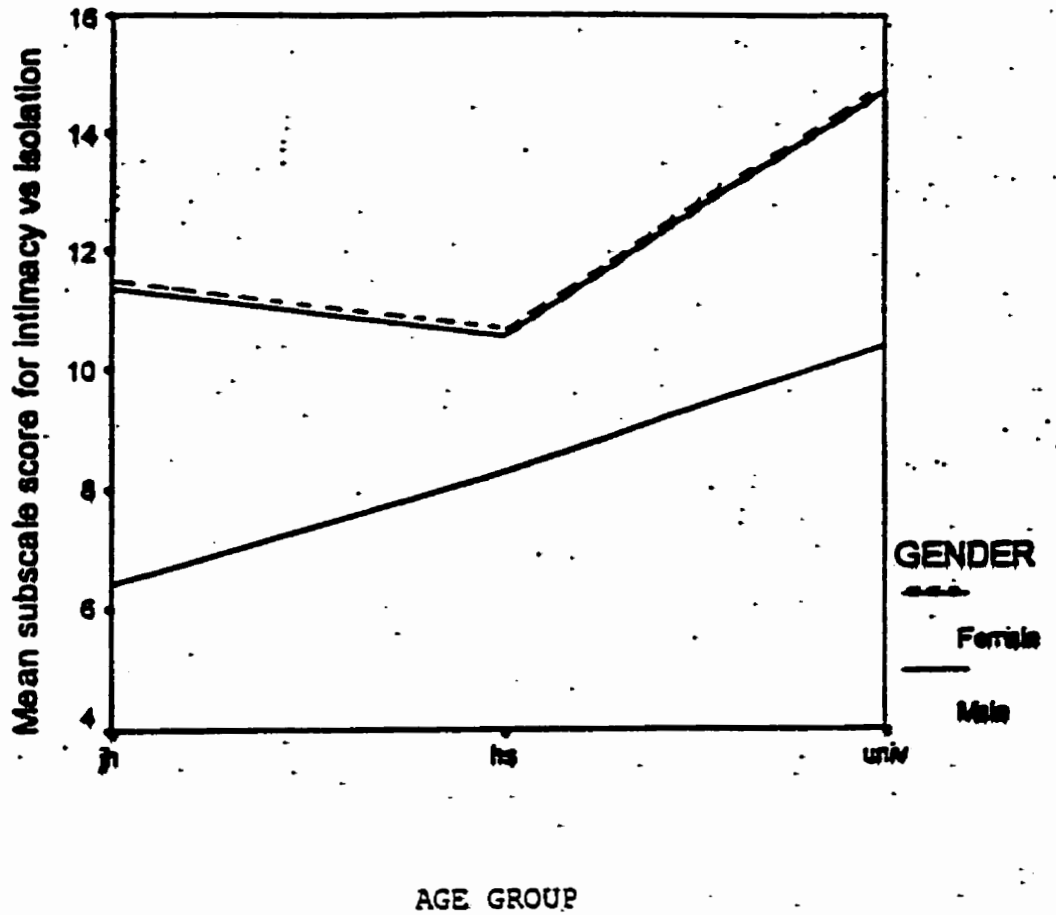


Figure 3. Resolution of Intimacy vs Isolation Scores

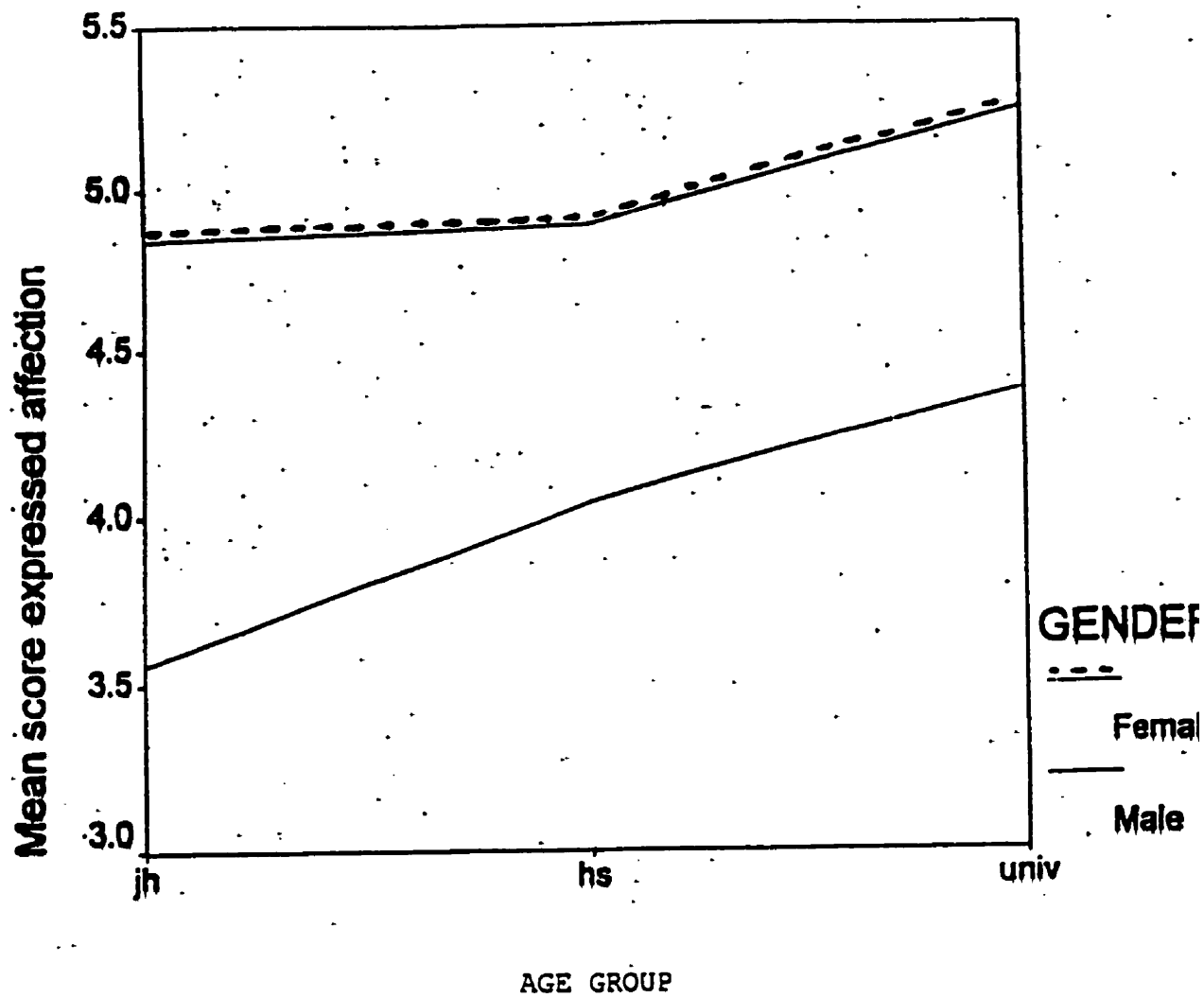


Figure 4. The Pattern of Expressed Affection Scores Across Adolescence.

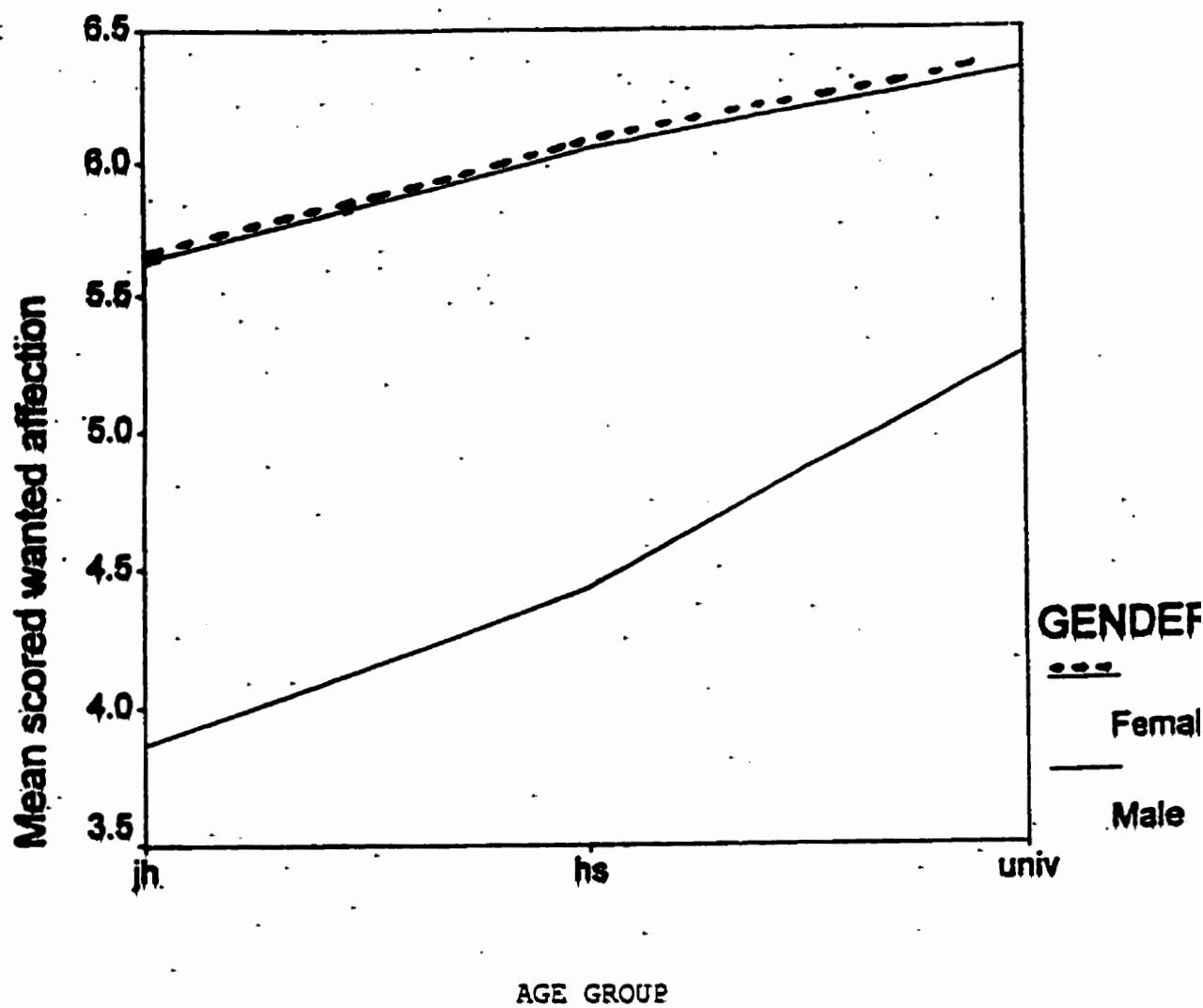


Figure 5. The Pattern of Wanted Affection Scores Across Adolescence.

Hypothesis 3

The third hypothesis predicted that for both males and females there would be a significant positive correlation between intimacy and identity.

There is some discrepancy in the literature about the degree to which identity and intimacy are related. As noted in the introduction, some researchers (e.g., Matteson, 1993) have reported a significant positive correlation between the two for men. Other researchers (e.g., Schiedel & Marcia, 1985) have demonstrated a negative correlation between identity and intimacy for women. Still others (e.g., Battle, 1993) have found a positive correlation for both men and women, and Matteson (1993) upon reanalyzing the data from a number of studies concluded that the two were not related for men or women.

Erikson's theory (1959/1980) would predict that identity and intimacy development are related because in his model, for men, the establishment of a firm sense of identity is the precursor to developing intimacy. Therefore, higher identity levels should be associated with higher intimacy levels, and lower identity levels should be associated with lower intimacy levels. As well, Erikson might predict that the two would become increasingly associated from early to late adolescence, for men in

particular, because intimacy development becomes increasingly important as young men enter adulthood. For women, one might speculate that Erikson would predict a stronger association between identity and intimacy than he would for men, because he postulated that the tasks were intertwined for females.

The self-in-relation theory would also predict that identity and intimacy would be positively correlated for women because it postulates that identity develops within the context of intimate relationships. One could also speculate that the self-in-relation theory would predict that the correlation between the two would remain high across adolescence, given the consistent importance of relationships in women's lives. For these reasons, the correlations between identity and intimacy were examined for males and females separately and across adolescence to investigate possible gender and developmental difference in their association.

To test this hypothesis, correlation coefficients were first calculated separately for males and females collapsed across the three age groups. All three of the intimacy measures (Resolution of Intimacy vs Isolation, Expressed Affection and Wanted Affection) were correlated with the four identity measures (Resolution of Identity vs Identity

Confusion and the three ISI domain scores: Vocation, Role of Marriage and Spouse, and Role of Parent). Table 18 shows the correlation coefficients for males and females separately.

In general, there were mixed results. For males and females, overall, there was a significant correlation between identity as measured by the Resolution of Identity vs Identity Confusion subscale of the MPD (MPD ID) and intimacy as measured by the Intimacy vs Isolation subscale of the MPD (MPD INT), $r_{\text{females}} (n = 207) = 0.52, p < .001$; $r_{\text{males}} (n = 146) = 0.40, p < .001$. There was also a significant correlation between the MPD ID and the Expressed Affection subscale of the FIRO-B (EA), $r_{\text{females}} (n = 207) = 0.24, p < .001$; $r_{\text{males}} (n = 146) = 0.27, p < .001$. No significant correlation was detected between the MPD ID and the Wanted Affection (WA) Subscale of the FIRO-B, $r_{\text{females}} (n = 207) = 0.06, p > .05$; $r_{\text{males}} (n = 146) = 0.09, p > .05$. As well, there were no significant correlations between the Identity Status domains (KIDS, MARR and VOC) and the MPD INT for males or females. There were, however, significant correlations between the Identity Status Marriage and the Role of Spouse (MARR) scores and EA for females, $r(n = 61) = 0.29, p < .05$, and MARR and WA for males, $r(n = 59) = 0.37, p < .01$. In summary, of 9 correlations between

identity and intimacy that were examined separately for males and females overall, 3 (33%) were significantly positively correlated for each of the genders.

Table 19 presents the correlations between identity and intimacy within each age group for females and males. When these correlations were examined, MPD ID was positively correlated with MPD INT for females in all three age groups, $r_{\text{junior high}} (n = 54) = 0.53, p < .001$; $r_{\text{high school}} (n = 70) = 0.39, p < .001$; $r_{\text{university}} (n = 83) = 0.59, p < .001$. For junior high and university females, MPD ID was also positively correlated with EA, $r_{\text{junior high}} (n = 54) = 0.29, p < .05$; $r_{\text{university}} (n = 83) = 0.34, p < .01$. In addition, for junior high females, MPD ID was also positively correlated with MARR, $r(n = 21) = 0.48, p < .05$. The IS domains were not significantly correlated with the intimacy measures.

There were similar findings for the males. MPD ID was positively correlated with MPD INT for the junior high and university males, $r_{\text{junior high}} (n = 45) = 0.42, p < .01$; $r_{\text{university}} (n = 53) = 0.57, p < .001$. MPD ID was also positively correlated with EA for the university men, $r (n = 53) = 0.42, p < .01$, but not for the younger males. For high school boys, the significant identity/intimacy correlation was between IS domain MARR and the WA subscale of FIRO-B, $r (n = 20) = 0.58, p < .01$. In summary, of the

54 identity/intimacy correlations that were examined (9 for each gender at 3 ages), 5 correlations (19%) were significant for the females, and 4 correlations (15%) were significant for the males.

As will be noted in these tables, the most consistent correlations were between the MPD identity and intimacy subscales. This is expected, in part, because within-measure correlations reflect more shared measurement error. There were cross-measure correlations between identity and intimacy as well, however, particularly between MPD ID and EA. Five of the 8 tested correlations (63%) (for females and males overall, and for the genders separately by age group) between these two subscales were significant and positive. In contrast, none of the correlations between MPD ID and WA were significant.

Interestingly, there were no correlations between any of the Identity Status Domains and the MPD INT. As well, there were no correlations between the IS Domains and the FIRO-B subscales (EA and WA) except in the three instances noted above (significant positive correlations between MARR and EA for females overall; between MARR and WA for males overall; and between MARR and WA for high school males).

Regarding the IS Domains, it is also interesting to note that of 24 correlations tested between the three IS

Table 18

Correlations Between Identity and Intimacy Measures For
Males and Females Overall

Variable	MPDID ^b	MPDINT ^c	KIDS ^a	MARR ^a	VOC ^a	EA ^d	WA ^d
All Females							
MPDID	---	.52***	.08	.09	.19	.24***	.06
MPDIN		---	.14	.17	-.09	.62***	.38***
KIDS			---	.48***	.16	.16	.02
MARR				---	.20	.29*	.17
VOC					---	-.03	-.18
EA						---	.59***
WA							---

^an = 61. ^bn = 207. ^cn = 216. ^dn = 223.

All Males							
MPDID	---	.40***	.08	.14	.26	.27***	.09
MPDIN		---	.04	.18	.09	.61***	.40***
KIDS			---	.43***	.05	.01	-.10
MARR				---	.15	.23	.37**
VOC					---	.13	.10
EA						---	.68***
WA							---

^an = 59. ^bn = 146. ^cn = 153. ^dn = 157.

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

Table 19

Correlations Between Identity and Intimacy Measures For
Males and Females in each of the Three Age Groups

Variable	MPDID ^b	MPDINT ^c	KIDS ^a	MARR ^a	VOC ^a	EA ^d	WA ^d
Junior High Females							
MPDID	---	.53***	.28	.48*	.13	.29*	.17
MPDIN		---	.19	.13	-.32	.68***	.43***
KIDS			---	.70***	-.10	.28	.22
MARR				---	.25	.25	.07
VOC					---	.00	-.15
EA						---	.60***
WA							---

^an = 21. ^bn = 54. ^cn = 58. ^dn = 63.

High School Females							
MPDID	---	.39***	.02	.08	.13	.09	.01
MPDIN		---	-.01	-.21	-.20	.50***	.36**
KIDS			---	.42	.23	.09	-.10
MARR				---	.44*	.14	.07
VOC					---	-.02	-.20
EA						---	.63***
WA							---

^an = 20. ^bn = 70. ^cn = 71. ^dn = 73.

Variable	MPDID ^b	MPDINT ^c	KIDS ^a	MARR ^a	VOC ^a	EA ^d	WA ^d
University Females							
MPDID	---	.59***	-.04	-.37	.41	.34**	.01
MPDIN		---	.11	.18	.19	.67***	.33**
KIDS			---	.33	.26	.00	-.17
MARR				---	-.07	.25	.24
VOC					---	-.13	-.30
EA						---	.55***
WA							---

^an = 20. ^bn = 83. ^cn = 87. ^dn = 87.

Junior High Males							
MPDID	---	.42**	.16	.43	-.05	.28	.19
MPDIN		---	.07	.26	-.09	.64***	.51***
KIDS			---	.64**	.33	-.16	-.26
MARR				---	.22	.40	.08
VOC					---	-.03	-.11
EA						---	.77***
WA							---

^an = 19. ^bn = 45. ^cn = 50. ^dn = 52.

Variable	MPDID ^b	MPDINT ^c	KIDS ^a	MARR ^a	VOC ^a	EA ^d	WA ^d
High School Males							
MPDID	---	.21	-.07	-.12	.47*	.04	-.01
MPDIN		---	-.13	-.18	.03	.68***	.26
KIDS			---	.56**	-.26	.11	.27
MARR				---	-.06	.06	.58**
VOC					---	-.08	-.10
EA						---	.58***
WA							---

^an = 20. ^bn = 48. ^cn = 49. ^dn = 51.

University Males							
MPDID	---	.57***	.06	.27	.43	.42**	.13
MPDIN		---	.14	.42	.21	.53***	.26
KIDS			---	.03	.20	.14	-.13
MARR				---	.40	.28	.39
VOC					---	.42	.22
EA						---	.67***
WA							---

^an = 20. ^bn = 53. ^cn = 54. ^dn = 54.

Note. MPDID is the Resolution of Identity vs Identity confusion Subscale of the MPD; MPDIN is the Resolution of Intimacy vs Isolation Subscale of the MPD; KIDS, MARR, and VOC are the Parenting, Marriage and the Role of Spouse, and Vocation Domains of the Identity Status Interview; EA and WA are the Expressed Affection and Wanted Affection Subscales of the FIRO-B.

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

domains and the other measure of identity (MPD ID), only two (8%) were significant (MPD ID and MARR for junior high females and MPD ID and VOC for high school males).

To determine whether there was a significant difference in the degree to which identity and intimacy were associated for females and males at each of the three age levels, the difference between the correlations for MPD ID and INT for males and females at each age were tested. Fisher's transformation of the correlations indicated that there were no significant differences between the genders in any of the age groups $Z_{\text{junior high}} (n = 58,50) = .72, p < .24$; $Z_{\text{high school}} (n = 71,49) = 1.04, p < .15$; $Z_{\text{university}} (n = 87,54) = .17, p < .44$. Table 20 shows the correlation coefficients and the Fisher's Z scores.

Since no gender differences in these correlations were detected, the gender groups were collapsed and the correlations were examined over the three age groups to determine if differences in the degree of association between identity and intimacy were evident across adolescence. Table 21 shows the correlation coefficients at the 3 ages.

Three Fisher's transformations (the equivalent of t-tests for two independent correlations) were conducted. There were significant differences evident between the

Table 20

Correlation Coefficients for MPD Identity and IntimacySubscale Scores for Females and Males

	Female	Male	Z
Junior high	0.53	0.42	.72
High School	0.39	0.21	1.04
University	0.59	0.57	.17

Table 21

Correlation Coefficients for MPD Identity and IntimacySubscale Scores Across Adolescence

	Junior high	High School	University
	0.41	0.32	0.58

correlations at junior high school and university, $Z(n = 94, 136) = 1.61, p < .05$; and between those at high school and university, $Z(n = 115, 136) = 2.57, p < .01$; but not between the correlations at junior high and high school, $Z(n = 94, 115) = .78, p < .22$. Figure 6 shows the correlation coefficients for males and females across the three age groups. Figure 7 shows the correlation coefficients collapsed across gender for the three age groups.

Exploratory Analyses

The first exploratory analysis examined the relationship between participants' gender role as assigned by the BSRI and the ASRI and their intimacy and identity development. Based on the recommendations of Baron and Kenny (1986), gender role was conceptualized as a possible mediating variable that could influence the effect of gender on intimacy and identity development. That is, the degree to which gender role rather than, or in addition to, biological gender, influences identity and intimacy development was assessed.

Following their suggestion, two ANOVAs were used to determine the effects of gender and age group on the Resolution of Identity vs Identity Confusion scores and the Resolution of Intimacy vs Isolation scores respectively. If interactions between gender and age had been detected, this would have indicated that the effects of age on identity and intimacy development were different for males and females. Then, if gender role had been entered into the ANOVAs as a covariate and the AGE X GENDER interaction disappeared, this would have indicated that gender role, rather than biological gender was important to differences in identity and intimacy development. Table 22 shows the results of the two ANOVAs and illustrates that no GENDER

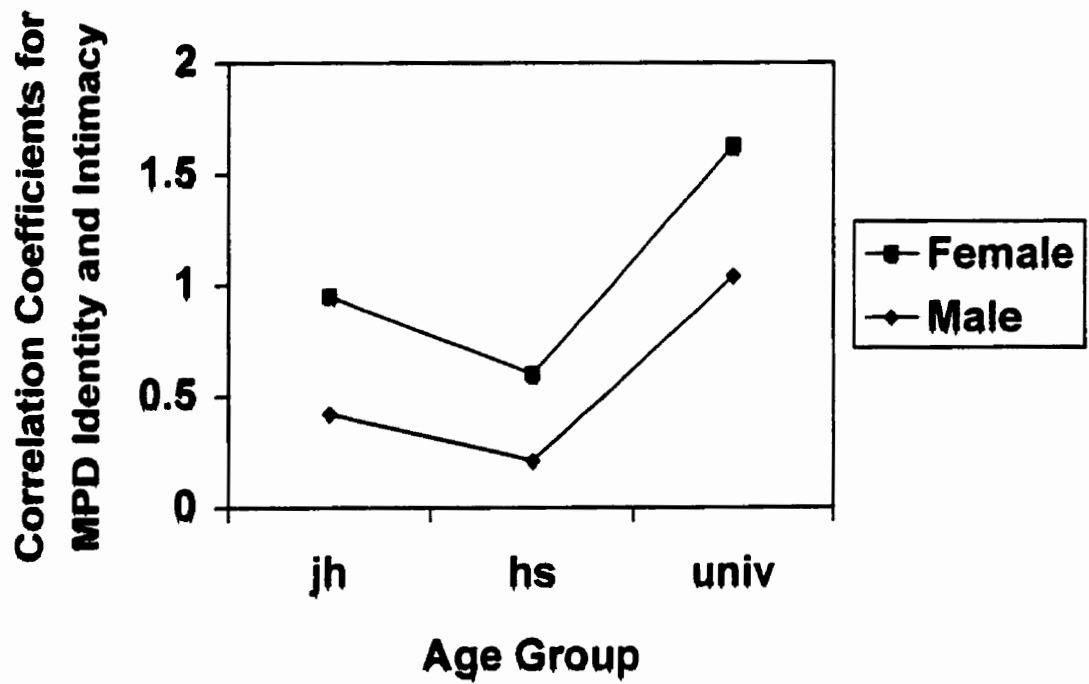


Figure 6. Correlation Coefficients for MPD Identity and Intimacy for Males and Females Across Adolescence.

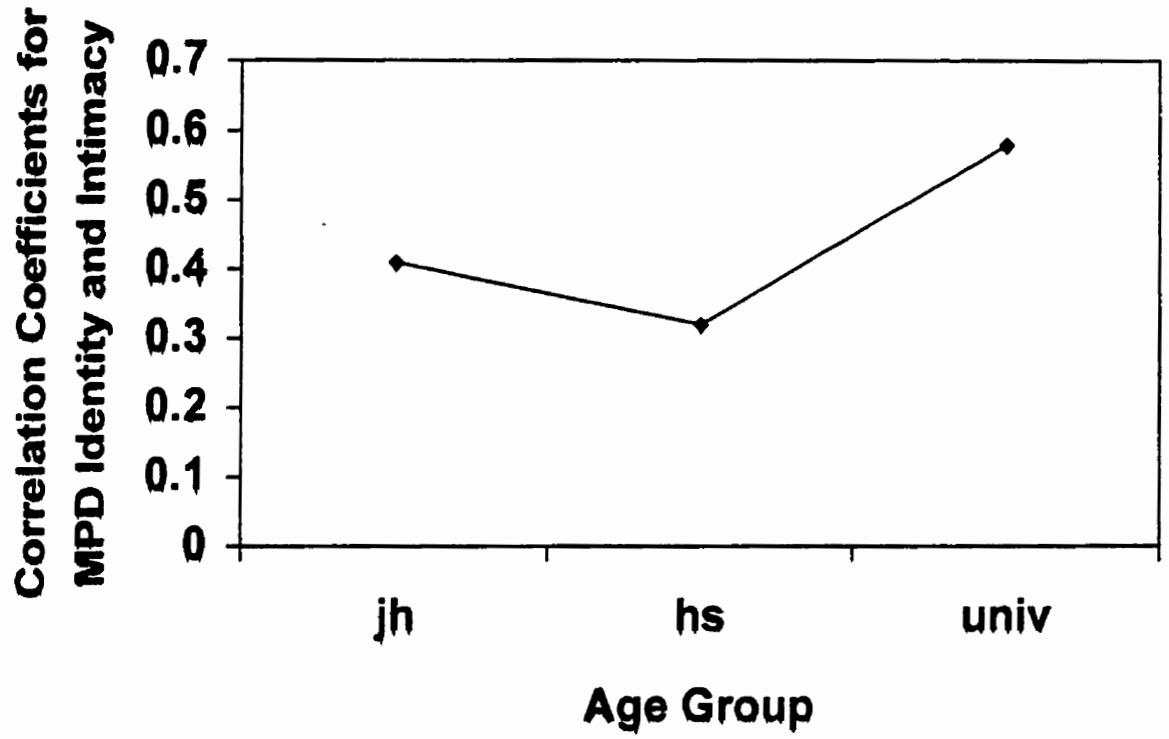


Figure 7. Correlation Coefficients for MPD Identity and Intimacy Across Adolescence.

by AGE interactions were evident.

Table 22

Analysis of Variance For Identity vs Identity confusion and
Intimacy vs Isolation Scores on the MPD

Source	df	MS	F
Identity vs Identity Confusion			
Main Effects			
Group	2	282.98	3.88 *
Gender	1	75.81	1.04
2-Way Interactions			
Group X Gender	2	103.12	1.41
Residual	347	73.02	
Intimacy vs Isolation			
Main Effects			
Group	2	448.15	6.72***
Gender	1	1365.70	20.47***
2-Way Interactions			
Group X Gender	2	63.39	.95
Residual	363	66.72	

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

Exploratory Analysis 2

The second exploratory analysis examined the degree to which males and females reported that others had influenced and been affected by their decisions in the three identity

domains. Tables 23 and 24 show the percentage of males and females reporting that their identity decisions were/were not influenced by others and would/would not affect others.

Table 23

Percentage of Males and Females Reporting Decisions
influenced by or Affecting Others in Each Domain

Identity Domain	Influenced by Others		Will Affect Others	
	Female %(n)	Male %(n)	Female %(n)	Male %(n)
<u>Vocation</u>				
YES	56% (34)	51% (29)	64% (38)	55% (31)
NO	44% (27)	49% (28)	36% (21)	45% (25)
<u>Marriage and Role of Spouse</u>				
YES	67% (40)	58% (33)	78% (47)	63% (34)
NO	33% (20)	42% (24)	22% (13)	37% (20)
<u>The Role of Parent</u>				
YES	70% (40)	53% (30)	81% (47)	73% (38)
NO	30% (17)	47% (27)	19% (11)	27% (14)

Chi-squares detected no significant differences between males and females, overall, in the Vocation or

Marriage and the Role of Spouse domains, in the degree to which they felt that their decisions were influenced by others, $\chi^2_{\text{vocation}} (n = 118) = .28, p < .60$; $\chi^2_{\text{marriage}} (n = 117) = .96, p < .33$. Differences were detected however, in the percentage who felt others influenced their decisions in the Parenting Domain, $\chi^2 (n = 114) = 3.70, p < .05$. More females reported that others had influenced their decisions about parenting than did males.

No differences were detected in the percentage of males and females who thought their decisions would affect/not affect others in any of the domains $\chi^2_{\text{vocation}} (n = 115) = .98, p < .33$; $\chi^2_{\text{marriage}} (n = 114) = 3.27, p < .07$; $\chi^2_{\text{parenting}} (n = 110) = .99, p < .33$. Table 24 shows the Chi-squares for the three identity domains and both types of decision-making.

When Chi-square tests were used to examine within age group differences, no gender differences were detected for either decision at any age group with one exception. The junior high students differed in their report that others would be affected by their decision about marriage, $\chi^2 (n = 38) = 3.70, p < .05$ with the girls reporting that their decision would affect others, more than did the boys. Table 25 shows the percentage of decisions influenced by

others for females and males, in the three identity domains. Table 26 shows the percentage of decisions affecting others for males and females in the three domains.

Table 24

Chi-squares for Relational Considerations in Identity

Decisions by Domain and Gender

Decisions Influenced by Others			
Domain	n	df	χ^2
Vocation	118	1	.28
Marriage/ Role of Spouse	117	1	.96
Parenting	114	1	3.70 *

Decisions Affecting Others			
Domain	n	df	χ^2
Vocation	115	1	.98
Marriage/ Role of Spouse	114	1	3.27
Parenting	110	1	.99

*p = .05

Table 25

Domain and Gender for Each Age Group

Domain	Gender	age group			Total	%
		jh	hs	univ		
<u>Vocation</u>						
Female						
61	no	10	7	10	27	44%
	yes	11	13	10	34	56%
Male						
57	no	8	8	12	28	49%
	yes	10	11	8	29	51%
<u>Marriage and Role of Spouse</u>						
Female						
60	no	7	6	7	20	33%
	yes	13	14	13	40	67%
Male						
57	no	10	6	8	24	42%
	yes	9	13	11	33	58%
<u>Parenting</u>						
Female						
57	no	6	5	6	17	30%
	yes	13	14	13	40	70%
Male						
57	no	10	7	10	27	47%
	yes	9	11	10	30	53%

Table 26

Percentage of Decisions **Affecting Others** by Identity Domain
and Gender

Domain		age group			Total	%	
Gender	n	jh	hs	univ			
<u>Vocation</u>							
Female							
	59	no	9	5	7	21	36%
		yes	12	14	12	38	64%
Male							
	56	no	9	8	8	25	45%
		yes	9	11	11	31	55%
<u>Marriage and Role of Spouse</u>							
Female							
	60	no	5	5	3	13	22%
		yes	15	15	17	47	78%
Male							
	54	no	10	7	3	20	37%
		yes	8	12	14	34	63%
<u>Parenting</u>							
Female							
	58	no	4	3	4	11	19%
		yes	15	17	15	47	81%
Male							
	52	no	5	6	3	14	27%
		yes	12	11	15	38	73%

Table 27 presents a summary of the chi-square tests assessing differences between males and females within the three groups.

Table 27
Chi-squares for Males and Females Reporting Relational
Components of Identity Decision-making within each Age
Group

Age Group	Gender				χ^2
	n	Female	<u>n</u>	Male	
Vocation Influenced by Others					
Junior High	Yes	11	10		.04
	No	10	8		
High School	yes	13	11		.21
	No	7	8		
University	Yes	10	8		.40
	No	10	12		
Vocation Affected by Others					
Junior High	yes	12	9		.20
	No	9	9		
High School	yes	14	11		1.05
	No	5	8		
University	Yes	12	11		.11
	No	7	8		

Marriage Influenced by Others				
Junior High	yes	13	9	
	No	7	10	1.23
High School	yes	14	13	
	No	6	6	.01
University	Yes	13	11	
	No	7	8	.21
Marriage Affected by Others				
Junior High	yes	15	8	
	No	5	10	3.70*
High School	yes	15	12	
	No	5	7	.64
University	Yes	17	14	
	No	3	3	.05
Parenting Influenced by Others				
Junior High	yes	13	9	
	No	6	10	1.73
High School	yes	14	11	
	No	5	7	.67
University	Yes	13	10	
	No	6	10	1.37
Parenting Affected by Others				
Junior High	yes	15	12	
	No	4	5	.33
High School	yes	17	11	
	No	3	6	2.06
University	Yes	15	15	
	No	4	3	.12

*p <.05.

DISCUSSION

Overview

The results of this study provide partial support for hypothesis one, which predicted that identity development would be higher for the late adolescents than it would be for the young adolescents. As measured by the questionnaire data, there was a significant quadratic affect, indicating a drop in participants' identity development from junior high school to high school, and then a recovery (to junior high levels) from high school to university. The interview data provided mixed results, but in one analysis revealed a significant difference in participants' identity decision-making concerning vocation between junior high school and university. No differences were evident in the two communal domains surveyed.

Hypothesis two, which predicted that females would demonstrate higher levels of intimacy than males at all three age levels, was also partially supported. There were significant differences in intimacy level between females and males in junior high school and university, but not in high school. There was also a significant linear trend, indicating that, overall, intimacy development for both males and females was higher in late adolescence than it was in early adolescence.

The females also indicated that they wanted affection more so than did the males in all three age groups. As well, significant linear trends indicated higher levels of both wanted and expressed affection across the three age groups for males and females. The junior high school girls also reported that they expressed affection more than did the boys in that group, and there was a trend for the females in the other groups to do so as well.

Hypothesis three, which predicted that identity and intimacy would be positively correlated for both females and males, was also partially supported. Significant positive correlations were evident between particular identity and intimacy measures, but not between all measures. Gender differences in the strength of the correlations were not evident, but there were age group differences, with identity and intimacy more strongly associated in university than in the two younger age groups.

Exploratory analysis one, which sought to determine whether participant gender role would mediate gender and the development of identity and intimacy, was not supported. Gender did not interact with age in relation to identity and intimacy development and thus gender role could not be identified as a mediator of this relationship.

Exploratory analysis two, which sought to investigate the role of relational considerations in identity decision-making, revealed that to an almost equal degree, males and females report that their identity decisions have been influenced by others and will affect others. Two significant gender differences were evident, however. Females, overall, reported that their parenting decisions had been influenced by others more so than did the males. As well, junior high school girls reported that their decisions about marriage would affect others more so than did the junior high boys. In all other domains and for both relational questions posed, gender differences were not evident.

The current findings are significant because they provide empirical support for Gilligan (1982), Jordan (1997) and others who have written about what they have termed, a relational crisis faced by females in adolescence. They also provide empirical support for Miller's (1976) assertion that gender differences in intimacy development are evident prior to adolescence rather than emerging during adolescence. Further, they indicate that intimacy development takes place during adolescence for both males and females. They also provide empirical support for Archer's (1993b) suggestion that both

males and females use relational considerations when making identity decisions. Finally, they do not provide support for the suggestion made by Dyck and Adams (1990), that gender role, rather than gender, accounts for the gender differences evident in identity and intimacy development.

Hypothesis 1

The first hypothesis predicted that both males and females would demonstrate higher identity levels in late adolescence than they would in early adolescence.

Questionnaire Data

University women and men reported better overall resolution of identity issues than did the high school girls and boys, but not better resolution than did the junior high school girls and boys. The presence of a quadratic rather than a linear pattern of development for both males and females across adolescence is surprising. Identity development has been clearly identified by Erikson (1959/1980), Marcia (1966; 1980; 1989; 1993b), and numerous others as the central developmental task of adolescence. That so well established a developmental trend was not evident in this study, may be due, in part, to measurement error related to high variability in sample scores.

The variability in the MPD Resolution of Identity vs Isolation scores, while equal for the genders, (and

comparable with that reported for the normative sample) is large (see Table 11), and results in less precision of measurement. Therefore, larger differences between genders and between groups are necessary in order to be detected. However, inspection of the group means, for both males and females, shows the same pattern of results: higher identity resolution in junior high school; lower resolution in high school and higher resolution in university, to approximately junior high levels. Thus, even with more precise measurement, one may speculate that the same pattern, possibly statistically significant for both males and females, might have been detected. A second possibility is that there was not adequate power to detect group differences. However, the results of a power analysis indicate that there was adequate power to detect group differences (observed power = .70), although not to detect gender differences (observed power = .17).

A third possibility is that it is qualitative aspects of identity development, such as a more realistic match between one's abilities and personality and one's career aspirations, rather than overall identity resolution that changes most over adolescence. This possibility will be discussed further in relation to change in identity status across adolescence, but it appears to be a reasonable

explanation.

The finding that females and males enter adolescence with the same level of identity development they leave this stage of development with, is contrary to the view that identity gradually develops over time as adolescents consolidate those disparate aspects of themselves into a cohesive whole. It does, however, replicate the finding of Battle's (1995) pilot study in which the identity development of junior high and university students (without high school students) was examined.

These findings also suggest that identity development, overall, may be better depicted as similar to the one proposed by Marcia concerning change in identity statuses across the life span. Marcia (1993a) has reported a pattern of identity reconfiguration whereby an individual who demonstrates Identity Achievement in a particular area, may later enter another period of exploration (Moratorium) before recommitting themselves to another decision in that identity domain. In this same way, there may be a process of revision that takes place during adolescence in which a sense of cohesion established in late childhood is dismantled by mid-adolescence and then reconfigured by the end of this developmental period.

There was evidence in this study, of an "identity

crisis", or "decisive turning point", (Erikson, 1959/80) for both females and males occurring in high school. This finding suggests that the adolescents may have entered adolescence with a sense of clarity regarding identity questions, perhaps with ideas about future occupations and plans that while not fully explored, nonetheless provide a sense of future orientation and confidence about future plans. They then appear to enter a period of disequilibrium, possibly as they are exposed to new possibilities, became more cognizant of their abilities, interests, and limitations, and became less sure about their earlier ideas. By late adolescence/early adulthood, they seem to have regained their equilibrium and to have resolved some of these issues.

The results of the exploratory analysis of gender differences in identity development, while tentative, and needing to be interpreted with caution, also suggest that between high school and university there are particular differences for females. This finding, in combination with the more general finding about identity development provides empirical support for Gilligan's (1982) assertion that upon their entry into adolescence, girls experience a crisis. In Gilligan's conceptualization, the crisis faced is concerning relationships. To remain connected to

important others in their lives, girls may sacrifice aspects of themselves -their authenticity and individuality, and perhaps their future orientation as well, for the sake of the relationship. By approximately age 16, the age of the high school students in this study, she believes that girls "go underground" into insecurity (Bumiller, 1998). There was clear evidence in this study of high school being a critical time for girls in relation to their identity development.

It is not clear how best to interpret the same pattern of overall identity development for males in this study. These findings are disparate from those of most other studies of identity development using a variety of measures. That the pattern of findings is similar to that evident for the females is also interesting and raises several questions. Do the boys, as well, face an identity crisis in high school? Erikson's theory predicts a decisive turning point, though not the sort of emotional turmoil and loss of confidence that Gilligan is describing. As well, the identity crisis faced by the boys, we would speculate given these results, is less intense than that faced by the girls. The crisis may also be related to issues different than the ones salient for girls. Gilligan (1982,1997), for example, believes that the comparable

struggle for boys, in relation to important relationships, occurs at a different point in development, at 4 or 5 years of age. Erikson (1959/1982) believed that the identity crisis in adolescence would most likely be due to occupational concerns. The findings of this study, as will be discussed in relation to the ISI, do not support this view.

Identity Status Interview (ISI) Data

Vocational plans

When the data were analyzed by collapsing the four identity statuses into two maturity groups, the university students had more mature identity statuses (had done more exploration and were more committed to their plans) than had the junior high students. There were no significant differences, however, between the high school group and either of the others. This finding indicates that in terms of vocation, there was a gradual change from the less mature to the more mature identity statuses from young to late adolescence/early adulthood. This finding is consistent with those reported by Archer (1982,1985) and Meilman (1979) and suggests that the lower MPD identity scores for the high school girls and boys were not related to concerns about vocation.

When differences in the frequency with which

participants were classified in the four status groups were examined, these differences between the junior high school and university groups were not evident, although the change in frequencies was in the expected direction (see Table 14).

Marriage and the Role of Spouse

No significant differences were detected between any of the age groups in this domain. This finding does not support those of Archer (1982, 1985) and Meilman (1979) who found the same trend evident for the vocation domain, evident in the "family roles" domain (equivalent to the two communal domains in this study). The gender difference Archer (1985) also reported in the family roles domain, with more high school girls in the Moratorium status, was not evident.

Role as a Parent

Similarly, no status change was evident in participants' thinking about their future role as a parent from young to late adolescence.

In general, the lack of developmental change evident for the ISI data is surprising, and different than that reported by other researchers in the area. This may be due, in part, to a small sample size. The decision about the number of participants to interview in each age group

was based on the number reported by investigators doing similar cross-sectional research (e.g., Archer, 1982). However, in this study, post hoc power analyses indicated that for the medium effect size evident with this data, 85 participants would have been needed in each group for power = .70; and 110 participants would have been needed for power = .80 ($df = 2$) (Carter-Clark, 1997, p.610). Thus the lack of findings for the four ISI statuses may be due, in part, to a lack of statistical power to detect differences that may exist. The lack of findings may also be due, in part, to reliability difficulties with the ISI. This possibility will be discussed further in relation to the limitations of the study.

When analyzed in terms of immature vs mature status, the interview findings suggest that of the three domains surveyed, identity issues related to marriage and parenting were the least salient for all of the adolescents. Vocational issues were addressed gradually across time, as expected.

The findings concerning specific identity domains can help to shed further light on the overall identity development findings. As Marcia (1993c) and others (e.g. Waterman & Archer, 1990) have suggested, there appears to be a pattern to identity development such that specific

aspects of identity are addressed at different points during adolescence and beyond. The finding that vocation was the first identity domain addressed by participants in this study is consistent with Waterman's (1985) findings. In his analysis of 8 cross-sectional studies with adolescents in 5 age groups, he found that for both males and females, vocation issues were addressed second to religion and morality issues, but before political issues. This study would suggest that vocation issues are also addressed before family role issues.

As well, the same junior high students who obtained MPD identity resolution scores comparable to the university students, had less mature identity status in the vocation domain. This finding lends support to the idea that it is the qualitative changes in identity, rather than overall identity that are most evident during adolescence.

Hypothesis 2

The second hypothesis predicted that females would demonstrate higher levels of intimacy than would males at all three age levels.

Measures of Psychosocial Development Data

The early and late adolescent females reported better resolution of intimacy versus isolation than did the males in those groups. The high school females did not. Both

males and females, however, demonstrated increasingly better resolution of intimacy issues across adolescence with the junior high students reporting the least resolution and the university students reporting the greatest resolution. This finding supports Sullivan's view that intimacy gradually deepens during adolescence, as well as the idea that overall, the process is similar for males and females. It does not seem to support the suggestion of Douvan & Adelson (1966), that males and females have different developmental foci in adolescence: the development of intimacy for females, and the development of independence for males. It does suggest, however, that there are quantitative differences in intimacy development across adolescence, possibly for the reasons suggested by the researchers such as Golombok & Fivush (1994) and those studying differences in children's play and social interactions (e.g., Maccoby & Jacklin, 1987; Benenson, 1993).

The finding that gender differences in intimacy development were not evident in high school due to a drop in the girls' scores, while the boys' scores continue to rise (see Figure 3) is interesting. It suggests that something is occurring during this period to negatively affect female scores but not male scores. Possible

interpretations of this finding, which parallel the identity development findings, will be discussed in the next section.

FIRO-B Data

Wanted Affection

In terms of the behaviors indicative of intimacy that they reported they wanted and expressed, the females in all three age groups reported that they wanted affection more than did the males in the three groups. There were also higher wanted affection scores reported by both males and females between junior high school to university.

Expressed Affection

The junior high school girls reported that they expressed affection more than did the junior high school boys. There was also a trend approaching significance for females in high school and university to report this as well. These findings concur with those of Blier & Blier-Wilson (1989) who reported that females are more confident expressing feelings than are males. In addition, there was an increase in expressed affection reported by both males and females from junior high school to university.

The FIRO-B findings, taken together, indicate that females enter adolescence expressing more affection than do the males, and generally maintain this behaviour through

adolescence. Females also want more affection than do the males at all three age levels. However, both males and females report higher levels of both wanted and expressed affection from early to late adolescence/early adulthood. This latter finding suggests that intimacy development occurs in adolescence for both males and females. One may also speculate, based on these findings, that males may receive the affection they want from the more expressive females; but the females may not receive the affection they want from the males. The findings may also lead one to speculate that adolescent females are more likely to have their intimacy needs met through their female relationships than through their relationships with boys.

The findings from the two intimacy measures taken together suggest that as a group, adolescent females have addressed relationship issues to a greater degree than have adolescent males and that, in general, they describe themselves as behaving in ways that reflect their interest in intimate relationships. The findings also suggest that for both males and females intimacy becomes increasingly important as they move through adolescence.

The finding that females reported higher intimacy resolution in junior high than did the males provides support for Miller's (1976) position that females enter

adolescence with a higher level of intimacy development relative to their male age-mates. The finding that intimacy levels are lower in mid adolescence, as are identity levels, also provides support for Gilligan's (1982) position that young women develop their identities through their relationships with others. It indicates, as she has suggested, that the two developmental tasks are intertwined for girls.

One could also speculate that these findings reflect the relational crisis the girls are experiencing. Though they are still engaging in intimate relationships with others, expressing affection and wanting affection, for example, inauthenticity in their relationships may be impacting on both their feelings of connection with important others in their lives and their sense of who they really are.

Erikson's model is also supported by these findings. Though Erikson did not believe that intimacy was the developmental task of adolescence, he believed that intimacy would be developing at a more tertiary level prior to its ascendancy in the next developmental stage. Therefore, its growing presence during adolescence would be expected in his model. In terms of his writing on female development, these findings would in part also support his

view, like Gilligan's, that for females, identity and intimacy development are intertwined.

These findings provide empirical support for the position held by researchers on women's psychological development, (e.g., Jordan, 1997; Gilligan, 1982; Miller, 1976) that relationships hold particular importance for adolescent females. While the question of whether intimacy development is as important as identity development for female adolescents cannot be answered by this study, what is clear is that it is an important component of adolescent development for young women.

The findings also suggest that although intimacy issues are less developed for adolescent males, the pattern across adolescence is similar in many respects for both males and females and thus males may be more interested in intimacy in relationships than they appear to be.

Hypothesis 3

Hypothesis three predicted that identity and intimacy would be positively correlated for both females and males. For both genders, higher resolution of identity issues as measured by the MPD was associated with higher resolution of intimacy issues as measured by the MPD. Thus, for these measures, participants of both genders with higher identity scores also tended to have higher intimacy scores.

Gender differences in the correlation between identity and intimacy were not evident. However, for both males and females identity and intimacy were more highly correlated in late adolescence than they were in young and mid adolescence.

These findings provide support for those of Battle (1994) and others reported by Matteson (1993) who also found a positive correlation between identity and intimacy. They are counter to the findings from a number of studies utilizing the Identity Status Interview and the Intimacy Status Interview Matteson (1993) reanalyzed and from which he concluded that identity was not a prerequisite for intimacy for males or females. These findings suggest, as he did, that the relation between the two constructs may be complex.

The present findings provide support for Erikson's assertion that successful resolution of identity is the precursor to successful resolution of the next psychosocial task, the development of intimacy. It is not clear from these findings, however, whether the intimacy development evident here is in its tertiary form (due to the epigenetic principle), as Erikson's model would suggest, or whether it is in "ascendancy" as well. Further, it is unclear how Erikson might account for the lack of overall identity

development evident in this sample, while intimacy level increases for both males and females.

These findings can also be seen as providing empirical support for the self-in-relation theorists' (e.g., Jordan, 1991, 1997; Gilligan, 1982; Miller, 1976) view that girls develop their identities within relational contexts.

These findings imply, however, that identity and intimacy are developmentally related, more so than Erikson (1959/1980) made explicit in his model. They further suggest that while identity and intimacy development are consistently, closely related for girls and young women, as proposed by the self-in-relation theorists, they are also related for young and older adolescent males as well.

Exploratory Analyses

Exploratory Analysis 1

Exploratory analysis one investigated whether participant gender role mediated gender and identity and intimacy development. The findings provided no evidence to suggest that participants' gender roles played an important role in the development of identity and intimacy for the adolescents in this study. Gender differences were evident in intimacy development, and to a lesser degree in identity

development as well. However, there was no interaction between gender and age evident in either of these developmental processes. This indicated that participants' gender did not moderate the relationship between their stage of adolescence and their identity or intimacy development. Thus there was no evidence to suggest that the effects of development on identity or intimacy were different for the two genders. Since there was no evidence of this type of moderator effect, there was no rationale to investigate whether gender role mediated the moderating effect of gender.

These findings do not provide support for Dyk & Adams (1990) who, using a time-lag design, found that gender role predicted particular patterns of identity and intimacy development. They found that for both males and females with high masculinity scores, (high masculinity -low femininity or high masculinity - high femininity) identity development predicted intimacy development. Only for females with high femininity scores, was there evidence that identity and intimacy were fused.

The findings of this study overall, suggest that the pattern of identity and intimacy development is more similar for males and females than it is different. Gender differences are evident in intimacy development, but for

both males and females, identity and intimacy are equally and increasingly associated across adolescence.

This study's findings may be different than Dyk & Adam's (1990) due, in part, to the type of research question posed. The present study is assessing three age groups at one point in time, and examining similarities and differences in development at that one time. Dyk & Adams (1990) looked at the same participants at several points over a relatively short period of time. Their design, therefore, may assess the micro-level process of developmental change in identity and intimacy development. It may be that the impact of gender role is evident at this level of analysis but disappears when developmental change that takes place over a larger period of time is examined.

Exploratory Analysis 2

Exploratory analysis two investigated the role of relational considerations in identity decision-making. Within the identity domains of Vocation and Marriage and the Role of Spouse, males and females were equally likely to feel that their decisions in these areas had been influenced by others. Within the domain of Parenting decisions, the females as a group reported that their decisions had been influenced by others more than did the males. There were no differences between males and

females, overall, in their report that others would/would not be affected by their identity decisions in any of the domains.

When within age group data were examined, the high school and university males and females did not differ in their reports about whether they had been influenced by others or thought others would be affected by their decisions in any of the domains surveyed. The junior high girls, as a group, reported that others would be affected by their decisions about marriage more so than did the boys in that age group.

In addition, participants in university were as likely to report that others had influenced and would be affected by their decisions as were the junior high students. As well, participants were as likely to report relational elements in their intrapersonal (vocational) decision making as they were in their interpersonal (marriage and parenting) decision making.

These findings provide support for Archer's (1993b) suggestion that relational considerations are an element of identity formation for both males and females in agentic as well as communal identity domains. They also provide support for Marcia's (1993a) suggestion that there are "relational roots" to identity decision making, that

research is beginning to examine. As well, they may be seen as additional support for the self-in-relation theorists' assertions that at least for women, identity decisions are made within relational contexts. These findings would suggest that the same process holds true for males.

Limitations

In this section, possible limitations in three major areas will be discussed: These are internal validity, external validity, and measurement issues.

Internal Validity. According to Clark-Carter (1997) internal validity "is the degree to which a design successfully demonstrates that changes in a dependent variable are caused by changes in an independent variable" (p. 41). A major threat to the internal validity of this study is that it is quasi-experimental rather than experimental, and cross-sectional, rather than longitudinal. Thus participants were part of junior high school, high school, and university groups, rather than assigned to these three conditions. As well, because they were not the same individuals sampled at three points in time, other possible confounding variables were introduced into the design. For example, because not all the students sampled in junior high school will go on to university, and

may not complete grades 11 or 12, participants in the older groups represent increasingly selected populations. Thus, as well as being older, the university population is more highly educated, possibly more intelligent, and possibly of higher SES than the other groups. Differences in identity and intimacy development may thus reflect these confounding variables as well as developmental level.

Efforts were made in the present study to reduce the effects of these confounds. First, the participants in the junior high school and high school sample were from the same suburban school division in Winnipeg, and thus differences in SES and belief in the value of education attainment, while not those in intellectual ability, may have been minimized. In addition, the university sample was drawn from one university in the same suburban area in Winnipeg, as well as from one in the downtown area. This combination of suburban and urban university population may have further minimized any SES difference between the three groups. The impact of educational attainment differences could be addressed in future research by using a late adolescent/early adult sample that is not comprised of university students. And ultimately, further longitudinal research addressing the patterns of identity and intimacy development for males and females is needed.

External Validity. According to Clark-Carter (1997), external validity refers to the generalizability of the findings to other conditions. In this study, major concerns involve aspects of the participants and their selection. Participants were not randomly selected in the study. The researcher attended a number of English and Introductory Psychology classes and invited all the students to participate, but not all the students did so. Thus, there were self-selection effects, and in the case of the junior high students and those high school students under 18 years of age, parent-selection effects as well. Further, the students who completed the questionnaires did not always agree to be contacted for the ISI interviews. Thus, those students interviewed comprise a group that is further self-selected, and may not be fully representative of the full sample.

In addition to these concerns about generalizability, it is important to note that while this study attempts to assess adolescent identity and intimacy development in relation to wide ranging theories of adolescent development, the results can legitimately be generalized only to the populations from which they came.

Measurement Issues. The questionnaire measures utilized had adequate reliability and validity, but all are self-

report measures and as such, do not necessarily reflect how individuals behave in the environment. Of these instruments, the FIRO-B has the strongest documentation indicating that it corresponds with direct observation. That is one of the reasons it was selected as an additional measure of intimacy in the present study.

As noted above, the MPD subscale scores also have a large degree of variance around the mean, and as such, provide imprecise measurement. An additional problem with the MPD in the present study, is that not all the subscales had adequate reliability as measured by the Reliability Coefficient, Alpha. This resulted in the decision to use resolution of identity and intimacy subscale scores rather than identity and intimacy subscale scores. These subscales did have adequate reliability, but make interpretation of results a little less clear.

Concerning the BSRI and the ASRI, it was unfortunate that the BSRI Original and Short Forms did not provide results that were equally comparable to the ASRI. For this reason, it was inappropriate to use the measure cross-sectionally with the three age groups.

A more serious problem in this study concerned the reliability of the ISI. Difficulties with inter-rater reliability, though interviewer/raters received adequate

training based on written guidelines recommended by the leading researchers in this area, suggest that the ISIs are more difficult to classify than they appear to be. Efforts were made to reduce other confounds such as differential effects of the interviewers on the raters, of the raters knowing each other and the interviewers and so on. However, it appears that some interviews are more difficult to rate than others.

As well, the criterion for classification varies between the age groups, and this may have also provided classification problems. For example, to be classified as demonstrating commitment to a vocational decision at university, one must demonstrate greater behavioral evidence of this commitment (i.e., volunteering, taking appropriate classes, applying to a program) than would the junior high students (i.e., telling others about their decision).

Conclusions and Future Directions

Conclusions

This study provides empirical support for a number of components of the self-in-relation model of women's development. First, it supports Miller's (1976) assertion that intimacy levels are different for boys and girls prior to their entry into adolescence. Second, it provides

support for the idea that relationships, as measured by overall resolution of intimacy level, the expression of affection, and wanting affection, are a more central focus for adolescent girls than they are for adolescent boys. Third, it provides support for Gilligan's (1982) assertion that girls experience a relational crisis between early and mid adolescence.

In this study, the high school girls reported lower resolution of identity issues relative to the junior high school girls and university women. They also demonstrate a dip in their intimacy development (within an overall increase in intimacy development from early to late adolescence). The interview data indicates that concerns about vocational aspects of identity were not responsible for these lower identity scores. Therefore other issues, such as those related to the congruence between who one is and who one appears to be (part of identity in Erikson's (1959/1980) theory; and part of being authentic in relationships in the self-in-relation model (Jordan et al., 1991) may be what is accounting for these lowered scores.

This study's findings also suggest that for this sample, examination of qualitative differences in identity development, as well as overall quantitative differences may provide a richer source of information about this

developmental process. They also suggest that intimacy development is important in adolescence - particularly for females, but for males as well. Further, they provide empirical support for Archer's (1993c) suggestion that even within identity development, relational considerations are an important part of the process for both male and female adolescents.

There are also clinical implications of these findings for therapeutic work with both adolescent boys and girls. In clinical work with girls, they suggest that sensitivity to the possibility of a relational crisis, or to difficulties with congruence and authenticity in relationships with others would likely be helpful. In clinical work with boys they suggest that while boys' expression of affection is likely to be low, their desire for affection is not, and therapists' efforts to express care for their clients in ways that are age appropriate, and acceptable to the client may be appreciated. As well, encouraging parents not to interpret their sons' lack of expression of affection as an indicator that they do not desire affectionate behaviour, may also assist boys to have their needs for affection met.

Future Directions

Future work in the area of identity and intimacy development in adolescence would be greatly enriched through the addition of longitudinal research. While this type of research is not generally feasible outside the parameters of an established research team with a steady stream of researchers examining change over time, this type of research program could address the limitations inherent in a cross-sectional study particularly related to participant selection.

Within the realm of other cross-sectional studies, those sampling other SES groups, cultural groups, and older adolescents/young adults attending adult education or vocational programs, as well as those in the work force full-time would be a welcome addition.

In relation to the exploration of identity development, as well as to the interplay between identity and intimacy development, additional qualitative study in this area would yield rich data about the adolescent experience that is not fully reflected in the quantitative research. Interviews such as those conducted by Gilligan (1982) and colleagues, with boys as well as girls, could help us to better understand the nuances of development, and to further explore those aspects of the adolescent

experience that contribute to uncertainty about identity in mid adolescence.

In terms of the ISI, future studies using this methodology must address the reliability problems in classifying participants. Though in this study great care was taken to adequately train interviewers and raters, closely following the recommendations of the primary researchers developing and using this methodology, problems were still encountered. Interestingly, informal conversation with another researcher who had used the ISI, indicated that he had also experienced these problems and had subsequently discontinued use of the interview. These problems suggest that the methodology is difficult to adequately learn by reading a manual. It would be extremely valuable for training programs, possibly using video training tapes, to be developed to assist researchers to best utilize the ISI.

This research study has also yielded additional data that was not analyzed within the context of this dissertation. Audiotapes of the ISI could be reanalyzed qualitatively, to further examine the richness of the interview data. As well, it would be extremely useful to begin to address the psychometric properties of the ASRI and the BSRI Original and Short Forms to facilitate their

use in cross-sectional studies. And finally, if money and time were not a limitation, it would be fascinating to follow the development of the junior high students who participated in this study, to observe and record their identity and intimacy development across adolescence. In addition, it would be exciting to widen the research "lens" and examine gender differences and similarities in the antecedents of identity and intimacy development pre-adolescence, as well as through early and mid-adulthood.

REFERENCES

- Adams, G. R., and Fitch, S. A. (1981). Ego stage and identity status development: A cross-lag analysis. Journal of Adolescence, 4, 163-171.
- Adams, G. R., and Fitch, S. A. (1982). Ego state and identity status development: A cross sectional analysis. Journal of Personality and Social Psychology, 43, 574-583.
- Adams, G. R., and Fitch, S.A. (1983). Psychological environments at university departments: Effects on college students' identity status and ego stage development. Journal of Personality and Social Psychology, 44, 1266-1275.
- Adams, G. R., Shea, J., & Fitch, S. A. (1979). Toward the development of an objective assessment of ego identity status. Journal of Youth and Adolescence, 8, 223-228.
- Alexander, G. M., & Hines, M. (1994). Gender labels and play styles: Their relative contribution to children's selection of playmates. Child Development, 65, 869-879.
- Archer, S. L. (1982). The lower age boundaries of identity development. Child Development, 53, 1551-1556.
- Archer, S. L. (1985). Identity and social roles. In A. S. Waterman (Ed.), Identity in adolescence: Processes and contents. New Directions for Child Development,

- Sourcebook #30. San Francisco: Jossey-Bass.
- Archer, S. L. (1993a). Identity in relational contexts: A Methodological proposal. In J. Kroger (Ed.), Discussions in ego identity. Hillsdale, NJ: L. Erlbaum.
- Archer, S. L. (1993b). Identity status in early and middle adolescents: Scoring criteria. In J. E. Marcia, A. S. Waterman, D. R. Matteson, S. L. Archer & J. L. Orlofsky (Eds.), Ego identity: A handbook for psychosocial research. New York: Springer-Verlag.
- Archer, S. L. & Waterman, A. S. (1988). Psychological individualism: Gender differences or gender neutrality? Human development, 31, 65-81.
- Archer, S. L., & Waterman, A. S. (1990). Variations of identity diffusions and foreclosures: An exploration of subcategories of the identity statuses. Journal of Adolescent Research, 5, 96-111.
- Archer, S. L., & Waterman, A. S. (1993). Identity status interview: Early and middle adolescent form. In J. E. Marcia, A. S. Waterman, D. R. Matteson, S. L. Archer & J. L. Orlofsky (Eds.), Ego identity: A handbook for psychosocial research. New York: Springer-Verlag.
- Atkinson, R. L., Atkinson, R. C., Smith, E. E., & Bem, D. (1990). Introduction to Psychology (10th ed.). San Diego: Harcourt, Brace, Jovanovich.

- Auckett, R., Ritchie, J., & Mill, K. (1988). Gender differences in friendship patterns, Sex Roles, 19, 57-66.
- Barnhart, C. L. (1969). The world book dictionary. Chicago: Field Enterprises Educational Corporation.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 51(6), 1173-1182.
- Barth, R. J., & Kinder, B. N. (1988). A theoretical analysis of sex differences in same-sex friendships. Sex Roles, 19, 349-363.
- Battle, P. (1994). Family functioning and psychosocial development in female and male undergraduates. Unpublished master's thesis, University of Manitoba, Winnipeg.
- Battle, P. (1995). [Identity and intimacy development in junior high school and university students: Pilot study]. Unpublished raw data.
- Bem, S. L. (1974). The measurement of psychological androgyny. Journal of Consulting and Clinical Psychology, 42, 155-162.
- Bem, S. L. (1981). Bem sex-role inventory professional

- manual. Palo Alto: Consulting Psychologists Press, Inc.
- Benenson, J. F. (1993). Greater preference among females than males for dyadic interaction in early childhood. Child Development, 64, 544-555.
- Berenbaum, S. A., Hines, M. (1992). Early androgens are related to childhood sex-typed toy preferences. Psychological Science, 3, 203-206.
- Blier, M. J., & Blier-Wilson, L. A. (1989). Gender differences in self-rated emotional expressiveness. Sex Roles, 21(3/4), 287-295.
- Block, J. (1971). Lives Through Time. Berkeley: Bancroft Books.
- Blurton-Jones, N., & Konner, M. J. (1973). Sex differences in behavior of London and Bushman children. In R. P. Michael & J. H. Crook (Eds.), Comparative ecology and behaviour of primates. London: Academic Press.
- Brown, L. M. & Gilligan, C. (1992). Meeting at the Crossroads: Women's psychology and girls' development. Feminism & Psychology, 3(1), 11-35.
- Buhrmester, D., & Furman, W. (1987). The development of companionship and intimacy. Child Development, 58, 1101-1113.
- Bumiller, E. (1998). Public lives: Pain of growing up, in

- girl's voice or boy's. The New York Times [On-line], Available: www.nytimes.com/98/4/24/news/national/ny-public-profile.html.
- Caplan, P. J. (1975). Erikson's concept of inner space: A data-based reevaluation. American Journal of Orthopsychiatry, 49, 100-108.
- Chelune, G. J., Vosk, B. N., Waring, E. M., & Sultan, F. E. (1984). Self-disclosure and its relationship to marital intimacy. Journal of Clinical Psychology, 40(1), 216-219.
- Clark, M. L., & Ayers, M. (1988). The role of reciprocity and proximity in junior high school friendships. Journal of Youth and Adolescence, 17, 403-411.
- Clark, M. L., & Ayers, M. (1993). Friendship expectations and friendship evaluations: Reciprocity and gender effects. Youth & Society, 24(3), 299-313.
- Clark-Carter, D. (1997). Doing quantitative psychological research from design to report. East Surrey, UK: Psychology Press.
- Connor, J. M. & Serbin, L. A. (1977). Behaviorally based masculine and feminine activity preference scales for preschoolers: Correlates with other classroom behaviors and cognitive tests. Child Development, 48, 1411-1416.
- Connors, C. K. (1963). Birth order and needs for

- affiliation. Journal of Personality, 31(3), 121-132.
- Craig-Bray, L., Adams, G. R., & Dobson, W. R. (1988). Identity formation and social relations during late adolescence. Journal of Youth and Adolescence, 17, 173-187.
- Dellas, M. & Jernigan, L. P. (1990). Affective personality characteristics associated with undergraduate ego identity formation. Journal of Adolescent Research, 5(3), 306-324.
- DiPietro, J. (1981). Rough and tumble play: A function of gender. Developmental Psychology, 17, 50-58.
- Douvan, E., & Adelson, J. (1966). The adolescent experience. New York: Wiley.
- Dyk, P. H., & Adams, G. R. (1990). Identity and intimacy: An initial investigation of three theoretical models using cross-lag panel correlations. Journal of Youth and Adolescence, 19, 91-109.
- Eaton, W. O. & Enns, L. R. (1986). Sex differences in human motor activity level. Psychological Bulletin, 100, 19-28.
- Eaton, Y. M., Mitchell, M. L., & Jolley, J. M. (1991). Gender differences in the development of relationships during late adolescence. Adolescence, 26(103), 565-568.
- Ehrhardt, A. A., & Baker, S. W. (1974). Fetal androgens,

- human central nervous system differentiation and behavior sex differences. In R. C. Freidman, R. M. Richardt, & R. L. Vande Wiele (Eds.), Sex differences in behavior. New York: Wiley.
- Engler, B. (1991). Personality theories: An introduction (3rd ed.). Boston: Houghton Mifflin Co.
- Erikson, E. H. (1958). Sex differences in the play construction of pre-adolescents. Discussions in child development, World Health Organization, Vol. III. New York: International Universities Press.
- Erikson, E. H. (1964). Insight and responsibility: Lectures on the ethical implications of psychoanalytic insight. New York: W. W. Norton & Company.
- Erikson, E. H. (1968). Identity: Youth and crisis. New York: W. W. Norton & Company.
- Erikson, E. H. (1976). Inner and outer space: Reflections on womanhood. In P. C. Lee, & R. S. Stewart (Eds.), Sex differences: Cultural and developmental dimensions. New York: Urizen.
- Erikson, E. H. (1980). Identity and the life cycle. New York: W. W. Norton & Company. (Original work published 1959)
- Erikson, E. H. (1982). The life cycle completed. New York: W. W. Norton & Company.

- Exline, R. V., & Messick, D. (1967). The effects of dependency and social reinforcement upon vision behavior during an interview. British Journal of Social and Clinical Psychology, 6, 256-266.
- Fagot, B. I. (1987). Toddler's play and sex stereotyping. In D. Bergen (Ed.), Play as a medium for learning and development (pp. 133-135). Portsmouth, NH: Heinemann.
- Feiring, C., & Lewis, M. (1991). The development of social networks from early to middle childhood: Gender differences and the relation to school competence. Sex Roles, 25, (3/4), 237-253.
- Flum, H. (1994). The evolutive style of identity formation. Journal of Youth and Adolescence, 23(4), 489-498.
- Forisha-Kovach, B. (1983). The experience of adolescence. Glenview, Illinois: Scott, Foresman & Co.
- Frankel, K. (1990). Girls' perceptions of peer relationship support and stress. Journal of Early Adolescence, 10(1), 69-88.
- Freilino, M. K. & Hummel, R. (1985). Achievement and identity in college age vs. adult women students. Journal of Youth and Adolescence, 14, 1-11.
- Fry, P. S. (1974). Developmental changes in identity status of university students from rural and urban

- backgrounds. Journal of College Student Personnel, 15, 183-190.
- Gard, J. G., & Bendig, A. W. (1964). A factor analytic study of Eysenck's and Schutz's personality dimensions among psychiatric groups. Journal of Consulting Psychology, 28, 252-258.
- Gilligan, C. (1982). In a different voice: Psychological theory and women's development. Cambridge: Harvard University Press.
- Gilligan, C. (1991). Women's psychological development: Implications for psychotherapy. In C. Gilligan, A. G. Rogers, & D. L. Tolman (Eds.), Women, girls, & psychotherapy: Reframing resistance. New York: Haworth Press.
- Glass, G.V., & Hopkins, K. D. (1996). Statistical methods in education and psychology (3rd Ed.). Needham Heights, MA: Allyn & Bacon.
- Gluck, G. A. (1983). Psychometric properties of the FIRO-B: A guide to research. Palo Alto CA: Consulting Psychologists Press.
- Goldberg, S., & Lewis, M. (1969). Play behavior in the year-old infant: Early sex differences. Child Development, 40, 21-32.
- Golombok, S., & Fivush, R. (1994). Gender Development.

- Cambridge, MA: Cambridge University Press.
- Greenglass, E. R. (1982). A world of difference: Gender roles in perspective. Toronto: John Wiley and Sons.
- Grovetant, H. D., Thorbecke, W. L., & Meyer, M. L. (1982). An extension of Marcia's identity status interview into the interpersonal domain. Journal of Youth and Adolescence, 11, 33-47.
- Guttman, R. A. (1974). The basis for scalogram analysis. In G. M. Maranell (Ed.), Scaling: A sourcebook for behavioral scientists. Chicago: Aldine.
- Harter, S. (1990). Processes underlying adolescent self-concept formation. In R. Montemayer, G. R. Adams, & T. P. Gullotta (Eds.), From childhood to adolescence: A transitional period? Newbury Park: Sage.
- Hawley, G. (1984). Construction and validation of an Eriksonian measure of psychosocial development. (Doctoral Dissertation, The University of North Carolina at Chapel Hill). Dissertation Abstracts International, 45, 2804A.
- Hawley, G. (1988). Measures of psychosocial development professional manual. Odessa, Florida: Psychological Assessment Resources, Inc.
- Hodgson, J. W., and Fischer, J. L. (1979). Sex differences in identity and intimacy development in college youth.

Journal of Youth and Adolescence, 8, 37-50.

Janeway, E. (1977). Man's world, woman's place. New York: Morrow.

Jordan, J. (1997). A relational perspective for understanding women's development. In J. Jordan (Ed.), Women's growth in diversity. New York: The Guilford Press.

Jordan, J., Kaplan, A., Miller, J.B., Stiver, I., & Surrey, J. (1991). Women's growth in connection: Writings from the stone center. New York: The Guilford Press.

Johnson, J., & Alford, R. (1987). The adolescent quest for intimacy: Implications for the therapeutic alliance. Intimate Relationships. New York: Haworth Press.

Jones, D. C., Bloys, N., & Wood, M. (1990). Sex roles and friendship patterns. Sex Roles, 23, 133-145.

Jones, R. M., & Streitmatter, J. L. (1987). Validity and reliability of the EOM-EIS for early adolescents. Adolescence, 22, 647-659.

Josselson, R. L. (1988). Finding herself: Pathways of identity development in women. New York: Jossey-Bass.

Kaplan, A. G., & Klein, R. (1991). The relational self in late adolescent women. In Judith V. Jordan, Alexandra G. Kaplan, Jean Baker Miller, Irene P. Stiver & Janet L. Surrey (Eds.), Women's growth in connection: Writings

- from the stone center. New York: Guilford Press.
- Kelley, H. H., Berscheid, E., Christensen, A., Harvey, J. H., Huston, T. L., Levinger, G. McClintock, E., Peplau, L. A., & Peterson, D. R. (1983). Close relationships. New York: Freeman.
- Kikuchi, A. & Gordon, L. V. (1966). Evaluation and cross-cultural application of a Japanese form of the survey of interpersonal values. Journal of Social Psychology, 69, 185-195.
- Kimball, M. M. (1994). The worlds we live in: Gender similarities and differences. Canadian Psychology, 35(4), 388-404.
- Kramer, E. (1967). A contribution toward the validation of the FIRO-B questionnaire. Journal of Projective Techniques and Personality Assessment, 31, 80-81
- LaVoie, J. C. (1976). Ego identity formation in middle adolescence. Journal of Youth and Adolescence, 5, 371-385
- Lempers, J. D., & Clark-Lempers, D. S. (1993). A functional comparison of same-sex and opposite-sex friendships during adolescence. Journal of Adolescent Research, 8(1), 89-108.
- Lever, J. (1976). Sex differences in games children play. Social Problems, 23, 478-487.

- Liss, M. B. (1981). Patterns of toy play: As an analysis of sex differences. Sex Roles, 7, 1143-1150.
- Lobel, T. E., & Winch, G. L. (1988). Psychosocial development, self-concept, and gender. Journal of Genetic Psychology, 149(3), 405-411.
- Maccoby, E. E., & Jacklin, C. N. (1987). Gender segregation in children. In H. W. Reese (Ed.), Advances in child development and behavior (Vol. 20, pp. 239-287). New York: Academic Press.
- Mahler, M. S., Pine, F., & Bergman, A. (1975). The psychological birth of the human infant. New York: Basic Books.
- Marcia, J. E. (1966). Development and validation of ego identity status. Journal of Personality and Social Psychology, 3, 551-558.
- Marcia, J. E. (1980). Identity in adolescence. In J. Adelson (Ed.), Handbook of adolescent psychology. New York: Wiley.
- Marcia, J. E. (1989). Identity diffusion differentiated. In M. A. Luszcz & T. Nettelbeck (Eds.), Psychological development: Perspectives across the lifespan. North Holland: Elsevier Science Publishers.
- Marcia, J. E. (1993a). The relational roots of identity. In J. Kroger (Ed.), Discussions on ego identity.
-

- Hillsdale N. J.: L. Erlbaum Assoc.
- Marcia, J. E. (1993b). The ego identity status approach to ego identity. In J. E. Marcia, A. S. Waterman, D. R. Matteson, S. L. Archer, & J. L. Orlofsky (Eds.), Ego Identity: A handbook for psychosocial research. New York: Springer-Verlag.
- Marcia, J. E. (1993c). The status of the statuses: A research review. In J. E. Marcia, A. S. Waterman, D. R. Matteson, S. L. Archer, & J. L. Orlofsky (Eds.), Ego Identity: A handbook for psychosocial research. New York: Springer-Verlag.
- Marcia, J. E. & Archer, S. L. (1993). Identity status interview: Late adolescent college form. In J. E. Marcia, A. S. Waterman, D. R. Matteson, S. L. Archer, & J. L. Orlofsky (Eds.), Ego Identity: A handbook for psychosocial research. New York: Springer-Verlag.
- Marcia, J. E. & Friedman, M. (1970). Ego identity status in college women. Journal of Personality, 38, 249-262.
- Matteson, D. R. (1977). Exploration and commitment: Sex differences and methodological problems in the use of the identity status categories. Journal of Youth and Adolescence, 6, 353-379.
- Matteson, D. R. (1993a). Differences within and between genders: A challenge to the theory. In J. E. Marcia, A.

- S. Waterman, D. R. Matteson, S. L. Archer, & J. L. Orlofsky (Eds.), Ego identity: A handbook for psychosocial research. New York: Springer-Verlag.
- Matteson, D. R. (1993b). Interviewers and interviewing. In J. E. Marcia, A. S. Waterman, D. R. Matteson, S. L. Archer, & J. L. Orlofsky (Eds.), Ego identity: A handbook for psychosocial research. New York: Springer-Verlag.
- McAdams, D. P. (1990). The person: An introduction to personality psychology. San Diego: Harcourt Brace Jovanovich.
- McKay, J., Pyke, S., & Goranson, R. (1984). Whatever happened to "inner-space": A failure to replicate. International Journal of Women's Studies, 7(5), 387-396.
- Millett, K. (1970). Sexual Politics. Garden City, NY: Doubleday.
- Meilman, P. W. (1979). Cross-sectional age changes in ego identity status during adolescence. Developmental Psychology, 15, 230-231.
- Meize-Grochowski, R. (1984). An analysis of the concept of trust. Journal of Advanced Nursing, 9, 563-572.
- Miller, B. J. (1976). Toward a new psychology of women. Boston: Beacon Press.
- Miller, B. J. (1991). The development of women's sense of
-

- self. In Judith V. Jordan, Alexandra G. Kaplan, Jean Baker Miller, Irene P. Stiver, & Janet L. Surrey (Eds.), Women's growth in connection: Writings from the stone center. New York: Guilford Press.
- Moos, R. (1974). The social climate scales. Palo Alto, CA: Consulting Psychologists Press.
- Moore, S., & Boldero, J. (1991). Psychosocial development and friendship functions in adolescence. Sex Roles, 25(9/10), 521-536.
- Muuss, R. E. (Ed.). (1982). Theories of adolescence (4th ed.). New York: Random House.
- Orosan, P. G., & Schilling, K. M. (1992). Gender differences in college students' definitions and perceptions of intimacy. Women & Therapy, 12, 201-212.
- Parke, R. D., & Sawin, D. B. (1980). The family in early infancy. In F. Pedersen (Ed.), The father-infant relationship: Observational studies in a family context. New York: Praeger.
- Paul, E. L., & White, K. M. (1990). The development of intimate relationships in late adolescence. Adolescence, 25(98), 375-400.
- Penfold, P.S., & Walker, G. A. (1983). Women and the Psychiatric Paradox. Montreal: Eden Press.
- Peoples, E. (1975). The impact of the criminal justice
-

- system up[on its personnel. Criminology, 13, 204-212.
- Pitcher, E. G., & Schultz, L. H. (1983). Boys and girls at play: The development of sex roles. New York: Praeger.
- Power, T. G., & Parke, R. D. (1982). Play as a context for early learning: Lab and home analyses. In E. Sigel & L. M. Laosa (eds.), The family as a learning environment. New York: Plenum.
- Raeff, C. (1994). Viewing adolescent mothers on their own terms: Linking self-conceptualization and adolescent motherhood. Developmental Review, 14, 215-244.
- Romig, C. & Bakken, L. (1992). Intimacy development in middle adolescence: Its relationship to gender and family cohesion and adaptability. Journal of Youth and Adolescence, 21, 325-338.
- Rosenfeld, L., & Jessen, P. (1972). Compatibility and interaction in a small group: Validation of Schutz's FIRO-B using a modified version of Lashbrook's PROANAS. Western Speech, Winter.
- Rosenthal, D. A., Gurney, R. M., & Moore, S. M. (1981). From trust to intimacy: A new inventory for examining Erikson's stages of psychosocial development. Journal of Youth and Adolescence, 10(6), 525-537.
- Ryan, L. R. (1989) Clinical interpretation of the FIRO-B (3rd ed.). Palo Alto CA: Consulting Psychologists

- Press.
- Sapolsky, A. (1965). Relationship between patient-doctor compatibility, mutual perception, and outcome of treatment. Journal of Abnormal Psychology, 70, 1, 1965.
- Sattler, J. M. (1992). Assessment of children: Revised and updated third edition. San Diego: Jerome M Sattler, Publisher, Inc.
- Scarr, S., Weinberg, R. A., & Levine, A. (1986). Understanding Development. New York: Harcourt Brace Jovanovich.
- Schenkel, S., & Marcia, J. E. (1972). Attitudes toward premarital intercourse in determining ego identity status in college women. Journal of Personality, 3, 472-482.
- Schiedel, D. G., & Marcia, J. E. (1985). Ego identity, intimacy, sex role orientation, and gender. Developmental Psychology, 18, 149-160.
- Schultz, L. H., & Selman, R. L. (1990). Relations among interpersonal action-related thought, self-reported social action, and emotional maturity in early adolescents. In C. Vandenplas-Holper & B. Campos (Eds.), Interpersonal and identity development: New directions. Porto, Portugal: Instituto de Consulta Psicologica. Formacao e Desenvolvimento.

- Schutz, W. C. (1966). The interpersonal underworld. Palo Alto CA: Science and Behavior Books.
- Schutz, W. (1978). FIRO scales manual. Palo Alto CA: Consulting Psychologists Press (Original work published 1967).
- Sheldon, A. (1990). Pickle fights: Gendered talk in preschool disputes. Discourse Processes, 13, 5-31.
- Sime, J. (1995). Sex role identification, intimacy development and family functioning in adolescence. Unpublished bachelor's thesis, University of Manitoba, Winnipeg.
- Sime, J., Koverola, C., & Battle, P. (1997). Sex role identification in relation to identity and intimacy development. Poster session presented at the annual meeting of the Canadian Psychological Association, Toronto, ON.
- Simmons, D. (1970). Development of an objective measure of identity achievement status. Journal of Projective Techniques and Personality Assessment, 34, 241-244.
- Stephen, J., Fraser, E., & Marcia, J. E. (1992). Moratorium-achievement (MAMA) cycles in lifespan identity development. Value orientations and reasoning system. Journal of Adolescence, 15, 283-300.
- Streitmatter, J. L. (1988). Ethnicity as a mediating

- variable of early adolescent identity development. Journal of Early Adolescence, 9, 99-116.
- Sullivan, H. S. (1953). The interpersonal theory of psychiatry. H. S. Perry and M. L. Gawel, (Eds.). New York: W.W. Norton & Co.
- Surrey, J. L. (1991). The relational self in women: Clinical implications. In Judith V. Jordan, Alexandra G. Kaplan, Jean Baker Miller, Irene P. Stiver, & Janet L. Surrey (Eds.), Women's growth in connection: Writings from the stone center. New York: Guilford Press.
- Tabachnick, B. G., & Fidell, L. S. (1996). Using multivariate statistics (3rd Ed.) New York: Harper Collins College Publishers.
- Tan, A. L., Kendis, R. J., Fine, J. T., & Porac, J. (1977). A short measure of Erikson ego identity. Journal of Personality Assessment, 41, 279-284.
- Tannen, D. (1990). Gender differences in topical coherence: Creating involvement in best friend's talk. Discourse Processes, 13, 73-90.
- Timmerman, G. M. (1991). A concept analysis of intimacy. Issues in Mental Health Nursing, 12, 19-30.
- Thomas, S., & Robinson, M. (1981). Development of a measure of androgyny for young adolescents. Journal of Early Adolescence, 1(2), 195-209.

- Thorbecke, W. & Grovetant, H. D. (1982). Gender differences in interpersonal identity formation. Journal of Youth and Adolescence, 11, 479-492.
- Ullman, L., Krasner, L., & Troffer, S. A. (1964). A contribution to FIRO-B norms. Journal of Clinical Psychology, 20, 240-242.
- Wagner, J. A. (1987). Formal operations and ego identity in adolescence. Adolescence, 22, 23-35.
- Waterman, A. S. (1985). Identity in the context of adolescent psychology. In A. S. Waterman (Ed.), Identity in Adolescence: Processes and contents. San Francisco: Jossey-Bass.
- Waterman, A. S. (1993a). Developmental perspectives on identity formation: From adolescence to adulthood. In J. E. Marcia, A. S. Waterman, D. R. Matteson, S. L. Archer, & J. L. Orlofsky (Eds.), Ego identity: A handbook for psychosocial research. New York: Springer-Verlag.
- Waterman, A. S. (1993b). Overview of the identity status scoring criteria. In J. E. Marcia, A. S. Waterman, D. R. Matteson, S. L. Archer, & J. L. Orlofsky (Eds.), Ego identity: A handbook for psychosocial research. New York: Springer-Verlag.
- Waterman, A. S. & Archer, S. L. (1993). Identity status

- during the adult years: Scoring criteria. In J. E. Marcia, A. S. Waterman, D. R. Matteson, S. L. Archer, & J. L. Orlofsky (Eds.), Ego identity: A handbook for psychosocial research. New York: Springer-Verlag.
- Waterman, A. S. & Goldman, J. A. (1976). A longitudinal study of ego identity development at a liberal arts college. Journal of Youth and Adolescence, 5, 361-369.
- Waterman, A. S. & Waterman, C. K. (1971). A longitudinal study of changes in ego identity status during the freshman year at college. Developmental Psychology, 5, 167-173.
- Waterman, A. S., Geary, P. S., & Waterman, C. K. (1974). Longitudinal study of changes in ego identity status from the freshman to the senior year college. Developmental Psychology, 10, 387-392.
- Whitbourne, S. K., Jelsma, B. M., & Waterman, A. S. (1982). An Eriksonian measure of personality development in college students: A re-examination of Constantinople's data and a partial replication. Developmental Psychology, 18, 369-371.
- Willemsen, E. W. & Waterman, K. K. (1991). Ego identity status and family environment: A correlational study. Psychological Reports, 69, 1203-1212.

APPENDIX A

Background Information Sheet

1. Age: ____ Years
2. Date of Birth: _____
3. Gender: Female ____ Male ____
4. Ethnic Origin:
 - Caucasian ____
 - Black ____
 - Asian ____
 - Hispanic ____
 - Aboriginal ____
 - Other ____
5. Postal Code: _____
7. Telephone Number (optional): _____

(Please include your phone number if you are interested in being contacted if we do a follow-up to this study when you are older).

APPENDIX B

Modified MPD

This questionnaire contains statements or phrases which people often use to describe themselves, their lives, and their experiences. For each statement, fill the circle on the IBM sheet which best represents your opinion, making sure that your answer is in the correctly lettered circle.

Fill in A if the statement is Not At All Like You

Fill in B if the statement is Not Much Like You

Fill in C if the statement is Somewhat Like You

Fill in D if the statement is Like You

Fill in E if the statement is Very Much Like You

1. Have worked out my basic beliefs about such matters as occupation, sex, family, politics, religion, etc.
2. Warm and understanding.
3. Not sure of my basic convictions.
4. Prefer doing most things alone.
5. Clear vision of what I want out of life.
6. Share my most private thoughts and feelings with those close to me.
7. A bundle of contradictions.

8. Keep my feelings to myself.
 9. Stand up for what I believe, even in the face of adversity.
 10. Others share their most private thoughts and feelings with me.
 11. Wide gap between the person I am and the person I want to be.
 12. No one seems to understand me.
 13. Found my place in the world.
 14. Comfortable in close relationships.
 15. Uncertain about what I'm going to do with my life.
 16. Emotionally distant.
 17. Others see me pretty much as I see myself.
 18. Willing to give and take in my relationships.
 19. Haven't found my place in life.
 20. Avoid commitment to others.
 21. Appreciate my own uniqueness and individuality.
 22. Others understand me.
 23. A mystery--even to myself.
 24. Many acquaintances; no real friends.
 25. Content to be who I am.
 26. There when my friends need me.
 27. In search of my identity.
 28. Wary of close relationships.
-

APPENDIX C

FIRO-B

Directions: This questionnaire explores the typical ways you interact with people. There are no right or wrong answers.

Sometimes people are tempted to answer questions like these in terms in terms of what they think a person should do. This is not what is wanted here. We would like to know how you actually behave.

Some items may seem similar to others. However, each item is different so please answer each one without regard to the others. There is no time limit, but do not debate long over any item.

For each statement below, decide which of the following answers best applies to you. Completely fill in the numbered circle on the IBM sheet that corresponds to that answer. Please be as honest as you can.

- 1. never 2. rarely 3. occasionally 4. sometimes**
5. often 6. usually

1. I try to be with people.
 2. I let other people decide what to do.
 3. I join social groups.
 4. I try to have close relationships with people.
 5. I tend to join social organizations when I have an
-

opportunity.

6. I let other people strongly influence my actions.
7. I try to be included in informal social activities.
8. I try to have close, personal relationships with people.
9. I try to include other people in my plans.
10. I let other control my actions.
11. I try to have people around me.
12. I try to get close and personal with people.
13. When people are doing things together I tend to join them.
14. I am easily led by people.
15. I try to avoid being alone.
16. I try to participate in group activities.

For each of the next group of statements, choose one of the following answers:

- 1. nobody 2. One or two people 3. A few people**
4. some people 5. many people 6. most people

17. I try to be friendly to people.
18. I let other people decide what to do.
19. My personal relations with people are cool and distant.

20. I let other people take charge of things.
21. I try to have close relationships with people.
22. I let other people strongly affect my actions.
23. I try to get close and personal with people.
24. I let other people control my actions.
25. I act cool and distant with people.
26. I am easily led by people.
27. I try to have close, personal relationships with
people.

For each of the next group of statements, choose one of the following answers:

- 1. nobody 2. one or two people 3. a few people
4. some people 5. many people 6. most people**

28. I like people to invite me to things.
29. I like people to act close and personal with me.
30. I try to influence strongly other people's actions.
31. I like people to invite me to join in their
activities.
32. I like people to act close toward me.
33. I try to take charge of things when I am with
people.
34. I like people to include me in their activities.

35. I like people to act cool and distant toward me.
36. I try to have other people do things the way I want them done.
37. I like people to ask me to participate in their discussions.
38. I like people to act friendly toward me.
39. I like people to invite me to participate in their activities.
40. I like people to act distant toward me.

For each of the next group of statements, choose one of the following answers:

- 1. never 2. rarely 3. occasionally 4. Sometimes**
5. often 6. Usually

41. I try to be the dominant person when I am with people.
42. I like people to invite me to things.
43. I like people to act close toward me.
44. I try to have other people do things I want.
45. I like people to invite me to join their activities.
46. I like people to act cool and distant toward me.
47. I try to influence strongly other people's actions.
48. I like people to include me in their activities.

49. I like people to act close and personal with me.
50. I try to take charge of things when I'm with people.
51. I like people to invite me to participate in their activities.
52. I like people to act distant toward me.
53. I try to have other people do things the way I want them done.
54. I take charge of things when I'm with people.

APPENDIX E

BSRI (SHORT FORM)

DIRECTIONS

On this sheet you will find listed a number of personality characteristics. We would like you to use those characteristics to describe yourself, that is, we would like you to indicate, on a scale from 1 to 7, how true of you each of these characteristics is. Please do not leave any characteristic unmarked.

Example: sly

- Write a 1 if it is never or almost never true that you are sly.
 Write a 2 if it is usually not true that you are sly.
 Write a 3 if it is sometimes but infrequently true that you are sly.
 Write a 4 if it is occasionally true that you are sly.
 Write a 5 if it is often true that you are sly.
 Write a 6 if it is usually true that you are sly.
 Write a 7 if it is always or almost always true that you are sly.

Thus, if you feel it is sometimes but infrequently true that you are "sly", never or almost never true that you are "malicious", always or almost always true that you are "irresponsible," and often true that you are "carefree," then you would rate these characteristics as follows:

Sly	3	Irresponsible	7
Malicious	1	Carefree	5

1	2	3	4	5	6	7
Never or almost never true	Usually not true	Sometimes but infrequently true	Occasionally true	Often true	Usually true	Always or almost always true

Defend my own beliefs		Eager to soothe hurt feelings	
Affectionate		Secretive	
Conscientious		Willing to take risks	
Independent		Warm	
Sympathetic		Adaptable	
Moody		Dominant	
Assertive		Tender	
Sensitive to needs of others		Conceited	
Reliable		Willing to take a stand	
Strong personality		Love children	
Understanding		Tactful	
Jealous		Aggressive	
Forceful		Gentle	
Compassionate		Conventional	
Truthful			
Have leadership abilities			

APPENDIX F

ASRI

DIRECTIONS

On this sheet you will find listed a number of personality characteristics. We would like you to use those characteristics to describe yourself, that is, we would like you to indicate, on a scale from 1 to 7, how true of you each of these characteristics is. Please do not leave any characteristic unmarked.

Example: sly

- Write a 1 if it is never or almost never true that you are sly.
 Write a 2 if it is usually not true that you are sly.
 Write a 3 if it is sometimes but infrequently true that you are sly.
 Write a 4 if it is occasionally true that you are sly.
 Write a 5 if it is often true that you are sly.
 Write a 6 if it is usually true that you are sly.
 Write a 7 if it is always or almost always true that you are sly.

Thus, if you feel it is sometimes but infrequently true that you are "sly", never or almost never true that you are "malicious", always or almost always true that you are "irresponsible," and often true that you are "carefree," then you would rate these characteristics as follows:

Sly	3	Irresponsible	7
Malicious	1	Carefree	5

1	2	3	4	5	6	7
Never or almost never true	Usually not true	Sometimes but infrequently true	Occasionally true	Often true	Usually true	Always or almost always true

1. Stand up for your ideas	1	2	3	4	5	6	7
2. Loving	1	2	3	4	5	6	7
3. Care about the things you do	1	2	3	4	5	6	7
4. On your own	1	2	3	4	5	6	7
5. Understanding	1	2	3	4	5	6	7
6. Moods go up and down	1	2	3	4	5	6	7
7. Forceful	1	2	3	4	5	6	7
8. Aware of other people's feelings	1	2	3	4	5	6	7
9. Someone you can count on	1	2	3	4	5	6	7
10. Bold	1	2	3	4	5	6	7
11. Can feel how another person feels	1	2	3	4	5	6	7
12. Afraid someone is taking your place	1	2	3	4	5	6	7
13. Make people do what you want	1	2	3	4	5	6	7
14. Caring	1	2	3	4	5	6	7

15. Honest	1	2	3	4	5	6	7
16. Able to direct a group	1	2	3	4	5	6	7
17. Want to help someone who is hurt	1	2	3	4	5	6	7
18. Keep to yourself	1	2	3	4	5	6	7
19. Willing to take risks	1	2	3	4	5	6	7
20. Warm	1	2	3	4	5	6	7
21. Able to adjust	1	2	3	4	5	6	7
22. Take charge	1	2	3	4	5	6	7
23. Tender	1	2	3	4	5	6	7
24. Think you are better than most people	1	2	3	4	5	6	7
25. Not afraid to speak out	1	2	3	4	5	6	7
26. Loves children	1	2	3	4	5	6	7
27. Think before you talk	1	2	3	4	5	6	7
28. Go after what you want	1	2	3	4	5	6	7
29. Gentle	1	2	3	4	5	6	7
30. Do things the way other expect them done	1	2	3	4	5	6	7
31. Able to take care of yourself	1	2	3	4	5	6	7
32. Giving in	1	2	3	4	5	6	7
33. Helpful	1	2	3	4	5	6	7
34. Good in sports	1	2	3	4	5	6	7
35. Cheerful	1	2	3	4	5	6	7
36. Disorganized	1	2	3	4	5	6	7
37. Likes to find out why things happen	1	2	3	4	5	6	7

38. Shy	1	2	3	4	5	6	7
39. Don't do your job well	1	2	3	4	5	6	7
40. Have no trouble making up your mind	1	2	3	4	5	6	7
41. Accepts praise	1	2	3	4	5	6	7
42. Dramatic	1	2	3	4	5	6	7
43. Can get along without help	1	2	3	4	5	6	7
44. Faithful	1	2	3	4	5	6	7
45. Happy	1	2	3	4	5	6	7
46. To be yourself	1	2	3	4	5	6	7
47. Meek	1	2	3	4	5	6	7
48. Someone you can't count on	1	2	3	4	5	6	7
49. Manly	1	2	3	4	5	6	7
50. Believe everything	1	2	3	4	5	6	7
51. Serious	1	2	3	4	5	6	7
52. Try hard to win	1	2	3	4	5	6	7
53. Act like a child	1	2	3	4	5	6	7
54. Easy to get along with	1	2	3	4	5	6	7
55. Want to be the best	1	2	3	4	5	6	7
56. Do not use bad language	1	2	3	4	5	6	7
57. Care deeply	1	2	3	4	5	6	7
58. Acts as a leader	1	2	3	4	5	6	7
59. Lady-like	1	2	3	4	5	6	7
60. Friendly	1	2	3	4	5	6	7

APPENDIX G

Identity Status Interview: Early and
Middle Adolescent Form**General Opening**

How old are you?

And you are in what grade?

Where are you from?

How do you feel about living in Winnipeg?

Are both your parents living?

[If not:] At what age were you when your (father) (mother)
died?

Have your parents ever been separated or divorced?

[If yes:] At what age were you when your parents
separated?

[If appropriate:] Whom have you lived with?

[If appropriate:] Has either of your parents remarried?

[If yes:] What age were you at that time?

Can you tell me something about your father's educational
background?

What type of work does he do?

And your mother, what was her educational background?

Has she ever been employed outside of the home?

[If appropriate:] Doing what?

Do you have any brothers or sisters? How many? Which are older and which are younger than you?

[If not already provided:] And your age is?

Vocational Plans - Opening

What grade are you in now?

[If High School:] What school program are you enrolled in here at Vincent Massey Collegiate?

Do you have any ideas about what you'd like to do after graduation from high school in terms of work, school and/or marriage?

[Proceed to the appropriate block(s) of questions: university, college or other education, work and/or marriage.]

[If "don't know," ask: Do you think it is more likely that you will continue with your education after high school or that you will seek employment?

Proceed to the appropriate block(s) of questions.]

(If the answer is again "don't know," proceed to the closing block of questions on vocational plans.)

Vocational Plans - Further Education

[If appropriate:] Do you have any plans for a university/college major at this time?

What type of work would you like to do?

How did you come to decide on _____? [Ask about future plans, if known; otherwise about major field.]

[If no definite interests are mentioned then omit this question and ask:]

[What do you hope to gain by attending university/college? Then skip to the closing block of questions on vocational plans.]

When did you first become interested in _____?

What do you find attractive about _____?

Is there anything not so attractive about this field?

[If several fields mentioned spontaneously, ask about each in turn.]

Have you ever considered any other fields besides _____?

[List all the fields that were previously mentioned.]

[If yes, repeat questions about when interested and nature of attraction.]

How seriously were (are) you considering each of the fields you mentioned?

[For students who have specified a decision:] Did you ever feel that you were actively deciding between _____ and _____?

Was this a difficult decision to make?

What may have helped you to make your choice here?

Has there been any particular person/people involved in your decision-making about this?

How do you think other people in your life might be affected by your career decision?

[For students who have not specified a decision:] Do you feel that choosing a career is something that you're trying to work out now, or do you feel that this is where you can let time take its course and just see what happens?

Do you have any ideas as to when you'd like to have this decision made?

How are you going about getting the information you'd like to have to make a decision?

Is there any particular person who is, or will be involved in your decision-making about this?

How do you think other people in your life might be affected by your decisions in this area?

Do you feel that this is an important decision for you to make now, or are you more concerned with other things right now?

[Proceed to the closing block of questions on vocational plans.]

Vocational Plans - Employment

What type of employment would you like to find?

How did you come to decide on _____?

When did you first become interested in that type of work?

What do you find attractive about _____?

What do you find not so attractive about this field?

[If several alternative possibilities are spontaneously mentioned, ask about each in turn.]

Have you ever considered any type of work besides _____?

[List all the fields previously mentioned.]

[Repeat cycle of questions above for each field mentioned that has not been previously discussed.]

How seriously were (are) you considering each of the plans you mentioned?

[For students who have specified a decision:] Do you feel that you were actively deciding between _____ and _____?

Was this a difficult decision for you to make?

What may have helped you to make your decision here?

Has there been any particular person/people involved in your decision-making about this?

How do you think other people in your life might be affected by your career decision?

[For students who have not specified a decision:] Do you feel that choosing a career is something that you're trying to work on now, or do you think that this is something where you can let time take its course and see what happens?

Do you have any idea as to when you'd like to have this decision made?

How are you going about getting the information you'd like to have to make a decision?

Is there any particular person/people who is, or will be involved in your decision-making about this?

How do you think other people in your life might be affected by your decisions in this area?

Do you feel that this is an important decision for you to make now, or are you more concerned about other things right now?

Have you ever seriously considered continuing your education after high school?

[If yes:] Could you describe your thinking at that time?

[If appropriate:] Why did you decide not to go on in school?

[Proceed to the closing block of questions on vocational plans.]

Vocational Plans - Marriage

How did you come to decide on marriage as the best plan for you?

Do you plan to have children?

[If yes:] Do you plan to work or remain at home until you have children?

[If appropriate:] After you have children, would you continue to work?

When did you first become interested in these plans?

What do you find attractive about marriage (and work)?

What do you find unattractive about marriage (and work)?

Have you ever considered any other type of plan?

[If yes, repeat questions about when interested and nature of attraction.]

Has there been any particular person/people involved in your decision-making about this?

How do you think other people in your life might be affected by your decision?

How seriously are you considering each of the plans you mentioned?

Have you ever seriously considered continuing your education (or going to work) after high school?

[If yes:] Could you describe your thinking at that time?

Why did you decide not to go with school (work)?

Vocational Plans - Closing

Most parents have plans for their (sons) (daughters), things they'd like to see them get into, things they'd like to see them do. Did your folks have any plans like that for you?

Do you think your parents may have had a preference for one plan over the other, although they would never have tried to pressure you about it?

[If yes:] Did you ever consider _____?

[If appropriate:] How do your parents feel about your plans to go into _____?

As you think about your activities in your coursework at school and any part-time work or hobbies you have had in the field(s) you might like to get into, what would you say is most satisfying or rewarding for you (for each of them)? Is there anything about these activities that you would consider to be not so good?

How would you describe your feelings when you are engaged in these activities?

Why do you think you feel that way?

How willing do you think you you'd be to change your plans from _____ (the strongest one or two plans mentioned), if something better came along?

[If asked: "What do you mean better? Respond: "Whatever might be better by your standards."]

[If respondent indicates the possibility of change:]

What might you change to?

What might cause you to make such a change?

How likely do you think it is that you will make some change?

[Repeat for all possibilities mentioned.]

On a 7-point scale, how important do you see your vocation as being to you in your life, where 7 means "extremely important" and 1 means "not at all important"?

Marriage and the Role of Spouse

[For those who were interviewed on the **Marriage -**

Vocational Plans, use this beginning to the marriage domain:] I'd like to ask you more specific questions about marriage and parenting now. [Go first to "Why do you plan to marry," and so on within the marriage domain, and then on the parenting domain begin with, "Why do you plan to become a parent," and so on.]

[For all others, begin:] Do you plan to marry some day?

[If yes:] Why do you plan to marry?

When do you think would be a good time for you to marry?

Why then?

What kind of a person would you want to marry?

How do you picture what marriage might be like for you?

What do you see as your role as a (husband) (wife)?

[If no:] Have you ever thought about the idea of marriage?

Why do you think you would prefer not to marry?

What do you see as the advantages and disadvantages of being single versus being married? [If only one side is asked about, ask about the other position.]

Has your decision about (marrying) (not marrying) come easily to you or has it been a difficult decision to make? Why?

Who may have influenced your decision?

(Has there been any particular person/people involved in your decision-making about this?)

How do you think other people in your life might be affected by your decision?

[If not already evident:] Have you gone through an important change in thinking about marriage for yourself?

[If yes:] Please describe that change?

What started you thinking about these questions?

Who may have influenced your thinking?

How would you compare your ideas about marriage with those of your (father) (mother)? [Make comparison with parent of the same gender as the Respondent.]

What is your parents' marriage like? How do you feel about the kind of marriage your parents (have) (had)?

Would you like your marriage to be similar to theirs?

How do your parents feel about your ideas on marriage? [If parents do not know:] How do you think they would feel about them if they did know?

Are you currently in a romantic relationship with someone? [If yes:] How does your (boy)(girl) friend feel about your ideas about marriage?

How do your ideas compare with (his)(hers)?

What do you think are the best and worst things about marriage in terms of what you would be doing in the marriage in your role as a (husband)(wife)?

How willing would you be to change your plans about marriage?

[If appropriate:] What would it take to change your ideas about marriage?

Do you think you might think again about your decision at some point in the future?

[If yes:] When? Why then?

On a 7-point scale, how important do you see marriage and your having the role of (husband)(wife) as being in your life? Again, 7 means "extremely important" and 1 means "not at all important."

The Role of Parent

[Remember, for people who answered vocational plans in terms of marriage and parenting, to begin with "Why do you plan to become a parent?"]

[For all others, begin:] Do you plan to become a parent some day?

[If yes:] Why do you plan to become a parent?

When do you think would be a good time in your life to start parenting?

How do you picture your role in parenting?

What type of behavior in your child would give you pleasure?

If you ever become a parent, what role do you think your (husband) (wife) **should** have in parenting with you?

What role do you think your (husband) (wife) **will** have in parenting with you?

[If any difference is mentioned:] Why do you think that would be?

[If no:] Is this because you have never thought about the role of parent for you yourself or that you definitely do not want to be a parent?

How did you figure out that decision?

What do you see as the advantages and disadvantages of parenting?

[If only one side is presented, ask about the other.]

Has your decision about parenting come easily to you, or has it been a difficult decision to make?

Why?

Who or what has had a part in helping you to make a decision about this?

How do you think other people in your life might be affected by your decision?

Have you ever gone through an important change in your thinking about parenting?

[If yes:] When was that in your life?

Please describe the changes.

What started you thinking about these questions?

How did you go about working out your ideas?

Who may have influenced your decision about this?

How would you compare your ideas about parenting with those of your parents?

How would you describe your parents' thinking about parenting?

What do you think of the parenting you have had?

Would you like your parenting to be like theirs?

Would your parents like to see you be a parent some day?

How do you feel about that?

How do your parents feel about your ideas on parenting? [If parents don't know:] How do you think they would feel about them if they did know?

[If presently in a romantic relationship:] How does your (boy)(girl) friend feel about what you think about parenting?

How do your ideas about parenting compare with (his)(hers)? Do you believe your ideas about parenting are now fairly worked out, or do you feel that you're still working out your thinking about parenting?

[If still working out ideas:] What questions are you still thinking about?

What are you doing now to work out your thinking about these questions?

As you think about being a parent yourself, what would you like best and least about your role of parent?

How willing would you be to change your plans about parenting?

[If appropriate:] What would it take to change your ideas about parenting?

Do you think you might reconsider your decision at some point in the future?

[If yes:] When?

Why then?

What do you think might influence your decision about whether to be a parent or not?

On a 7-point scale, how important do you see the role of parent as being to you in your life? Again, 7 means "extremely important" and 1 means "not at all important."

Identity Status Interview:

Late Adolescent Form

General Opening

How old are you?

Where are you from originally?

And where are you living now?

How do you feel about living in Winnipeg?

Are both your parents living?

[If not:] At what age were you when your (father) (mother) died?

Have your parents ever been separated or divorced?

[If yes:] At what age were you when your parents separated?

[If appropriate:] Whom have you lived with?

[If appropriate:] Has either of your parents remarried?

[If yes:] What age were you at that time?

Can you tell me something about your father's educational background?

What type of work does he do?

And your mother, what was her educational background?

Has she ever been employed outside of the home?

[If appropriate:] What type of work does she do?

Do you have any brothers or sisters?

[If yes:] What are their ages?

[If not already provided:] And your age is?

Vocational Plans

How did you come to decide on attending U of M?

What year are you in now?

What is your major?

How did you come to decide on _____ as a major?

When did you first become interested in _____?

What do you find attractive about this field?

What drawbacks do you see about this field?

What would you like to do with this major after you graduate from university?

How would you describe your feelings while you are engaged in activities related to your major?

Why do you think you feel this way?

Since you have been at university, have you ever thought about any majors besides _____?

[If yes:] What else have you considered?

When did you first become interested in _____?

What did you find attractive about _____?

What drawbacks did you see to this field?

Was this a difficult decision to make?

What do you think influenced your choice?

[Repeat for each possible major mentioned.]

How about when you were in high school—what was your thinking about your future vocational plans?

[Repeat cycle of questions above for each field mentioned that has not been previously discussed.]

[If not already evident:] Was there ever a time when you were trying to decide between two very different directions for your life, in terms of the work you wished to pursue?

[If yes:] What were the alternatives then?

Was this a difficult decision to make?

What influenced your decision here?

Most parents have plans for their (sons) (daughters), things they'd like to see them get into, things they'd like to see them do. Did your folks have any plans like that for you?

Do you think your parents may have had a preference for one field over another, although they would never have tried to pressure you about it?

[If necessary:] How do your parents feel about your plans to go into _____? [Respondent's current career plans].

How willing do you think you you'd be to change your plans from _____ (Respondent's current career plans), if something better came along?

[If asked: "What do you mean better? Respond: "Whatever might be better by your standards."]

[If respondent indicates the possibility of change:]

What might you change to?

What might cause you to make such a change?

How likely do you think it is that you will make some change?

In terms of your future vocational plans, has there been any specific person who has important input into your decision-making about this?

Do you think other people in your life will be affected by your decision? Who? In what way?

On a 7-point scale, how important do you see your vocation as being to you in your life, where 7 means "extremely important" and 1 means "not at all important"?

Marriage and the Role of Spouse

Do you plan to marry some day?

[If yes:] Why do you plan to marry?

When do you think would be a good time for you to marry?

Why then?

What kind of a person would you want to marry?

How do you picture what marriage might be like for you?

What do you see as your role as a (husband) (wife)?

[If no:] Have you ever thought about the idea of marriage?

Why do you think you would prefer not to marry?

What do you see as the advantages and disadvantages of being single versus being married? [If only one side is asked about, ask about the other position.]

Has your decision about (marrying) (not marrying) come easily to you or has it been a difficult decision to make?

Why do you think it has?

Who may have influenced your decision?

(Has there been any particular person/people involved in your decision-making about this?)

How do you think other people in your life might be affected by your decision?

[If not already evident:] Have you gone through an important change in thinking about marriage for yourself?

[If yes:] Please describe that change?

What started you thinking about these questions?

Who may have been a factor in your thinking?

How would you compare your ideas about marriage with those of your (father) (mother)? [Make comparison with parent of the same gender as the Respondent.]

How would you describe your parents' marriage?

What do you think of the marriage your parents (have) (had)?

Would you like your marriage to be similar to theirs?

How do your parents feel about your ideas on marriage? [If parents do not know:] How do you think they would feel about them if they did know?

Are you currently in a romantic relationship with someone?

[If yes:] How does the person you are involved with feel about your ideas on marriage?

How do your ideas compare with (his) (hers)?

As you think about the activities involved in marriage and your role as a (husband) (wife), what would you say you anticipate to be most satisfying or rewarding for you?

Is there anything about these activities that you anticipate will be a source of dissatisfaction for you?

How willing would you be to change your plans about marriage?

Do you anticipate that you will reexamine your decision at some point in the future?

[If yes:] When? Why then?

On a 7-point scale, how important do you see marriage and your having the role of (husband) (wife) as being in your life? Again, 7 means "extremely important" and 1 means "not at all important."

The Role of Parent

Do you plan to become a parent some day?

[If yes:] Why do you plan to become a parent?

When do you think would be a good time in your life to start parenting?

How do you picture your role in parenting?

What type of behavior in your child would give you pleasure?

If you ever become a parent, what role do you think your (husband) (wife) **should** have in parenting with you?

What role do you think your (husband) (wife) **would** have in parenting with you?

[If any difference is mentioned:] Why?

[If no:] Is this because you have never thought about the role of parent for you yourself or that you definitely do not want to be a parent?

How have you arrived at that decision?

What do you see as the advantages and disadvantages of parenting?

[If only one side is presented, ask about the other.]

Has your decision about parenting come easily to you, or has it been a difficult decision to make?

Why do you think it has been?

What has influenced your decision? Has there been any particular person involved in your decision making? Who do you think will be affected by your decision?

Have you ever gone through an important change in your thinking about parenting?

[If yes:] When was that in your life?

Please describe the changes.

What started you thinking about these questions?

Who may have been a factor in your thinking?

How did you go about working out your ideas?

How would you compare your ideas about parenting with those of your parents?

How would you describe your parents' thinking about parenting?

What do you think of the parenting you have had?

Would you like your parenting to be like theirs?

Would your parents like to see you be a parent some day?

How do you feel about that?

How do your parents feel about your ideas on parenting? [If parents don't know:] How do you think they would feel about them if they did know?

[If presently in a romantic relationship:] How does the person you are presently involved with feel about your attitudes toward parenting?

How do your ideas about parenting compare with (his) (hers)?

Do you believe your ideas about parenting are now fairly worked out, or do you feel that you're still working out your thinking about parenting?

[If still working out ideas:] What questions are you still thinking about?

What are you doing now to work out your thinking about these questions?

How willing would you be to change your plans about parenting?

[If appropriate:] What would it take to change your ideas about parenting?

Do you anticipate that you might reexamine your decision at some point in the future?

[If yes:] When? Why then?

What do you think might influence your decision?

On a 7-point scale, how important do you see the role of parent as being to you in your life? Again, 7 means "extremely important" and 1 means "not at all important."

APPENDIX H

CRITERIA FOR COMPETENT ISI ADMINISTRATION

Introduction:			Comments
Y	N	NA	1. Writes participant number on tape.
Y	N	NA	2. Checks tape-recorder before interview.
Y	N	NA	3. Interview area is private, quiet, free from major distractions (i.e., interviewer faces window).
Y	N	NA	4. Introduces self to participant.
Y	N	NA	5. Explains about confidentiality.
Y	N	NA	6. Is friendly and makes effort to establish rapport.
Y	N	NA	7. Voice is friendly in tone.
Y	N	NA	8. Gives general intro to interview i.e., no right or wrong answers, interested in what you think.
Y	N	NA	9. Appears relaxed and confident.
Y	N	NA	10. Answers any questions briefly and honestly.
Y	N	NA	11. Moves quickly into interview.
Y	N	NA	12. Explains about audio-tape.
<hr/> (Total)			<hr/> Accuracy (%)

Y N NA 5. Asks about people possibly affected by
decision.

Y N NA 6. If no decision: Asks about time-
line info.

— — — —
(Total) Accuracy (%)

Vocational Plans - Employment:

Y N NA 1. Asks about job plans and attractive/
unattractive aspects (KNOWLEDGEABILITY
and INFO).

Y N NA 2. Asks about other fields (KNOWLEDGEABILITY
and INFO).

Y N NA 3. Asks about decision-making
(ALTERNATIVES).

Y N NA 4. Asks about people involved in decision-
making.

Y N NA 5. Asks about people possibly affected by
decision.

Y N NA 6. If no decision: Asks about time-line
(INFO).

— — — —
(Total) Accuracy (%)

Vocational Plans - Marriage:

- | | | | |
|---|---|----|--|
| Y | N | NA | 1. Asks about decision to marry/have children and attractive/unattractive aspects (KNOWLEDGEABILITY and INFO). |
| Y | N | NA | 2. Asks about other plans (KNOWLEDGEABILITY and INFO). |
| Y | N | NA | 3. Asks about decision-making (ALTERNATIVES). |
| Y | N | NA | 4. Asks about people involved in decision-making. |
| Y | N | NA | 5. Asks about people possibly affected by decision. |
| Y | N | NA | 6. Asks about seriousness of other plans if approp. (INFO and COMMITMENT). |

(Total) Accuracy (%)

Vocational Plans - Closing:

- | | | | |
|---|---|----|---|
| Y | N | NA | 1. Asks about parents' reaction (IDENTIFICATION). |
| Y | N | NA | 2. Asks about related activities (INFO). |
| Y | N | NA | 3. Asks about possibility of change (RESISTANCE TO SWAY). |
-

Y	N	NA	4. Asks about 7-point scale.
Y	N	NA	5. Sufficient data to determine classification.

—	—	—	————
(Total)			Accuracy (%)

Marriage and the Role of Spouse:

Y	N	NA	1. Uses correct form of opening.
Y	N	NA	2. Uses correct response for Yes/No responses.
Y	N	NA	3. Asks about advantages/disadvantages (mar. & single) (KNOWLEDGEABILITY and INFO).
Y	N	NA	4. Asks about decision-making (ALTERNATIVES).
Y	N	NA	5. Asks about people involved in decision- making.
Y	N	NA	5. Asks about people possibly affected by decision.
Y	N	NA	6. Asks about changes in thinking (KNOW. and COMMITMENT).
Y	N	NA	7. Asks about parents (INFO).
Y	N	NA	8. Asks about current relationship (INFO and KNOW).

- | | | | |
|---|---|----|--|
| Y | N | NA | 9. Asks about possibility of change
(RESISTANCE). |
| Y | N | NA | 10. Asks about 7-point scale. |
| Y | N | NA | 11. Sufficient data to determine
classification. |

— — — ———
(Total) Accuracy (%)

The Role of Parent:

- | | | | |
|---|---|----|--|
| Y | N | NA | 1. Uses correct form of opening. |
| Y | N | NA | 2. Uses correct response for Yes/No
responses. |
| Y | N | NA | 3. Asks about advantages/disadvantages (both
child/no child). (KNOWLEDGEABILITY &
INFO). |
| Y | N | NA | 4. Asks about decision-making
(ALTERNATIVES). |
| Y | N | NA | 5. Asks about people involved in decision-
making. |
| Y | N | NA | 5. Asks about people possibly affected by
decision. |
| Y | N | NA | 6. Asks about changes in thinking (KNOW. and
COMMITMENT). |
| Y | N | NA | 7. Asks about parents (INFO). |

- | | | | |
|---|---|----|---|
| Y | N | NA | 8. Asks about current relationship (INFO and KNOW). |
| Y | N | NA | 9. Asks about possibility of change (RESISTANCE). |
| Y | N | NA | 10. Asks about 7-point scale. |

APPENDIX I

ISI DECISION TREE

DECISION TREE FOR IDENTITY STATUS INTERVIEW (ISI)				Identity Status	
Indicators	Evidence Yes/No	Decision			
<p>Exploration: Active questioning or struggling evident in arriving at decisions</p>	<p>1. Knowledgeability: Beyond usual degree re content; implications of alternatives seriously considered; not necessarily completely accurate.</p> <p>2. Information Gathering: Activities such as reading, taking courses, discussion, behavioral exploration strongest evidence but not essential.</p> <p>3. Considering Alternatives: 1 of 2 patterns: 1. Simultaneous presence of 2 or 3 alternatives (prior to some or each in detail). 2. Successive changes over time - a history of commitment to a number of choices, each rejected for particular reasons.</p> <p>4. Emotional Tone: Anticipation, curiosity (excitement), ambivalence, anxiety (later), based on individual temperament.</p> <p>5. Desire for Early Decision: More likely with older adolescents; may not be evident with younger.</p>	<p>Y N</p> <p>Y N</p> <p>Y N</p>	<p>Exploration?</p> <p>YES <input type="checkbox"/></p> <p>Then IDENTITY ACHIEVEMENT or MORATORIUM</p>		
		<p>NO <input type="checkbox"/></p> <p>Then FORECLOSURE or DIFFUSION</p>			

	Indicators	Evidence Yes/No	Decision Commitment?	Identity Status
<p>COMMITMENT:</p> <p>Investment individual has made to goals, beliefs, and values</p> <p>Determined by <u>ACTIVITY</u> engaged in to support investment</p>	<p>1. <u>Knowledgeability:</u> Amount of information obtained & understood from a variety of sources; more accurate & sophisticated with older respondents; can clearly state choice & discuss pros & cons.</p>	<p>Y N</p>	<p>YES <input type="checkbox"/></p>	
	<p>2. <u>Activity re Implementation:</u> Reading, discussions, practicing (part-time jobs, volunteering etc.); can describe activities engaged in to support commitment.</p>	<p>Y N</p>	<p>If Exploration YES <input type="checkbox"/></p>	<p>→ IDENTITY ACHIEVEMENT</p>
	<p>3. <u>Emotional Tone:</u> Usually calm/secure, but can be anxious or sad depending on circumstances.</p>	<p>Y N</p>	<p>NO <input type="checkbox"/></p>	<p>→ FORECLOSURE</p>
	<p>4. <u>Identification with Significant Others:</u> Parents, teachers, media personalities etc. Foreclosure identify totally. Identity Achievers select aspects of models to fit them.</p>	<p>Y N</p>	<p>NO <input type="checkbox"/></p>	
	<p>5. <u>Project into One's Future:</u> More likely with older adolescents; may not be evident with younger.</p>	<p>Y N</p>	<p>If Exploration YES <input type="checkbox"/></p>	<p>→ MORATORIUM *</p>
	<p>6. <u>Resistance to Being Swayed:</u> May seem flexible, but other options/possibilities of change unlikely.</p>	<p>Y N</p>	<p>NO <input type="checkbox"/></p> <p><small>*Note: Distinction between Moratorium and Diffusion: Moratorium commitment may be vague rather than absent; may also be distressed re lack of same, diffusion not concerned.</small></p>	<p>→ DIFFUSION</p>

APPENDIX J
ISI RATING FORM

Subject Number: _____ **Rater:** _____ **Rater:** _____

Vocational Plans:

Knowledgeability?	Y	N	Knowledgeability?	Y	N
Info Gathering?	Y	N	Activity?	Y	N
Alternatives?	Y	N	Tone?	Y	N
Emotional Tone?	Y	N	Identification?	Y	N
Early Decision?	Y	N	Projection to Future	Y	N
			Resistance to Sway?	Y	N
Exploration?	Y	N	Commitment?	Y	N

Status: _____

Person who influenced? N Y who? _____

Person affected? N Y who? _____

Comments:

Marriage and Role as Spouse:

Knowledgeability?	Y	N	Knowledgeability?	Y	N
Info Gathering?	Y	N	Activity?	Y	N
Alternatives?	Y	N	Tone?	Y	N
Emotional Tone?	Y	N	Identification?	Y	N
Early Decision?	Y	N	Projection to Future	Y	N

			Resistance to Sway?	Y	N
Exploration?	Y	N	Commitment?	Y	N

Status: _____

Person who influenced? N Y who? _____

Person affected? N Y who? _____

Comments:

Role of Parent:

Knowledgeability?	Y	N	Knowledgeability?	Y	N
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Info Gathering?	Y	N	Activity?	Y	N
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Alternatives?	Y	N	Tone?	Y	N
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Emotional Tone?	Y	N	Identification?	Y	N
-----------------	---	---	-----------------	---	---

Early Decision?	Y	N	Projection to Future	Y	N
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			Resistance to Sway?	Y	N
--	--	--	---------------------	---	---

Exploration?	Y	N	Commitment?	Y	N
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Status: _____

Person who influenced? N Y who? _____

Person affected? N Y who? _____

Comments:

APPENDIX K

Dear Parent

We would like your permission for your child to participate in a study that is being conducted by the Psychology Department at the University of Manitoba. The purpose of the study is to examine how an individual's identity develops and how involvement in relationships with others (such as friends) develops. We have studied this topic with first year university students and now we would like to better understand how identity and involvement in relationships develop in early adolescence.

What would participation in the study involve?

1) Your child would be asked to fill out four questionnaires with other members of his class. Then we will randomly select a smaller number of students to participate in an individual interview. The interview will take place at school, during class time, and be with a trained interviewer from the University of Manitoba. Completion of the questionnaires would take approximately 15 minutes and the interview would take approximately 30-40 minutes. For two of the questionnaires the student would read a number of statements or phrases such as "I've got a clear idea of what I want to be", "I care deeply for others", "Warm and understanding", "In search of my

identity" and indicate on a five-point scale how well these statements describe him or her. For the third questionnaire, participants would rate statements such as "I try to be friendly to people", "I let other people control my actions" and "I try to participate in group activities" on a 6-point scale in relation to how often they behave this way and whether they do so with few people or most people.

2) You would be asked to complete the enclosed Background Information Form. General information of this kind is important because it will allow us to compare characteristics of the students participating in this study with others, such as the university students who participated earlier.

The information that is obtained in this study will be confidential and only used by researchers who are involved in the study. Any details that might reveal your child's identity will not be recorded in the research report.

There is also a possibility that we may do a follow-up of this study within a few years. It would be very helpful if we were able to speak to as many of the same students as possible as they get older. If you are agreeable to our contacting you if there is a follow-up study, please put your phone number on the background information sheet. Of

course, if you did not want to participate at that time you would be under no obligation to do so.

If your child would like to participate in this study and you are willing to have them do so, please sign the enclosed Parent's Consent Form and have your child sign the Youth's Consent Form. As well, please complete the Background Information Sheet and send all three sheets, sealed in the envelope, with your child to their homeroom class. Even if you decide that your child will not participate, please indicate this on the sheet and send the envelope back to the homeroom class with your child.

At the completion of the study, a written summary of the findings will be given to the students during their home room class and they will be asked to bring the information home to share with you.

Thank you for considering our request. Your participation and your child's participation are greatly appreciated. If you have further questions about this study please contact us at 474-9718.

Sincerely,

Paula Battle, M.A.

Doctoral Student

C. Koverola, Ph. D., C. Psych

Supervising Psychologist

Department of Psychology, University of Manitoba

APPENDIX L

CONSENT FORMS

Parent's Consent Form

I understand that my child and I have been asked to participate in a study that will investigate the development of identity and relationships with others (such as friends) in young adolescent boys and girls.

I understand that my participation will involve completing the enclosed Background Information Form and sending this form with the signed consent forms back to Arthur A. Leach School with my child. I also understand that my child would complete four questionnaires and may be interviewed about his/her goals, beliefs and plans he/she has formed to this point in life.

I understand that our participation in this study is completely voluntary and that there are no penalties of any kind if we decide not to participate. I also understand that if we agree to participate now we can change our minds at any time and that there are no penalties for doing so.

I understand that the information collected in this study will be kept confidential and will only be used by the researchers involved in the study. I also understand any details that might reveal the identity of any members

of my family will be excluded from any research reports.

I have had a chance to ask questions. I volunteer to be in this study.

Name (Please print)

Signature

Date

Youth's Consent Form

I understand that I have been asked to be in a study about boys and girls my age and what we think about ourselves and relationships with other people. If I agree to be in this study I understand that I will fill out 4 questionnaires and that I may be interviewed by the researcher during school time.

I understand that I don't have to answer any questions I don't want to and that it is O.K if I don't want to participate at all. I also understand and that even if I agree to be in the study now, I can change my mind at any time and that there would be no problem if I did so.

I understand that my answers on the questionnaires and what I say in the interview will be between me and the researchers and that no one else will know what I said.

If understand that if I have any questions about the study I can ask my parents or the researchers.

I have had a chance to ask questions. I volunteer to be in this study.

Name (Please print)

Signature

Date

APPENDIX M
Feedback Sheet

Dear Student and Parent:

We wish to thank you for participating in our study. We would also like to tell you more about the study's goals.

We are trying to understand how females and males develop their identity and their connections to other people as they grow up. In our research with young adults we found that males and females had achieved the same level of identity but the females had a higher level of relatedness with others than had the males. We are very interested in further exploring these differences and determining whether they are evident in younger people as well.

We hope that the results yielded by our study will enrich our understanding of boys' and girls' development. Such understanding of both the similarities and differences in female and male personality development can assist us to better support young people in their personality development.

A summary of the results of this study will be distributed to the participants in their homeroom class.

The students will then be asked to bring the summary home to share with you. If you have any questions about the results please contact us at 474-8719 and we would be happy to answer them.

Sincerely,

Paula Battle, M.A.

Doctoral Student

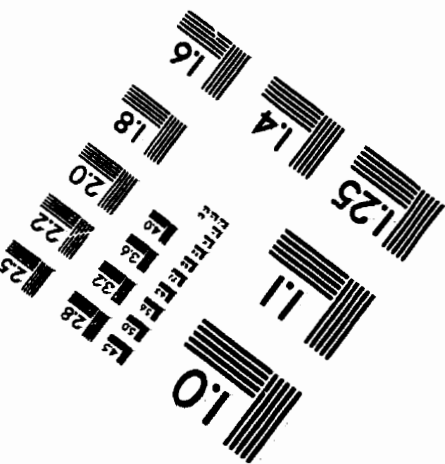
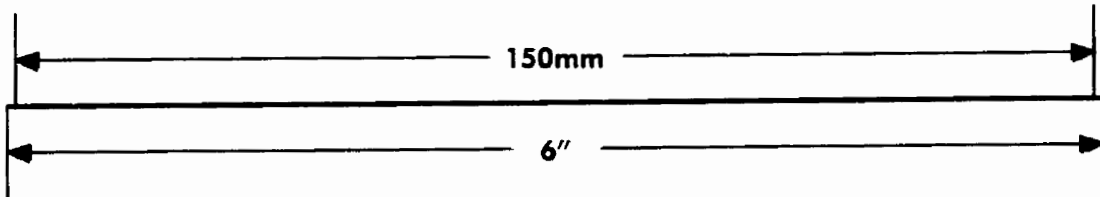
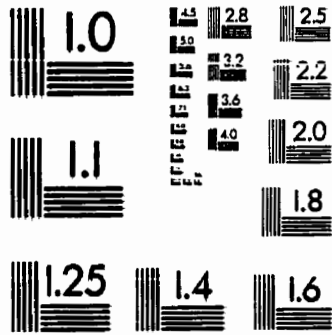
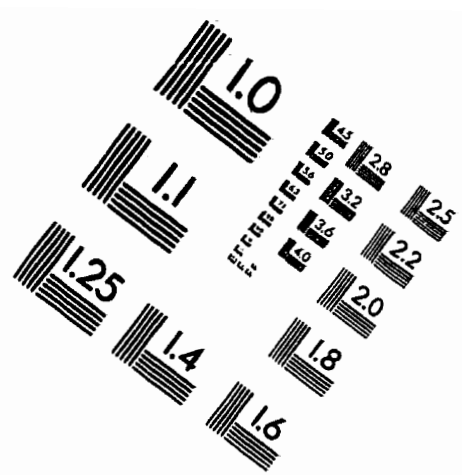
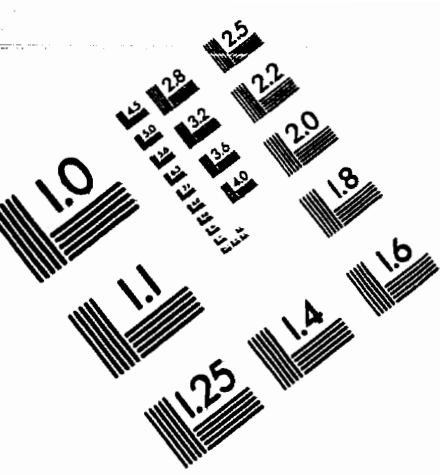
C. Koverola, Ph.D., C. Psych.

Supervising Psychologist

Department of Psychology

University of Manitoba

TEST TARGET (QA-3)



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