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LA THÈSE A ÉTÉ
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IDENTITY STATUS, RESOLUTION OF PREVIOUS PSYCHOSOCIAL
STAGES AND SOCIAL SUPPORT IN COLLEGE WOMEN

A dissertation presented
to the School of Graduate Studies
University of Ottawa

In Partial Fullfillment of the
Requirement for the Degree of
Doctor of Philosophy

by

Lesly I. Merrill

January 18, 1980

ACKNOWLEDGEMENTS

This dissertation was prepared under the supervision of Professor Gilles Chagnon of the School of Psychology of the University of Ottawa. I gratefully acknowledge his advice, encouragement and guidance.

I also wish to express appreciation to the following persons at the University of Ottawa: Dr. Wm..F. Barry for his interest and support, and for critically reviewing the manuscript; Dr. Richard Clément of the School of Psychology and Assistant Professor Jean Paul Dionne of the Faculty of Education, for their generous assistance with psychometrics and statistics; Mrs. Ann Hurd for helping with computer programming; my friend and colleague Irwin Pencer for helping to rate subjects.

I am particularly grateful to the young women who participated, and were interested, in the project, and who gave so generously of their time.

Finally, I especially wish to thank my daughters, Susan and Jill, for their support and understanding during the undertaking of this task.

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ABSTRACT

This study investigated two hypotheses derived from Erikson's psychosocial theory as they apply to identity formation in females, viz., there is a positive relationship between; (1) identity resolution and resolution of the preceding stages of trust, autonomy, initiative and industry; (2) identity resolution and social support.

Female volunteers were solicited from third and fourth year classes at the University of Ottawa. Using Marcia's (1966) identity status interview, 47 Achievement (A), 38 Moratorium (M), 28 Foreclosure (F) and 32 Diffusion (D) individuals were identified, yielding a total sample of 135. The subjects were administered Boyd's (1968) Self-Description Questionnaire (S-DQ) to assess ego stage resolution, a Social Support Questionnaire (SSQ) to assess perceived social support, and a Data Questionnaire to obtain demographic information. Multivariate analysis of variance was used to test the ego stage hypothesis. The 11 variables on the SSQ were factor analyzed yielding three factors which were labelled: Belonging in the Community (F. I); Support from Others (F. II); Satisfaction with Support from Others (F. III). Analyses of variance were used to test the social support hypothesis.

The ego stage hypothesis was partially supported by the results of this study as the following comparisons were significant: $F > D$ on Trust, Initiative and Industry, $A > D$ on Autonomy and Initiative. Combined group comparisons were: $A \& F > D$, and $A \& M \& F > D$ on Trust, Initiative and Industry. Stronger support was found for the social support hypothesis as the following comparisons were significant: $F > D$ and $A \& F > D$ on F. I; $A > D$, $M > D$, and $F > D$ on F. II and F. III; plus $F > M$ on F. II. The results obtained suggest that social support may be an important factor in the developmental task of identity resolution and thus provide empirical support for a significant part of Erikson's psychosocial theory. The results regarding identity and ego stage resolution, although in the direction hypothesized, are less clear-cut and provide only partial support for the ego stage hypothesis as they deal with current resolutions of ego stages and not resolutions that occurred at an earlier age. Findings also provide additional validity for Marcia's identity status construct as the "higher" ego statuses are distinct from the Diffusion group on ego stages and on social support. Also, the A's emerged as high on Autonomy and Initiative and the F's as high on Trust and Industry. Some questions were raised concerning the meaning of the high scores for the F. status. Finally, it was suggested that the results have implications for counselling and social planning.

INTRODUCTION

The purpose of the present research is to investigate two hypotheses from E. H. Erikson's psychosocial theory as they apply to identity formation in females. The implication in these hypotheses is that: (a) there is a positive relationship between identity resolution and the resolution of the preceding psychosocial stages; and (b) there is a positive relationship between identity resolution and social support.

Erikson hypothesized two polar outcomes of the identity crisis, viz., Identity versus Role Confusion. J. E. Marcia (1964, 1966), in his paradigm of identity statuses, has suggested four ways of coping with the identity crisis, and has thereby given a new and broader definition to the resolution of this psychosocial stage. It is Marcia's operational definition of identity that will be used in this study to differentiate individuals according to their various ways of coping with the identity crisis.

Although the search for self-identity, involving such questions as "Who am I", "Where do I belong?", has been asked by individuals in every historical age, it becomes particularly important in times of marked social change when cultural guidelines tend to be blurred, shifting, and sometimes non-existent (Lynd, 1958). In the larger cultural view, the 20th century has been an age of considerable social change, and E. H. Erikson (1950, pp. 242, 239) has suggested that the search for identity has become as strategic in our time as the study of sex was in Freud's time. On a smaller social and historical

scale, the recent decades have been times of marked change in women's roles, life styles, attitudes, and values, and these changes have been accompanied by an increased concern regarding the question of female identity. Hence, the study of identity resolution in women has a special significance for our time.

According to Erikson's epigenetic theory, successful resolution of each developmental stage is dependent on favorable resolution of preceding stages. The ability to cope with each developmental crisis is dependent on the attitudes the individual has toward himself and the world as a result of his successful or unsuccessful resolution of previous crises. Hence, it would follow from Erikson's theory that identity resolution should be related to the preceding psychosocial stages, which involve the ego qualities of basic trust, autonomy, initiative, and industry.

A few studies have investigated these relationships for various groups of subjects. Although, the findings of these studies have been generally supportive of Erikson's epigenetic theory, they have varied regarding the relative importance of the various psychosocial stages to identity and regarding which stages are related to identity. In addition, only one study (Rothman, 1978) appears to have been made regarding the relationship between the ego identity statuses and the outcome of previous psychosocial stages. If the identity statuses represent real differences among individuals in dealing with an identity crisis, then it seems important to ask what ego qualities or basic attitudes underlie the various styles of identity resolution represented by the statuses.

It is a purpose of the present research to investigate the relationship between the identity statuses, which represent styles of coping with the identity crisis, and the current resolution of the other psychosocial stages, in a sample of third and fourth year college women.

A minor goal of the study will be to investigate the pertinency of the various ego stages in the lives of these women. Which issues or crises are of current concern? Is there, in fact, a concern regarding identity? Pertinency is used here to "refer to a person's conscious awareness of the attention he is directing to a particular set of basic alternative attitudes" (Boyd and Koskela, 1970, p.6).

To assess an individual's position along the bipolar dimension of each ego stage, and to assess the pertinency of each ego stage, a Self-Description Questionnaire (S-D Q) developed by Boyd (1968) will be used.

The psychosocial nature of Erikson's theory implies a mutual relationship between the growing organism and the social milieu. The environment, at each stage of development must supply the essential nutrients for the organism to develop and it does this through various forms of social or environmental support. A few studies have investigated the relationship between social support and identity resolution in ethnic and black groups. However, there appear to be no studies that have directly investigated the question of social support and identity formation in males and females in the larger North American culture. Yet this would seem to be an important question. If the identity crisis is the pivotal stage in the

developmental cycle from birth to old age, as Erikson suggests, how can the culture provide the optimum milieu in which it can take place? To do this properly requires a knowledge of the relationship between identity and social support.

A third goal of the present study will be to investigate the relationship between the identity statuses and perceived social support.

A questionnaire, based partly on well known measures of social support, and including some questions which are new to this study, will be used to measure perceived social support.

For purposes of this dissertation, it is to be understood that the use of the word "man" is in its generic sense, such that references to "his", "men", "himself", etc., are abstractions that represent individual men and women.

CHAPTER I

REVIEW OF THE LITERATURE

This chapter is divided into seven sections. Section One sets forth the relevance and significance of the identity concept for women in the present culture. Section Two presents the concepts of ego development, psychosocial stages and ego identity, as they are set forth in Erikson's theory. Section Three discusses operational definitions of ego identity and presents James Marcia's experimental model of identity statuses, along with a descriptive summary of the identity statuses. The empirical literature pertaining to identity and psychosocial stages is reviewed in Section Four, followed by a review of literature regarding identity and social support in Section Five. Section Six offers a statement of the purpose of the study, and Section Seven concludes the chapter with a statement of the rationale and hypotheses of the study.

Relevance and Significance of Identity for Women

Is there an identity crisis? -- a time of experimentation and self-exploration, when the individual attempts to synthesize his past identifications and experiences and decide who he is?, where he is going?, and what is reasonable for him to do given his unique abilities and needs? Gallatin (1975) points out that self-knowledge of the sort that Erikson describes depends to a degree on leisure, and on the opportunity and the need to make choices. As such, the identity crisis is largely an invention of industrialized society, and

has applied mainly to the middle class, white male. Blacks and lower class youth in our society still have limited choices and opportunities regarding life plans (Hauser, 1972).

Generally speaking, these limitations have also applied to females, whose traditional roles have been largely as wives and mothers, and, as such, mainly prescribed by biology and society. However, the changing attitudes regarding women's roles, increased employment opportunities for women, more effective birth control methods, longer life expectancy, and recently, the pressure from the Women's Liberation movement for greater educational and career opportunities for women, have made it increasingly possible, and necessary, for women to make choices regarding their life plans, and to try to settle on a personal identity. To do this wisely, requires an understanding of identity formation, both by women themselves and by those who counsel women, both vocationally and personally.

In addition, identity diffusion or a lack of personal identity in women has been linked to various social problems: (a) the empty-nest and housewives syndromes (Bardwick, 1971; Donelson and Gullahorn, 1977); (b) alcoholism (Curlee, 1969); and (c) depression (Bart, 1971). Donelson and Gullahorn, (1977) also point out that a woman's family may pay a high price when a mother has a vicarious or reflected identity instead of a personal one, as she often seeks an outlet for her self expression through domination in the home and puts pressure on her husband and children to provide her with vicarious achievement satisfaction.

A brief look at some of the current social issues and concerns serves to document the growing interest in female

identity. In the area of the communication media, there were more movies dealing with women's conflicts than with men's conflicts in 1978 (Chatelaine, September, 1978). These conflicts often centre around the subject of identity, e.g., An Unmarried Woman, The Turning Point. Also, many more books are being written around the theme of female identity than previously and the fact that some of these appear on the best seller lists of fiction and non-fiction serves to point up the widespread interest in the subject. For example, My Mother, Myself, by Friday, and Two Women by Anderson both made the MacLeans (October, 1978) and Time (October 2, 1978) bestseller lists. In the judicial field, the new legislation proposed by the Ontario Law Reform Commission and passed by the legislature regarding Divorce and Family Property, is designed to deal with the legal problems of changes in women's status and identity, and serves to emphasize that female identity concerns are issues recognized by a large segment of society.

In addition to the above indications of a current interest in female identity, there has also been a large amount of systematic research in the area, e.g., O'Connell, 1976; Josselson, 1972; Orloffsky, 1978; Prager, 1976; Raphael, 1975; Schenkel, 1975; Toder and Marcia, 1973; Joyce, 1970; Miller (in press); Howard, 1975; Greenhouse, 1975; Dignan, 1965.

In summary, the notion of an identity crisis for large numbers of women is a recent and growing phenomenon in our society, and has become a current social issue. Accordingly, the necessity to understand female identity formation appears to have become increasingly important.

Erikson's Theory of Psychosocial Development

E. H. Erikson (1959, 1963, 1968) is probably the most influential writer on identity in the latter half of the 20th century. His writings not only have wide interdisciplinary appeal among professionals in the Social Sciences and the Arts but they have also found their way into the popular media. In addition, Erikson's theory of ego identity, since it is essentially a psychosocial theory, is particularly sensitive to changes in the social milieu and thus seems to be appropriate for a study of female identity in an era of considerable social change.

His concept of ego identity has evolved out of ego psychoanalytic theory and his own psychosocial theory of personality development. A brief overview of these two concepts will help to provide a background for a consideration of the identity concept.

Ego Development

Personality structure in psychoanalytic terms consists of three systems, viz., the id, the ego, and the superego, which are abstractions that refer to certain characteristics of behavior (Rapaport, 1963, p. 6). Behavior is nearly always the product of an interaction among these three systems. The id consists of everything psychological that is inherited. It is the sources of all drives and the reservoir of instincts. The superego is the internal representative of the traditional values and ideals of society as they are interpreted to the child by his parents. It represents that part of the personality that deals with moral and social values.

Sigmund Freud thought of the ego as that organizing aspect of the psyche or personality structure which is responsible for testing reality and mediating between the conflicting demands of the other two systems. He endeavored to explain the motivation of people in conflict with themselves and so he emphasized intrapsychic aspects of the personality. He saw the ego mainly as a set of defenses against inner drives and outer reality, and as depending on instinctual sources for its energy.

The trend in psychoanalytic thought has been to grant increasing autonomy to the ego (Hartmann, Kris, and Loewenstein,

1946) relevant to the id and the superego, and to view the ego's function as extending beyond mere defensiveness to adaptation. Erikson (1963), in particular, emphasized the unifying function of the ego, and he tends to measure the ego's strength by the range of conditions that an individual's ego is able to unify. He saw the ego as mediating between outer events and inner responses, between past and future, and between the higher and the lower selves. Erikson's concept of ego strength thus accounts for the difference between feeling whole or fragmented. He sees the ego as the inner synthesizer that organizes experience and guides action, that enables the individual to maintain centrality in his experience so he is capable of making meaningful choices (Roazen, 1976, p. 25).

Psychosocial Development

Erikson (1963) added another important dimension to Freud's views and those of the ego psychologists by setting forth his concept of psychosocial stages, which emphasizes the mutual relationship between the developing individual and society. He viewed the ego as developing from the interaction of biological and social factors in a series of eight successive stages, which span the period from birth to old age.

According to Erikson (1963), each of the eight stages of ego growth and personality development is associated with a specific task or crisis, and these normally arise within a particular age period. Each step in the life cycle represents "a new life task, that is, a set of choices and tests which are in some traditional way prescribed and prepared for him by his society's structure" (Erikson, 1958, p. 254). The developing

individual, during each period of his life cycle, has particular needs, and as he matures, he displays certain abilities. In turn society at each period of development makes certain demands on these abilities, and if all goes well, provides certain rewards and gratification of needs. The development of these stages thus depends upon social interactions in which a demand is placed upon the individual and he reacts to these demands, or in Eriksonian terms, a crisis ensues. The crisis is whether the ego will prove strong enough "to integrate the timetable of the organism with the structure of social institutions" (Erikson, 1963, p. 246). Erikson thus sees personality growth in terms of achievement of integration between the organisms developing needs and abilities, and the demands and expectations of the environment.

Erikson (1968) defines crisis not as "an impending sense of catastrophe... but a necessary turning point, a crucial moment when development must move one way or another ..." (p. 16).

Erikson coined the term "epigenetic" to describe this pattern of human development and he interprets his epigenetic outlook to mean the "anything that grows has a ground plan and.. out of this ground plan the parts arise, each having its time of special ascendancy, until all parts have risen to form a functioning whole (1959, p. 52).

Erikson uses an epigenetic diagram (Figure 1) to illustrate the successive stages of growth in the personality. The squares, along an ascending diagonal, indicate both a sequence of stages and a gradual development of component parts

VIII MATURITY							EGO INTEGRITY VS. DESPAIR
VII ADULTHOOD						GENERA- TIVITY VS. - STAGNATION	
VI YOUNG ADULTHOOD						INTIMACY VS. ISOLATION	
V PUBERTY AND ADOLESCENCE					IDENTITY VS. ROLE CONFUSION		
IV LATENCY					INDUSTRY VS. INFERIORITY		
III LOCOMOTOR- GENITAL				INITIATIVE VS. GUILT			
II MUSCULAR- ANAL				AUTONOMY VS. SHAME, DOUBT			
I ORAL SENSORY							
	BASIC TRUST VS. MISTRUST						

Note. From Childhood and Society by E. H. Erikson, New York: Norton & Co., 1963, 273

Figure 1 - Epigenetic Diagram

of the psychosocial personality. Each of the eight stages are described in terms of the basic attitudes which develop out of the resolution of the crisis of that period, and the two poles of the attitude reflect successful solution of, or failure at, the task. Each box contains both a criterion of psychosocial health and of ill-health, and represents a crisis where development can go one way or the other.

The eight stages are: (1) Basic Trust vs. Mistrust (during the oral stages); (2) Autonomy vs. Shame and Doubt (during the anal stage); (3) Initiative vs. Guilt (during the phallic stage); (4) Industry vs. Inferiority (during latency); (5) Identity vs. Role Confusion (during adolescence); (6) Intimacy vs. Isolation (during young adulthood); (7) Generativity vs. Stagnation (during mature adulthood); (8) Ego Integrity vs. Despair (during old age). The first five psychosocial stages also parallel the Freudian psychosexual stages of development (see the left side of Figure 1).

Erikson's model of development thus includes the psychosocial phase-specific crisis, the time occurrence and the corresponding psychosocial stages. Although, the sexual drives are not the focus of his theory, Erikson recognizes them as an important component of the maturational development of the individual.

According to Erikson's epigenetic view, each stage is systematically related to all other stages. The ability to cope successfully or unsuccessfully with each developmental stage is dependent on the attitudes the individual has toward himself and the world as a result of the way he has resolved previous stages.

Erikson has thus developed a schedule of unifying strengths that are called forth by the developing life cycle (1963, p. 46). Each new strength has the task of resolving a crisis in growth. Every resolution involves both psychological and social dimensions. The role of society is to provide both institutions and caretakers to assist the individual in adapting his abilities to the social milieu. The chart of psychosocial gains, which he presents in Figure 1, is the result of the ego's successful mediation between physical stages and social institutions.

Erikson foresaw that his chart might lead to some misconceptions regarding the dynamic nature of the stages. He suggests that three misconceptions often arise. First, he points out that, although a particular crisis is most likely to arise at its chronological phase, it exists in some sense before its decisive and critical time normally arises and it may reoccur at later phases. For example, a baby may show indications of "autonomy" in the first few weeks of life. However, it is not usually until the second year of life that maturational development and social expectations coincide to produce the crisis involving the question of free will.

Secondly, a crisis is never resolved in a wholly positive or negative fashion, e.g., one either trusts or mistrusts. Resolution is conceived by Erikson (1963) to be a ratio between positive and negative elements of an ego stage. A successful resolution implies an emphasis on the positive elements but it is also important to have some negative elements present. For example, a completely trusting person would be at a distinct disadvantage in most cultures.

Finally, crises are not resolved once and for all. New experiences may alter past resolutions and provide for new solutions to the crisis. An individual may be very trusting as a preschooler but if the school environment is harsh and inconsistent, the person may become mistrustful as he is shaped by the reality of his experience.

It is important to note that Erikson seems to imply mutuality in the relationship between the individual and society, and not conformity of the individual to society. There is thus reciprocal participation between the individual and his environment. Society becomes a necessary matrix for the development of all behavior but even as it influences individuals, it may in turn be influenced by the individual.

In summary, the Epigenetic theory conceives of the development of personality in terms of physical and social growth within a familial and social structure and sees development in terms of decisive encounters with the environment. Whereas Freud was concerned with the intrapsychic aspects of ego development and viewed the environment, if at all, as the "outer world", Erikson looks more to a mutual relationship between the individual and society and to social sources of ego strength. In Erikson's concept of ego development, it is impossible to abstract man from society and his concept of ego is essentially a social one. Erikson's epigenetic view of ego development thus leads to a much greater emphasis on social processes and their influence on the developing personality than has previously been the case in psychoanalytic theory.



Ego Identity

Ego identity is considered by Erikson to be the successful resolution of the fifth stage of ego development which he hypothesized to occur during adolescence. The task of this stage is for the individual to make a choice of occupation and role that is compatible with himself and with the opportunities of his society.

At this stage, the individual may find himself exposed to a combination of experiences that demand his simultaneous commitment to physical intimacy, to decisive occupational choice, to energetic competition, and to psychosocial self-definition (Erikson, 1959, p. 123). Failure to meet these demands may result in identity diffusion. The individual may experience problems with intimacy, a diffusion of time perspective, and a diffusion of industry resulting in an inability to concentrate or in a self-destructive preoccupation with some one-sided activity, or he may choose a negative identity, i.e. a role that has been presented to him by society as undesirable or dangerous.

Erikson has made the identity crisis the pivotal stage in his theory of ego development. It marks the transition from childhood to adulthood, and he contends that its manner of resolution depends on what has gone before and determines much of what follows. It may also be a time for reworking earlier resolutions regarding previous stages, and arriving at new solutions to previous crisis. As such, the tasks of this stage may involve a re-evaluation of beliefs, attitudes and behaviors

as one considers what one has been in the past from a new perspective and establishes what one hopes to become in the future. Constantinople (1969), in her research on personality development in college students, found some evidence of changes across the college years in the areas of basic trust versus mistrust and initiative versus guilt (p. 369). Nixon (1962) suggests, in his discussion of the cognitive stages of development, that rethinking in late adolescence can provide a new perspective and lead to changes in attitudes acquired earlier. This is in line with the orthodox psychoanalytic view which sees adolescence as a time when the oral, anal and phallic stages are worked through again at a faster pace.

Many societies recognize the importance and difficulty of the tasks at this stage and grant the young person a psychosocial moratorium in which to work through his identity crisis. Erikson (1968, p. 157) describes the moratorium as a period of delay granted to someone who is not ready to make a commitment. It is a period, "that is characterized by a selective permissiveness on the part of society and of provocative playfulness on the part of youth" before taking up adult commitments. It allows the individual leeway to experiment with roles and to test himself in situations without yet assuming the responsibilities of the future.

Erikson admits that he has tried out the term identity in many different connotations (1968, p. 208) and has thus set forth different definitions of the concept. At one time Erikson (1959) suggests that ego identity signifies a sense of being a distinct individual in one's own right and within a social framework. As such the term includes the concept of one's self

as a continuous, active personal being; and of one's self as a meaningful part of a surrounding human group. Erikson (1959) further describes it as follows:

It is this identity of something in the individuals core with an essential aspect of a group's inner coherence which is under consideration here: for the young individual must learn to be most like himself where he means most to others - those others, to be sure, who have come to mean most to him. The term identity expresses such a mutual relation in that it connotes both a persistent sameness within oneself (selfsameness) and a persistent sharing of some kind of essential character with others. (p. 102)

The concept thus includes a unique individual, who searches for a place of his own in society where he can be himself as well as a meaningful part of society.

At another time, Erikson (1959) defines the process of identity formation

as an evolving configuration - a configuration which is gradually established by successive ego syntheses and resyntheses throughout childhood; it is a configuration gradually integrating constitutional givens, idiosyncratic libidinal needs, favored capacities, significant identifications, effective defenses, successful sublimations, and consistent roles. (p. 116)

The emphasis here seems to be on a synthesis of childhood identifications, taking into account the individual's needs, abilities and interests, and the nature of his social world. it implies a degree of self knowledge and a realistic view of one's relationship to society.

In summarizing his approach to identity, Erikson (1959, p. 102) suggest that the predominant characteristics of the concept seem to be: (1) a feeling of uniqueness; (2) continuity of personal character; (3) ego synthesis; (4) "solidarity with a group's ideals and identity".

What does it feel like to have a sense of identity. Is it a conscious feeling? Erikson (1959) says that it is experienced preconsciously as a sense of psychosocial well being. One feels at home in one's body, has a sense of "knowing where one is going" and an inner assurance of anticipated recognition from those who count. Many people simply experience it as a sense of things coming together. As one science student put it "things are beginning to make sense, and fit in with other things".

What factors influence or are important to identity formation? Identification certainly plays a part in the formation of identity. All through childhood there are tentative crystallizations of identity. Family, neighborhood and school provide contact and experimental identifications with younger and with older people and with society. The child builds up expectations of what it will be like to be older and what it will feel like to have been younger. These expectations become part of his identity. It seems that the final identity includes all the significant identifications of childhood but these are altered so as to form a unique and reasonably coherent whole, i.e., a new configuration.

There are also philosophical considerations involved in identity formation. Erikson (1959) suggests that to envisage a future, a young adult may need something like a "religion" and "a clear comprehension of life in the light of an intelligible theory" (p. 142). An ideology seems to be a necessity for the growing ego, which is part of the succession of generations, and has to make its own synthesis of past and future.

These then are some of the general factors and considerations involved in identity formation. In line with the epigenetic principle of ego growth, one must also look at the process in terms of accomplishments hypothesized to occur at various stages of development.

Infancy and the mutuality of recognition. A sense of basic trust, a pervasive attitude to oneself and the world, is the psychosocial accomplishment to be derived from the first year of life. Its development in the infant depends on the mother's ability to feed and welcome him, which in turn depends on her development as a woman, on her unconscious attitude to the child, and on her and her community's attitude to the act of nursing and care of the child, and on the responses of the newborn.

The amount of trust depends on the quality of the maternal relationship and forms the basis for a sense of being "all right". The earliest sense of identity develops from this encounter which includes mutual trustworthiness and mutual recognition. The institution which attempts to uphold basic trust is Religion. A characteristic of ill-health which may develop from this stage is basic mistrust, the tendency to withdraw into self when things go wrong.

Early childhood and the will to be oneself. As the child begins to coordinate conflicting action patterns, characterized by tendencies of "holding on" and "letting go", he begins to experience his autonomous will. This stage is

decisive for establishing the ratio between cooperativeness and willfulness.

The quality of autonomy which parents are able to grant the child depends on the dignity and sense of personal independence they derive from their own lives. The principle of law and order seems to be the institutional safeguard for the autonomy of the individual. If parents are frustrated in marriage, in work, in citizenship, they become unwilling to grant each other or their children a measure of autonomy.

Erikson sees the contribution of this childhood stage to eventual identity formation as the courage to be an independent individual who can choose and guide his own future.

Childhood and the anticipation of roles. The next question in development seems to be "what kind of person will I be?" The child must emerge with a sense of initiative as a basis for a sense of ambition and purpose. This is the stage of finding out what he can and may do, and of increased imagination. A danger at this stage is that the child will develop deep guilt feelings and his conscience will be too punitive, and this may keep him from living up to his inner capacities; or, alternately, he may over-compensate.

The contribution of the initiative stage to later identity development is that of freeing the child's initiative and sense of purpose for adult tasks, e.g., "I am what I imagine I will be". These promise, but can not guarantee, a fulfillment of one's capacities.

School age and task identification. The child is now ready "to become big in the sense of sharing obligations,

discipline and performance" (Erikson, 1968, p. 122). He is eager to make things together, to share in construction and planning, and to watch and imitate people in occupations which he can comprehend, e.g. fireman, garbageman. The child in this stage needs to develop a sense of industry. He needs to be able to make things and make them well and learn to win recognition by producing things.

The danger is that he will develop a sense of inferiority, e.g. nothing he has learned to do well so far seems to count with his peers or teachers, or that he will get fixated on being a good little helper, or never learn to do one thing really well. Another danger is that he may accept work as the only criterion of worthwhileness, playing down imagination and playfulness.

He needs to develop a sense of competence through the free exercise of skill and intelligence in the completion of serious tasks. This is a necessary basis for cooperative participation in productive adult life. The contribution of this school age to the sense of identity seems to be "I am what I can learn to make work".

Adolescence. If the need for trust in oneself and in others was established in the first stage, the adolescent now looks for men and ideas to have faith in. If the sense of autonomy developed from the second stage, the adolescent now seeks the opportunity to decide on a suitable avenue of duty and service, i.e., a career. If the heritage of the play age is unlimited imagination as to what one might become, then the

adolescent will seek peers and leaders who give scope to his aspirations. Finally, if he has gained from the school age the desire to make something work and work well, then the choice of an occupation becomes something more than just a question of remuneration and of status.

The adolescent looks to society to provide opportunities and choices in which he can express himself through the exercise of initiative and productivity. The individual needs to be able to do something that feels like him, and at the same time, that is useful and worthwhile. If the environment deprives him too radically of all forms of self expression then he may resist as vigorously as though he were fighting for his survival. Erikson (1968) points out that in the "social jungle of human existence there is no feeling of being alive without a sense of identity" (p. 130). Furthermore, he believes that, in general, young people are more disturbed by the inability to settle on an occupation than by other indecisions.

Erikson suggests that the ideology of a culture is the social institution which is the guardian of identity. He also uses the term imagery of an aristocracy to connote that, within a world image and a given course in history, the best people will come to rule and rule will develop the best in people. Young people must be able to convince themselves that those who succeed in the adult world thereby take on the obligation of being the best. Otherwise, the young person may become cynical or lost.

Stages beyond identity. The following three stages beyond identity will be discussed only briefly.

The next developmental task is to achieve intimacy, and true engagement with others requires firm self-delineation. It is necessary to be sure of one's own identity before one can risk being close to another person and achieve true intimacy. If there is a lack of self-delineation, there is apt to be a strain in relationships as though engagement with others will lead to interpersonal fusion and a lack of identity. The individual who is threatened in this way often holds back in a relationship and is cautious of commitment. If the strain is not resolved the individual may isolate himself and enter only stereotyped and formalized interpersonal relationships, or seek intimacy with improbable partners.

The seventh stage involves generativity where the individual is called upon to give of himself to others either in the role of parent and/or in his profession and other life activities. It is based on the fact that mature man needs to be needed. The inability to give of oneself results from the confusion of giver and receiver roles.

The eighth and final stage of Erikson's developmental outline includes the fruits of all the other stages. The challenge of this stage is to come to terms with what one's life has been and is, and to achieve out of one's experience some feeling of world order and spiritual sense.

In summary, Erikson's view of identity formation suggests that a sense of identity comes about through mastery of the psychosocial tasks of each of the first five stages of

development, and that this accomplishment then gives one a genuine readiness to face the challenges of the last three stages of development.

In conclusion, the process of identity formation seems to depend on the unique growth pattern of the individual, which includes constitutional givens and maturational processes; on the nature of the environment, which includes the mother, father, neighborhood and culture, as well as the traditions and wisdom of past generations; and on the process of interaction between the two. A worksheet depicting the interrelationships between maturation, the social milieu and stages of development, is shown in Figure 2.

Measurement of Ego Identity

Definitions

Erikson's concept of ego identity is broad, connotative and complex, and he has not been precise in his delineation of what is involved in gaining an identity. Hence, the concept has been difficult to put into operational terms. Two levels of meaning seem to be involved. The first level defines ego identity as a subjective feeling. It refers to the individual's sense of "who he is, knowing where he is going, perceiving himself as having inner sameness and continuity and being certain about the perception others have of him" (cf. Marcia, 1976; Raphael, 1975; Baker, 1971). Several researchers have concentrated on this subjective and intrapsychic aspect of Erikson's writings (Bronson, 1959; Gruen, 1960; Rasmussen, 1964; Dignan, 1965; Hauser, 1971).

FIG 2: ERIKSON'S WORKSHEET OF DEVELOPMENTAL PHASES

psychosocial Crises	Radius of Significant Relations		Related Elements of Social Order		Psychosocial Modalities		Psychosexual Stages
	Maternal person		Cosmic order		To get To give in return		
I Trust vs. Mistrust							Oral-respiratory Sensory, kinesthetic (Incorporative Modes)
II Autonomy vs. shame, doubt	Parental persons		"Law and order"		To hold (on) To let (go)		Anal-urethral, mus- cular (retentive- eliminative)
III Initiative vs. guilt	Basic Family		Ideal Prototypes		To make (=going after To "make Like" (=playing)		Infantile-genital, Locomotor (intru- sive, inclusive)
IV Industry vs inferiority	"Neighbourhood," School		Technological elements		To make things (=completing) To make things together		"Latency"
V Identity and repudiation vs identity diffusion	Peer groups and outgroups; models of leadership		Ideological perspectives		To be oneself (or not to be) To share being oneself		Puberty
VI Intimacy and solidarity vs. isolation	Partners in friendship, sex, competition, cooperation		Patterns of cooperation and competition		To lose and find oneself in another		Genitality
VII Generativity vs self-absorption	Divided labor and shared household		Currents of education and tradition		To make be To take care of		
VIII Integrity vs disgust despair	"Mankind" "My kind"		Wisdom		To be, through having been To face not being		

Note. From "Identity and the life cycle" by E. H. Erikson, Psychological Issues, 1959, I, 166.

In the second level of meaning, the observable social behaviors associated with identity achievement have been stressed; the consideration and adoption of adult roles.

the child can conjure up systematically the full range of alternative possibilities that can exist at any time...he must make a series of ever narrowing personal, occupational, sexual, and ideological commitments. (Erikson, 1968, p. 245)

Identity formation is thus seen as a turning point at which time an individual must organize and consolidate his previous experiences in preparation for the adoption of adult roles, which, according to Erikson, involves commitment to a vocation and the establishment of a world view or set of ideological beliefs. Simmons (1970) points out that the emphasis here is, first, on some period of re-thinking, sorting through, trying out various roles and life plans which is taken to be the behavioral referent for the internal process referred to in psychoanalytic theory as "the synthesizing function of the ego" (Erikson, 1956, p. 104). Marcia (1964) refers to this exploration and decision period as a crisis, a time when the individual is actively involved in choosing among meaningful alternatives. After the period of crisis or exploration, the second emphasis is on subsequent commitment in the important life areas of vocation and ideology. Commitment here refers to the degree of personal investment the individual expresses in a course of action or belief.

Early research seeking to operationalize Erikson's formulations concentrated on identity as a subjective sense of being. Bronson (1959) used interviews and the semantic differential to measure four aspects of ego identity. Gruen

(1960) used a Q-sort task and equated ego identity to congruence between the real and the ideal self. Rasmussen (1964), using item analysis, developed a paper and pencil measure of identity with items tapping derivations of health and non-health for each of the first six Eriksonian crises. Using a sample of 1400 male navy recruits, he found ego identity, as measured by his scale, was related to successful adjustment to the navy as measured by a peer nomination form.

Dignan (1965), following a purely rational approach, constructed a 50-item scale by having five psychologists/psychiatrists judge an original pool of items in terms of their construct validity. Constantinople (1969) used a questionnaire based on a Q-sort, which was originally devised by Wessman and Ricks (1966) to measure self concept. The Q-sort consisted of 60 items, 5 items reflecting "successful" resolution (e.g. of Basic Trust) and five items reflecting "unsuccessful" resolution (e.g. of Basic Mistrust). Hauser (1971) also used a Q-sort technique in studying identity formation in black and white adolescents.

There have been a number of problems associated with the measures reviewed above. Firstly, each researcher has constructed and used his own measure of identity so it is difficult to draw together any conclusions from a consideration of the results of the studies. Little comparative work has been done on any of the measures (Marcia, 1977). Secondly, generally the measures provide for only two categories of identity resolution, viz., achievement and diffusion. There is no category for the "role-rigid" person, who makes firm commitments

but does not actively consider alternatives on his own terms, and for the individual who is seriously considering alternatives but has been unable, as yet, to make any commitments. Thirdly, some of the measures appear to be tapping aspects of adjustment rather than the individual's construction of a world view (Raphael, 1975). Erikson (1964) foresaw this danger and was concerned over the probability that his ego stages "will be eagerly accepted by some as a potential inventory for tests of adjustment, or as a new production schedule in the manufacture of desirable children, citizens, and workers" (pp. 134, 156). Finally, although Erikson's theory is a psychosocial one, most of the above measures are largely concerned with intrapsychic aspects and have not examined the societal aspects of the theory -- the continuing mutual adaptation between individual and society.

Consequently, a number of writers have suggested that it would be better to focus on the observable social behaviors involved in identity formation; the aspects of consideration of, and commitment to, the occupational and ideological alternatives a society offers to an individual.

James Marcia (1964, 1966) has been foremost among the researchers who have focused on the psychosocial aspect of identity. He has developed a semi-structured interview (see Appendix 1) which ascertains the occurrence of crisis (exploration of alternatives and period of active decision making) and presence of commitment (degree of personal investment the individual expresses in a course of action or belief) in the areas of occupation, religion, and politics.

Religion and politics have been taken to comprise the concept of an ideology (see Erikson, 1968, p. 189).

The individual is thus placed in one of four identity statuses on the basis of an interview. The statuses, which represent different ways of coping with the identity crisis, are based on the presence or absence of crisis and the presence or absence of commitment (see Figure 3). These four identity statuses consist of Erikson's polar alternatives of Identity Achievement and Identity Diffusion and two additional intermediate statuses of Moratorium and Foreclosure.

The Identity Achieved are those who have gone through a period of seriously considering occupational choices and ideological alternatives and have made a commitment on their own terms to an occupation and a set of beliefs. The Moratorium status individuals are currently in an active crisis period and engaged in a real struggle to make commitments. A characteristic of the Moratorium individual is that he shows concern about his lack of commitment. Foreclosure status individuals are those who, while committed to an occupation and ideology, seem to have experienced no crisis period. They appear to have experienced few doubts and made few choices. Their chosen occupation is often what they had always planned to be, and their ideologies are often based on what they have always believed. Often the commitments are based on those of their parents. The Foreclosure individual seems to have absorbed an identity rather than achieved one on his own terms. The Identity Diffusion status individuals are those who lack

3

		CRISIS	
		Presence	Absence
COMMITMENT	Presence	Identity Achieved	Foreclosure
	Absence	Moratorium	Identity Diffusion

Figure 3. Criteria for Determining Ego Identity Status

commitments and appear unconcerned about it. They may or may not have experienced a crisis. At present they do not have specific plans for the future or strong allegiance to an ideology.

Construct validity for the identity status interview has been provided by Marcia and his associates by their demonstrating that persons within each of the identity statuses behave consistently and differentially on independent measures such as anxiety, performance under stress, authoritarianism, cognitive style, and cooperation in a prisoner's dilemma game (Marcia, 1964, 1966; Podd, Marcia & Rubin, 1970; Waterman & Waterman 1974).

Marcia (1964) also provided concurrent validity for the Identity Status Interview by constructing an independent projective measure of identity, the Ego Identity Incomplete Sentences Blank (EI-ISB). The order of means of the overall ego identity scores obtained from the EI-ISB paralleled the order of the identity statuses: Identity Achievement, Moratorium, Foreclosure, and Identity Diffusion, thus providing confirmation of the concurrent validity of the statuses.

The early validation studies were carried out with male subjects. Attempts to use the original interview with female subjects led to difficulties and subsequent modifications. Theoretical and empirical writings on female development have stressed the pre-eminence of the interpersonal sphere (Douvan and Adelson, 1966; Coleman, 1961; Deutsch, 1941) so it seemed necessary to include a content area that related to interpersonal identity. Accordingly, when Marcia and Friedman

(1970) extended the identity status research to women, they added a set of questions regarding decisions about premarital sexual behavior. When this modification was made, it was found that persons within each of the female identity statuses behaved consistently and differentially on independent measures of attitudes and behavior (Schenkel, 1972).

Thus, the status categorization system based on the interview appears to have some construct and predictive validity as related to Erikson's writings and it appears to be a reliable way of differentiating different ways of coping with the identity crisis for both males and females.

In addition, Marcia (1964) checked the inter-scorer reliability by randomly selecting 20 interviews and having these independently rated by two judges plus the experimenter. The overall percentage of agreement, using total agreement as the criterion, was 75%. Subsequent checks on inter-scorer reliability by other researchers over 13 studies indicated an average of about 80% for the identity statuses when the interviews are rated independently by two or three judges using a criterion of two-thirds or unanimous agreement among judges. (Marcia, 1976).

In summary, the advantages of the Marcia measure of identity resolution over those measures cited earlier are as follows: (1) the identity status paradigm appears to be based directly on Erikson's conception of identity as a psychosocial phenomenon; (2) the paradigm provides a status for the role-rigid or Foreclosure person and thus provides a broader basis for examining ways of coping with the identity resolution;

(3) a large number of studies have used Marcia's operational definition and hence it is possible to relate research data obtained to a larger body of findings that have used a common measure of identity.

Research on Identity Statuses and Summary Descriptions of the Statuses

As previously stated, the identity status measure was originally validated with college males (Marcia, 1964, 1966, 1967), and early research tended to focus on the attitudinal and behavioral characteristics of college males in the statuses. A brief summary of this research yields the following description of the male statuses.

Achievement status individuals have the highest performance on stressful concept attainment tasks (Marcia, 1966), are least vulnerable to self-esteem manipulation (Marcia, 1967), are generally stable (Donovan, 1970), and have the highest grade-point averages (Cross and Allen, 1970). In addition, they are more reflective (as opposed to impulsive) in their decision making styles (Waterman and Waterman, 1974), have a higher level of moral judgement (Podd, 1967) and are more internal in locus of control orientation (Waterman, Buebel, & Waterman, 1970) than Foreclosure or Diffusion individuals. In general, the Achievement individual seems able to cope with his world, and to deal with sudden shifts in environment or unexpected burdens of responsibility (Marcia, 1966).

In the research with males, Moratorium status individuals appear more similar to Achievement status

individuals than any of the other statuses. Accordingly, Moratorium individuals also are less vulnerable to self-esteem manipulation, are more reflective in their decision-making styles, have higher levels of moral judgement, and are more internal in locus of control orientation than the other two statuses. In addition, Moratorium individuals are the most anxious and the least authoritarian of the statuses (Marcia, 1966, 1967). Donovan (1970) reports that they are the most creative and insightful and the most active interpersonally. However, as one would expect, they have difficulty in making commitments to other people and to specific tasks and occupations.

Foreclosure status individuals are the most authoritarian, set unrealistically high goals for themselves (Marcia, 1967) and, along with Diffusion status individuals, have an impulsive cognitive style (Waterman and Waterman, 1974). Donovan (1970) reports that they have the highest grades and tend to come from homes that emphasize strict super-ego functioning in addition to warmth and closeness. In addition, they tend to have a restricted initiative and Marcia (1966) found their response to failure was unrealistic. They sought to maintain, rather than moderate, unattained high goals. Marcia notes that Rotter (1954, pp. 196-197) attributes low freedom of movement to those who have achieved superiority through identification and he sees this as a fitting description of the Foreclosure style of functioning.

The Diffusion status individual is the most vulnerable of all the statuses to self-esteem manipulation (Marcia, 1966),

has the most impulsive cognitive style (Waterman and Waterman, 1974), and has little trust in himself or the world (Donovan, 1970). Marcia describes two types of Diffusion status individuals in his Interview Manual (Appendix 2). The first is a pre-crisis individual who has experienced a laissez-faire type of child-rearing, which provided no consistent structure for the developing individual. "Because he never really was anything, it is almost impossible for him to conceive of himself as being anything" (p. 7). This type is impulsive, unstable, tends to be anxious, and may be somewhat depressed. The second type of Diffusion is more of the play-boy type, who seems "committed to a lack of commitment" (p. 7). He is impulsive, unstable, and lives essentially in the present.

Description of female identity statuses. Marcia and Friedman (1970) extended the identity status research to females, and thereby initiated a number of studies which focused on the attitudinal, behavioral, and developmental characteristics of females in the identity statuses. As already noted, these studies used a modified identity status interview that takes into account the concern the female has traditionally had with interpersonal aspects of identity formation. In later studies (Matteson, 1972; Schenkel, 1973), questions regarding sex roles were also added to the original interview.

In general, research findings for the female statuses were similar to those for the male identity statuses, except that the status groupings were different. The status groupings for men on many of the variables were Identity Achievement and

Moratorium individuals versus Foreclosure and Diffusion individuals. Whereas, for women, the usual pattern tended to be Identity Achievement and Foreclosure versus Moratorium and Diffusion status individuals. For example, on a number of variable (field dependence, locus of control, conformity, difficulty of college major, and anxiety), Foreclosure status females perform more like Identity Achievement women, while Moratorium status females perform more like those in the Diffusion status (Marcia and Friedman, 1970; Schenkel, 1972; Toder and Marcia, 1973; Howard, 1975).

In discussing this phenomenon, Marcia (1977) notes that with men chronological proximity to identity achievement seemed to be the determining factor if one were grouping the statuses on any measure involving ego strength, e.g. field dependence, anxiety, self-esteem. Thus for males, Achievements and Moratoriums are apt to be higher on many measures involving ego strength than Foreclosures and Diffusions. However, for females, the important criterion seemed to be the stability of the identity status. Both Achievements and Foreclosures have an identity and are thus fairly stable statuses. Thus for females, Achievement and Foreclosure statuses are apt to be higher on measures involving ego strength than are the Moratorium and Diffusion statuses.

Marcia and Friedman (1970) suggest that the Foreclosure status may be particularly adaptive for women as traditionally there has been high social support for females being the culture-bearers and becoming what their parents intended them to become. While men are encouraged to develop their own beliefs

and life styles and become autonomous, women have been expected to find their identities through marriage and child rearing. Hence, women who do go through an identity crisis and consider alternatives may get less support from society than women who accept their parent's values and adopts the traditional roles.

A brief summary of the research on college females yields the following descriptions of the identity statuses for females.

Identity Achievement individuals choose the most difficult college majors (Marcia and Friedman, 1970), are field independent (Schenkel, 1973), more resistant to conformity pressure (Toder and Marcia, 1973), more internal in locus of control orientation (Howard, 1975), and are less anxious than Moratorium and Diffusion status individuals. Josselson (1973), who investigated psychodynamic factors in a case study approach of identity statuses among college females, describes the Achievement individual as one whose basis for self-esteem lies in her own abilities rather than being parentally based. She tends to see her parents realistically and can experience ambivalence toward them. The challenge to make it on her own is very important to her, and hence, she seeks to develop autonomy and independence.

Foreclosure status individuals resemble Achievement status individuals in being field independent (Schenkel, 1973), more resistant to conformity pressure (Toder and Marcia, 1973), and are more internal in control orientation (Howard, 1975). In addition, they appear to have the highest self-esteem, the lowest anxiety and are the most authoritarian (Marcia and

Friedman, 1970). Josselson (1973) describes the Foreclosure status female as one who remains very close to her family and who may overidentity with her family to the extent that she remains closer to her parents point of view than to that of her peers. Although apparently confident and self-assured, Foreclosures derive their self-esteem from their ability to adhere to a parentally derived super-ego. They seem unable to experience ambivalence or conflict and hence have a generally un insightful approach to themselves. They tend to focus on "what they have or are seeking to be given" (p. 17).

Moratorium status females are relatively field dependent, susceptible to conformity pressure (Toder and Marcia, 1973; Schenkel, 1973), and have low self-esteem (Prager, 1976). They are the least authoritarian (Marcia and Friedman, 1970) and the highest in anxiety (Schenkel, 1973) of all the statuses. Josselson describes them as having a need for structure and as seeking themselves primarily in relation to other people. They all appear to share an omnipresent sense of guilt usually based on a feeling of having disappointed their parents or on their potential for doing so. They seem to be struggling with issues of dependence, autonomy, and ambition. The Moratorium status individual seems to want everything, e.g., her parents; approval, to go her own way and to achieve her goals. Hence, she has difficulty making decisions which necessitate choosing one thing and giving up another. In spite of their conflict, vacillation, and anxiety, Moratoriums tend to be the most sensitive, engaging, and insightful of the statuses. Although, they have low levels of self-esteem, they have more energy and are less depressed than the Diffusion status females.

Diffusion status females are like Moratorium status females in being field dependent (Schenkel, 1973), having low self-esteem (Prager, 1976), high anxiety (Marcia and Friedman, 1970), and being more external in locus of control orientation (Howard, 1975). They are the most variable of all the status groups, varying from "borderline psychotic to near-Moratorium levels of functioning" (Marcia, 1976, p. 112). Josselson (1973) notes that the basic defect in the Diffusion status personality seems to be a failure of internalization of objects (p. 40). The parents of Diffusions seemed to have been absent, either physically or psychologically, during childhood and so were not available as identification models or to provide structure for the developing personality. The result is an inability to see themselves as "anything" or as "being" in any defined sense of the word. As a group, they seem characterized by fear, fantasy, and flight. They fear commitments, use fantasy to bolster their self-esteem, and resort to flight if faced with a difficult situation. They seem to need to keep all alternatives open. On the whole, they tend to be impulsive, to be very much aware of their feelings, and to exist largely in the present with little ability to integrate the past and the future.

The following Table (I) is a reprint of a summary of the findings from Josselson's research on the female identity statuses.

Research on Identity and Psychosocial Stages

Gruen (1964) defined Erikson's psychosocial stages as

TABLE 1
Josselson's SUMMARY OF CLINICAL FINDINGS on Female Identity Statuses

	Focus of self-definition	Relation of ego-superego	Identifications with parents	Relations with peers	Defense mechanisms
Foreclosure	"I am loved and cared for, therefore, I am"	Superego is ruling force; infantile, demanding but loving superego	Mother ++ Father + (or + -)	Poor; intimacy for security	Repression Denial Isolation
Achievement	"I have an effect on the world and on others, there- fore, I am"	Ego has affected compromise with and integrated superego	Mother + - Father + - (or +)	Good; intimacy for inde- pendence	Intellectual- ization Suppression Denial
Moratorium	"I am Right, therefore, I am"	Ego battling demanding but loving superego	Mother - (or + -) Father + (or + -)	Conflict- ridden	Intellectual- ization Projection
Diffusions	"I feel, therefore, I am"	Superego split off, repressed, infantile and archaic	Mother - (or + -) Father - (or + -)	Varied, short- lived	Denial Acting out

Note. From Identity formation in college women by R. L. Josselson, Unpublished doctoral dissertation, Univ. of Michigan, 1972, 140.

eight dimensions of personality, and investigated the inter-correlations between these personality dimensions, using a rating scale and an interview format to assess the stages, with a sample of male and female subjects, age 40-65. He found consistent positive correlations, varying from .34 to .74, with a mean of .57, and with the highest correlations generally occurring between adjacent personality dimensions. All correlations were statistically reliable. He concluded that, in general, his data supports Erikson's assumption regarding stages of ego development and the influence of earlier ego resolutions on subsequent ones. However, he points out that his findings were by no means as clear and conclusive as Erikson's theory would lead one to anticipate, and he suggested that the difficulty might be due to the methods used. He pointed out that he

may not have succeeded in defining behaviorally the dimensions of personality that Erikson had in mind; the data may have been too scant and superficial; and there may have been a halo effect in making the ratings.
(Grueh, 1964, p. 9)

His research points up the need for better measures in defining the eight psychosocial stages.

Waterman, Buebel and Waterman (1970) investigated the relationship between resolution of identity crisis and outcomes of previous psychosocial crises for college males in two studies. In Study 1, the authors used Marcia's interview technique to determine High, Mixed, and Low identity levels (a modification of Marcia's categories), the Internal-External Control (I-E) scale (Rotter, 1966) as an indicator of degree of autonomy, and the Interpersonal Trust (I-T) scale (Rotter, 1967)

as a measure of basic trust. They point out that Rotter's scales were not originally constructed within an Eriksonian framework but appear to relate to Erikson's theory. They found a significant difference between identity groups on the I-E scores ($F = 3.21$, $df = 2/85$, $p < .05$) but not on the I-T scores ($F = .96$, $df = 2/86$). In study 2, they tested the implication that level of ego identity is related to the degree of success in resolving the first four psychosocial stages, using Constantinople's (1969) measure of ego stage resolution, which was specifically constructed within an Eriksonian framework. Identity resolution, in this case, is assessed within a univariate model (i.e., along a single continuum). They found significant correlations between identity and each antecedent stage ($p < .05$ for initiative and industry, $p < .01$ for trust and autonomy, $df = 86$). The findings of the two studies generally support the Eriksonian hypothesis that successful coping of the identity crisis is related to a favorable resolution of previous stages for college males.

La Voie (1976) studied ego identity formation in middle adolescence (15-18 years), using Marcia's (1966) Ego Identity Incomplete Sentences Blank to measure ego identity and found high-identity adolescents scored more positive on Basic Trust ($F = 6.36$, $df = 1/108$, $p < .01$) and industry ($F = 4.10$, $df = 1/108$, $p < .05$) than low-identity adolescents. Findings for autonomy, initiative, and intimacy were similar but nonsignificant.

Boyd and Koskela (1970), in testing the validity and reliability of the Self-Description Questionnaire, an instrument

designed to measure successful or unsuccessful resolution of Erikson's eight ego stages, found, in examining the relationship between the various scales of their instrument, that ego stages 1, 3 and 4 (Trust, Initiative, Industry) were the best predictors of ego stage 5.

Tan, Kendis, Fine, and Porac (1977), using their own measure of Eriksonian ego identity with college students, found a significant relationship between Rotter's (1966) Locus of Control (used as autonomy measure) and ego identity, and between intimacy and ego identity, but not between Interpersonal Trust (Rotter, 1967) and ego identity. The failure to correlate with Interpersonal Trust replicated the earlier finding by Waterman et al. (1970).

Ciaccio (1971) tested two basic postulates of Erikson's theory of ego epigenesis with a sample of 120 boys (5-, 8-, and 11- year olds), using a projective instrument designed by Boyd (1964) and Ciaccio's own coding system. The postulates were: (a) ego stage progression with increasing age; (b) the ego develops as it meets with different crisis elements of the ego stages. The coding system reflects both the positive (psychosocial strengths) and negative (crisis or conflict) elements of each stage. Ciaccio found that the psychosocial strengths or attitudes emerge in the stage sequence postulated by Erikson; Group I was most concerned with stages 2 and 3, while groups II and III showed peak interest in stages 3 and 4, respectively. However, the conflicts or negative aspects of the ego stages did not follow a sequential progression with the exception of stage 2. All three groups showed most conflict for

stage 2 crisis (Autonomy vs. Shame and Doubt), suggesting, along with earlier findings (Bettelheim, 1967, Ciaccio, 1969), that stage 2 may be the focal crisis of the first five ego stages.

Rothman (1978) investigated the intercorrelations among psychosocial stage resolution variables and ego identity status, using Rasmussen's (1964) measure of ego development, which provides a measure of each of the first six psychosocial stages, and Marcia's interview to place subjects in one of the four identity statuses. He found the autonomy crisis stage was the most discriminating variable among the four identity statuses with an F statistic of 5.85 ($p < .05$), followed by the Industry crisis stage ($F = 4.17$) which also significantly discriminated among statuses ($p < .05$). He interpreted these results as being supportive of Erikson's epigenetic theory.

Herrmann (1977), who investigated the relationship between experiences of early childhood trust and autonomy and experiences of identity formation in a sample of college students, found that foundational experiences of trust and autonomy have direct influence upon identity formation in late adolescence and early adulthood.

Bauer and Snyder (1972), in a study exploring the hypothesized relationship between the attainment of a sense of industry and the development of identity, found that college students high on Rasmussen's identity measure were also high in achievement imagery.

It is difficult to draw any general conclusions from the above studies due to the variety of measures employed to study ego identity and the other psychosocial stages, and due to

the variety in samples. However, bearing these limitations in mind, it would appear that: (1) in at least one study (Waterman et al., (1970), successful resolution of previous psychosocial stages does correlate with successful resolution of identity for college males when a univariate measure of identity is used; (2) in other studies, using both males and females, and also a univariate measure of identity, there is some evidence that successful resolution of previous and later ego stages does correlate positively with identity but the results are somewhat conflicting as they vary as to which ego stages are significantly related to identity; (3) there does seem to be a developmental progression in ego stage issues for children for the positive aspects of resolution but not for the negative aspects (Ciaccio, 1971), i.e., conflicts may not get resolved in a sequential order; (4) a few researchers (Gruen, 1964; Constantinople, 1969) have indicated concern regarding the limitations of their instruments; (5) there is at least one study (Rothman, 1978) which has investigated the ability of psychosocial stage measures to differentiate among the identity statuses.

The above has been a review of research that has specifically investigated identity and the psychosocial stages. When the hypotheses of the study are stated in the last section of this chapter, the literature will be reviewed more specifically from the point of view of each ego stage before the separate hypotheses are stated.

Review of Literature on Identity and Social Support

Erikson's theory of personality development is very much a psychosocial theory. He repeatedly emphasizes the mutual relation between the growing organism and the social milieu (1963, 1968). Although Erikson believes that the eight stages of psychosocial development are universal, he assumes that each

culture influences the ways by which its members deal with their developmental crises, and this seems particularly true of the identity stage. For example, the Sioux Indians (Erikson, 1963) are provided with a good childhood that seems to establish a foundation for lasting trust but the type of life forced on them later leads to their demoralization as the young become aware of a lack of freedom to pursue whatever roles may be uniquely appropriate for them. Douvan and Adelson, (1966, p. 15) in speaking of identity, point out that "Who the child is to be will be influenced (and in some cases determined) by what the environment permits and encourages". McClain (1975), in his study of the Eriksonian crises in six different cultures, found that some cultures provide environments that are more supportive for healthy development than others. Hauser (1972) found that Black and White adolescents have emphatically different patterns of identity formation. The pattern for Blacks tend to be that of identity foreclosure, while the pattern for Whites tends to be consistent with progressive identity formation.

In his writings, Erikson makes many references to the relationship between social support and the development of ego qualities. In contrast to orthodox psychoanalytic writings, which emphasize intrapsychic factors, Erikson has tried to study "those adaptive social processes that must protect and support ego development in childhood and give strength and direction to adolescent identity" (1970, p. 160). He suggests that society guides and narrows the individual's choices, as "it confirms members in "the right life plan" (1968, p. 87). The development of the young individual's positive identity thus depends on support from significant social groups.

Underlying assumptions in Erikson's epigenetic chart of the eight psychosocial stages are

(1) that the human personality in principal develops according to steps predetermined in the growing person's readiness to be driven toward, to be aware of, and to interact with, a widening social radius; and (2) that society, in principle, tends to ... safeguard and to encourage the proper rate and the proper sequence of their unfolding [i.e. the steps]. (Erikson, 1963, p. 270)

Implicit in Erikson's description of the ego stages then, is the idea that social support is important and necessary for the individual at each stage of his development.

In summary, a relationship between social support and ego stage development, and particularly between social support and identity formation, is clearly implied in Erikson's psychosocial theory.

Statement of Purpose

According to Erikson's psychosocial theory, two parameters that influence the way the individual copes with the identity stage are (1) the resolution of the preceding stages of trust, autonomy, initiative, and industry; (2) the support offered by society.

A few studies have investigated the relationship between previous psychosocial stages and identity resolution for various groups of subjects. Although, the findings of these studies have been generally supportive of Erikson's theory, they have varied regarding the relative importance of the various psychosocial stages to identity. In addition, only one study appears to have been made regarding the relationship between the ego identity statuses and the outcome of previous psychosocial

stages. If the identity statuses represent genuine difference among individuals in dealing with an identity crisis, then it seems important to ask what ego qualities or basic attitudes underlie the various styles of identity resolution represented by the statuses. Why do some individuals become Achievements, managing to actively consider alternative choices in occupation and ideology, and make commitments, while others become Foreclosures, unable to experience ambivalence, over-identified with their parents and committed to an occupation and ideology that has been accepted rather than thought through on their own terms? Similarly, why do other individuals seem to remain suspended in a Moratorium state, in conflict over alternative choices, and seemingly unable to make commitments, while a fourth group of individuals (Diffusions) have either, not seriously considered alternative choices, or have considered them and have given up on the idea of being able to make a meaningful choice and seem committed to a lack of commitment? It is a goal of the present research to investigate the relationship between these ways of coping with identity resolution, which represents a broader definition of identity resolution than was postulated by Erikson, and the current resolution of the other psychosocial stages.

The limitations to this approach in testing Erikson's psychosocial theory should be pointed out here. Since Erikson postulates that the resolution of each developmental stage is dependent on the favorable resolution of preceding stages, the best test of the developmental aspect of Erikson's theory as it relates to identity resolution would be through a longitudinal

design, covering a period from birth to the early twenties. A cross sectional design is often employed when it is not feasible to do a longitudinal design and this has been used to test the emergence of psychosocial stages in the stage sequence postulated by Erikson (Ciaccio, 1971). However, as Mussen, Conger, and Kagan (1969, p. 22) and Mussen (1963, p. 10) point out, the longitudinal approach, as opposed to the cross sectional, should be used to evaluate the latent or delayed effects of earlier experiences on later personality and behavior. How one copes with each developmental stage is a part of one's experience and will vary with individuals. As Palermo (1963, p. 70) suggests, in the cross sectional design "the major interest is not so much what changes take place in a specific child's behavior over time, but rather the physical and behavioral characteristics of age groups".

In the present study, it is expected that there will be a relationship between ways of coping with the identity crisis and successful resolution of "previous" stages, such that Identity Achievement individuals will score highest, Identity Diffusions lowest, and Moratoriums and Foreclosure statuses somewhere in the middle ranges, depending on the particular ego stage. However, the findings of this study will not supply any clear cut evidence that the present position of ego stages on a bipolar continua actually occurred at an earlier stage. As Waterman et al. (1970) point out in their study using the Constantinople subscales of psychosocial stage resolution, "these findings cannot be construed as demonstrating that successful resolution of theoretically earlier crisis either

causes or precedes positive outcome of the identity crisis (p. 9)". The authors go on to discuss the possibility that the various ego qualities could conceivably develop concurrently as opposed to sequentially. In support of this view, they cite evidence drawn from a cross sectional study of college students (freshmen, sophomore, junior, senior) by Constantinople (1969) in which she showed that college students showed substantial changes in several ego qualities (Trust vs. Mistrust, Initiative vs. Guilt) associated with "earlier" stages. Hence, assessment of a subject current position on one of the supposedly earlier ego qualities does not necessarily tell us what his position was at the time the crisis associated with it reached ascendancy. The contributions of the present study, in this respect, are thus limited to investigating the relationship between current resolution of psychosocial stages and styles of identity resolution, represented by the statuses.

A second goal of the study will be to investigate the pertinency of the various ego stages in the lives of these women. Which issues or crises are of current concern? Is there in fact a concern regarding identity? Do Moratorium status individuals score highest in identity concerns, as would be expected from Erikson's theory as theoretically they are still striving to resolve the identity crisis? Pertinency is used here to "refer to a person's conscious awareness of the attention he is directing to a particular set of basic alternative attitudes" (Boyd and Koskela, 1970, p. 6).

To assess an individual's position along the bipolar dimension of each ego stage, and to assess the pertinency of

each ego stage, a Self-Description Questionnaire (S-D Q) developed by Boyd, and described by Boyd and Koskela (1970), will be used (see Appendix 3).

The psychosocial nature of Erikson's theory implies a mutual relationship between the growing organism and the social milieu. The environment, at each stage of development must supply the essential nutrients for the organism to develop. A few studies have investigated the relationship between social support and identity formation in ethnic and black groups. However, there appear to be no studies that have directly investigated the question of social support and identity formation in males and females in the larger North American culture. Yet this would appear to be an important question. Do Identity Achieved individuals have high levels of social support, as one would expect from Erikson's theory? Do Identity Diffusion individuals have low levels of social support? How does social support relate to the Foreclosure and Moratorium statuses?

A third goal of the present study will be to investigate the relationship between perceived social support and type of identity resolution. It is expected that there will be a relationship between the identity statuses and levels of social support such that Identity Achieved individuals will score highest, followed by Foreclosure, Moratorium, and Identity Diffused individuals, in that order. Foreclosure individuals are expected to score higher than Moratorium individuals because, due to their strong ties with the family and with tradition, they are apt to be tied in more closely with society.

A questionnaire, based partly on well known measures of social support, and including some questions which are new to this study, will be used to measure perceived social support.

Although the identity crisis posited by Erikson probably occurs in its simplest and clearest form in adolescent males, the writer wants this study to be pertinent to certain important social issues of our time, and has, therefore, chosen to study the phenomenon as it occurs in women.

Timing of identity formation in women. Although, Erikson (1969) saw identity formation as a lifelong development, beginning shortly after birth and extending into old age, he regarded it as the psychosocial task of adolescence. In this study, Marica's paradigm of identity statuses will be used to differentiate individuals according to their various ways of coping with the identity crisis. This raises a problem regarding the instability of the identity statuses, and particularly of the Moratorium status, viz., at what age can one expect the individual to have adopted a characteristic way of dealing with the identity crisis and not simply be in transition from Moratorium to Achievement status?

A few researchers have addressed themselves to this question. Josselson (1973), who carried out an in-depth study of identity in senior college women, takes the following line of reasoning. Identity status groups are by definition relatively unstable states. They are positions at a point in time but not random distributions at a point in time. In adolescence they are distributions at an important point in time when social

forces are extracting certain choices and commitments. How one chooses to cope may be indicative of more stable and permanent characteristics of coping.

Raphael (1977) suggests that, when Marcia developed his rationale for the identity statuses, he seemed interested, not in the characteristics of individuals who pass through a moratorium, but in the characteristics of those who remain fixed in a period of exploring alternatives. If one looks at third and fourth year college students who are in a moratorium status, they are apt to be fixed in that stage because after two or three years at university they are still unable to reach conclusions and make commitments. At the very least, we can say that they have taken longer than many of their peers to form an identity.

Although, some researchers (Bardwick, 1971; O'Connell, 1976; Marcia, 1977) suggest that women generally take longer to evolve a sense of identity than men, several other researchers (Hoffman, 1977; Lunneborg and Rosenwood, 1972; Rand and Miller, 1972; Helson, 1975) point to the declining sex differences in social and economic roles and the increased desire and expectancy among women to combine marriage and a career simultaneously, and suggest that the necessity to forge a personal sense of identity (usually a prerequisite to choosing a career) may be occurring at an earlier age for women.

In view of the Eriksonian theoretical stance, which places the identity crisis in adolescence, and the above research, both on the identity statuses and on identity development in women, it was decided to investigate identity resolution in third and fourth year college women.

Rationale and Hypotheses of the Study

Rationale and Hypotheses Regarding Identity Statuses and Ego Stages

Hypothesis I. The identity statuses will differ significantly on the trust, ~~autonomy~~, initiative and industry components. Specific hypotheses for each of these ego stages are as follows:

(a) Trust vs. Mistrust: Erikson views the sense of trust established in the mother child relationship as the basis 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 (1963, p. 249). One would expect, therefore, that degree of success in resolving the trust stage should correlate with measures of identity resolution. However, research findings in this area have been conflicting. Waterman et al. (1970) and Tan et al. (1977) found no relationship between scores on Rotter's Interpersonal trust scale and measures of ego identity, while La Voie (1976) and Boyd and Koskela (1970) did find significant relationships between favorable resolution of the two ego stages, when they used a measure of trust developed within an Eriksonian framework. As Waterman et al (1970) point out, Rotter's index of trust may be a more limited variable than is subsumed under Erikson's conceptualization of basic trust. In addition, Rotter's measure of trust is based on a social learning theory framework and so has been designed to measure trust in a somewhat different context.

It is hypothesized that Achievement women will achieve the highest scores on Basic Trust, followed by Foreclosure, Moratorium and Diffusion women, in that order.

(b) Autonomy vs. Shame and Doubt: Research findings regarding the relationship of autonomy scores to identity statuses have been conflicting with regard to the Foreclosure and Moratorium statuses. Generally, research on college women has found that Achievement and Foreclosure women were more field-independent (Schenkel, 1975), less conforming (Toder and Marcia, 1972), and had a more internal locus of control (Howard, 1975); while Moratorium and Diffusion women were less field-independent, more conforming, and were more external in locus of control. Research on males has found Achievements and Moratoriums have higher autonomy scores than Foreclosures and Diffusions (Orlofsky, Marcia, and Lesser, 1973; Matteson, 1974), and Achievements and Moratoriums to be more internally-oriented than Foreclosures and Diffusions (Waterman et al., 1970).

Theoretically, one would expect Achievement women to be highest on autonomy scores since independence and self-reliance are considered essential to the ability to explore (Marcia's crisis criteria) and make commitments. Assuming that autonomy is of greater importance to exploration than to commitment, one would hypothesize that Achievement women will achieve the highest scores on Autonomy, followed by Moratorium, Foreclosure, and Diffusion women, in that order.

(c) Initiative vs. Guilt: There seems to have been little research regarding the relationship of initiative to the identity statuses. Two alternative hypotheses are proposed.

For the first hypothesis the same line of reasoning could be used with initiative as with autonomy, i.e., initiative would seem necessary to engage in the active selection of meaningful alternatives (crisis criteria) and to a lesser extent, to the making of commitments. Hence, it could be hypothesized that Achievement women will achieve the highest scores, followed by Moratorium, Foreclosure, and Diffusion women, in that order.

The alternative hypothesis is based on a consideration of the bipolar opposite of initiative, viz., guilt. Josselson (1973), points out that the most striking single characteristic of the Moratorium women is omnipresent guilt. Hence, it could be hypothesized that Achievement women will achieve the highest scores on Initiative, followed by Foreclosure, Diffusion and Moratorium women, in that order.

(d) Industry vs. Inferiority: This stage is the immediate precursor to the identity stage and may perhaps be the most significant to identity achievement. Vocational commitment (vocation is broadly defined here to include not just one's occupation but also one's "work in the world") is an essential aspect of identity achievement and the ability to make vocational commitments seems directly related to a sense of industry, of wanting to make things well and "of a positive identification with those who know things and know how to do things" (Erikson, 1969, p. 87). A successful resolution of the industry period should leave one with a set of specific skills, confidence in one's capacity for worthwhile work, and a generally positive attitude toward work. A sense of industry would be expected to underlie both the criteria of exploration

and of commitment but more specifically the latter. Hence, it is hypothesized that Achievement and Foreclosure women will achieve the highest scores on Industry, followed by Moratorium and Diffusion women, in that order.

Hypothesis II. The Moratorium and Achievement statuses will differ significantly on the pertinence¹ scores for some of the ego stages.

(a) Identity vs. Role Confusion: There appears to be only one research study that has investigated the area of pertinency of identity stage issues across identity statuses. Mahler (1969), in a study of defensive coping style, presented Moratorium and Foreclosure status individuals with ten neutral and ten ego-identity conflict words. He found that Moratorium individuals recalled significantly more conflict words than neutral words, whereas there was no difference between recall of neutral and conflict words for the Foreclosure individuals.

Theoretically, one would expect Moratorium individuals to be highest on the pertinency scales for the identity stage since they are still actively engaged in trying to resolve the identity crisis. Hence, it is hypothesized that Moratorium women will have higher scores on the positive and negative

¹The question of pertinency deals with the concerns of women in the various identity statuses. The assumption is that high pertinency scores denote concern, low pertinency scores denote: (a) some resolution of the conflict; (b) an acceptance of the resolution achieved, whether favorable or unfavorable; (c) the individual has not yet reached that particular ego stage conflict.

pertinency scores for the Identity stage than women in any of the other statuses.

(b) Intimacy, Generativity and Integrity Stages: There seem to be no research studies that have investigated the varying levels of concern of the identity status groups for the stages that follow the identity stage. One would expect, in accordance with Erikson's theory, that Achievement women will have more or less resolved the first five stages, and can now give more attention to the stages that are hypothesized to follow the identity stage. Hence, it is hypothesized that Achievement women will have higher scores on the positive and negative pertinency scores for the Intimacy, Generativity and Integrity stages than any of the other statuses.

Rationale and Hypotheses Regarding Identity and Perceived Social Support

In this present study, the focus is on investigating the relationship between social support and type of identity resolution. Erikson is not explicit in defining his meaning of social support. At one time, society seems to play a nourishing role, providing the individual with the proper ingredients for development at the proper time (1963, p. 270). At other times society lightens "the inescapable conflicts of childhood with a promise of some security, identity, and integrity" (1963, p. 277), and offers guidance and reassurance of worth (1968, p. 87). In addition, Erikson suggests that the individual looks to society to provide him with role models of what he may become (1963, pp. 235-246).

Since Erikson is not explicit in defining his meaning of social support, it seems reasonable to look at how other writers define the construct. Tolsdorf (1976, p. 410) defines support "as any action or behavior that functions to assist the focal person in meeting his personal goals or in dealing with the demands of any particular situation". Various review studies of the social support literature (Cobb, 1976; Pinneau, 1976; Gore, 1973; Liem and Liem, 1978; Carveth and Gottlieb, 1977) have attempted to determine the important components of social support. In a recent review of some of the research on social support, Liem and Liem state that

On a most general level, social support includes an instrumental and an emotional dimension. The former refers to the direct provision of material resources and services, information and advice. Emotional support generally includes the expression of positive affect such as liking and caring, affirmation of attitudes and values, acceptance. (1978, p. 7)

Some writers further divide the emotional dimension (Cobb, 1976; Weiss, 1974; Seigelman, 1965) into (a) nurturance -- information leading the subject to believe he is cared for and loved, and (b) esteem support -- information leading the subject to believe that he is esteemed and valued. In addition, other writers have added a fourth dimension variously described as, a sense of social integration in a network of relationships (Weiss, 1974), a sense of community (Sarason, 1974), feeling tied in with society and not alone or isolated (Gore, 1973), or information leading one to believe that he belongs to a network of communication and mutual obligation (Cobb, 1976).

The present study will focus on the above four components of social support specifically defined as:

1. Tangible or instrumental support which provides the

individual with concrete help and assistance with problems he may be experiencing. Examples for the college student would include a friend loaning you money, helping you understand an assignment, giving you advice about how to go about doing something.

2. Emotional support. This is shown by the expression of concern and interest and leads the subject to believe that she is cared for and loved.

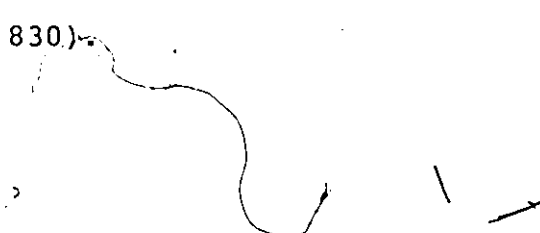
3. Esteem support. This is shown by giving the person positive feed-back about herself and letting her know when she has done a good job. It leads the person to feel that she is esteemed and valued.

4. A sense of social integration in a network of relationships. The individual feels tied in with society, has a general feeling of connectedness and does not feel alone or isolated. Three broad indicators of social integration will be used in an attempt to measure this construct: (a) participation in voluntary organizations; (b) a measure of the extent to which the subject feels integrated in the group; and (c) a measure of the extent to which the subject feels she shares the values and attitudes of people in various groups.

In addition, subjects will be asked: (1) about the amount and adequacy of financial resources available to them (Financial resources constitute an index of material support and represent a type of social support); (2) to what extent they believe society provides them with appropriate role models.

All of the measures, with the exception of 4(a) (participation in voluntary organizations) and part of 5 (amount

of financial resources), are subjective and measure perceived versus actual social support. Although, ideally it is preferable to have both objective and subjective measures, several authors argue strongly for the importance and potency of perceived social support, or of our perception of events. In the area of social learning theory, Kiritz and Moos (1974) note that "the social stimuli do not act directly on the individual. Rather it is his perception of the social environment, as mediated by personality variables, role and status relationships, and his behavior within the environment, which affects him directly and in turn affect his personality and behavior" (pp. 7-8). A basic tenet of Albert Ellis's theory of Rational Emotive Therapy is that it is not what happens to us but how we perceive it that is important (Ellis, 1973). In the family interaction literature, Thomas, Gecas, Weigert, & Rooney (1974, p. 15), in discussing the validity of their support and control measures (Bronfenbrenner Parent Behavior Questionnaire) notes that "We take our cues from a symbolic interaction perspective which asserts that it is the interactant's perception and evaluation of the other's social actions which enters effectively into future social encounters.", and Seigelman (1966) points out that the theoretical importance of the child's perception of his parents for understanding personality development has been widely recognized. In the phenomenological area, theory and research on the "perceived self" suggests that it is not necessarily what others think but what we think they think that is crucial. (Rosenberg, 1973, p. 830).



Hypothesis III. The identity statuses will differ significantly on measures of social support. Because of the hypothesized relationship between identity resolution and social support, it is expected that Achievement women will score highest and Diffusion women will score lowest. Because Foreclosure women are by definition more traditional, closer to their families and to the values of society, it is expected that they will score higher in measures of social support than Moratorium women. Specific hypotheses are as follows:

(a) Components of social support: It is hypothesized that Achievement women will score highest, followed by Foreclosure, Moratorium and Diffusion women, in that order, on each of the six measures of social support.

(b) Overall measures of social support: It is hypothesized that Achievement women will score highest, followed by Foreclosure, Moratorium and Diffusion women, in that order, on a combined measure of social support.

CHAPTER II

RESEARCH DESIGN

This chapter presents the research design used in the study. It begins by describing the subjects and their selection in section one. Section Two describes the measures used to assess the experimental hypotheses, while the third section outlines the procedures utilized. The fourth section concludes the chapter by presenting the statistical procedures employed to analyze the data.

Description of the Subjects

Volunteers for the study were solicited from a variety of third and fourth year classes in the faculties of Arts, Science, Health Sciences, Social Science and Administration at the University of Ottawa in December of 1978 and January of 1979 (end of Fall Session and beginning of Winter Session). Sign-up sheets were passed out in classes requesting names, phone numbers and approximate times subjects would be available for testing. Volunteers were phoned within one or two days and given appointments at the Guidance Centre of the University of Ottawa. Potential volunteers were told the project was about modern women, and that the research involved a study of values, attitudes, life styles and social support. No monetary incentives were offered but the experimenter agreed to send group results to all subjects who participated in the project.

The subject group thus obtained consisted of 140 full-time female undergraduates. After each individual was

rated as to his ego identity status, five subjects were dropped because of lack of agreement between the two judges who were rating. Hence, the final sample consisted of 135 subjects.

The remaining subjects ($N = 135$) were between 19 and 24 years of age with a mean age of 21.2 and SD of 1.17. The 19-to-24 age range was used because previous studies (Josselson, 1973; La Voie, 1976) have found this to be a critical time for identity resolution in females.

All subjects spoke English as a first language or were fluently bilingual. This was done to insure that participants were able to fully understand the questionnaires used in the study. Of the 135 subjects, 87% were single, 8% married, .7% divorced, and 4% living with a male. Thirty-six per cent of the subjects were living at home, 16% were not at home but in the same city as their parents, 49% were not at home and their parents did not live in Ottawa. Fourteen per cent of the sample lived in residence; 86% lived off campus. In terms of religious preference, 25% were Protestant, 48% Catholic, 4% Jewish, and 23% classified themselves in the 'other' category. With regard to background, 77% were urban and 23% were rural. In terms of educational level of the parents of participants, 46% of the fathers had attained grade or high school education, 34% community college or university education, 19% post-graduate education; 53% of the mothers had grade or high school education, 38% community college or university education, and 11% post-graduate or 'other' education. Income levels for participants families showed 10% at \$10,000 or less, 39% in the

\$10,000 to 20,000 range, and 52% earning over \$20,000 per year.

The Measures

Ego Identity Status Interview

The ego identity status of the subject was determined by means of a 30-minute, semi-structured interview divided into, five sections: occupation, religion, attitudes to premarital sex, sex roles and politics.

Presence of a decision-making period (crisis) and personal investment in alternatives chosen (commitment) was assessed in each individual section and then a summary rating was made essentially according to the same scoring criteria found in the rating manual developed by Marcia (1964, 1966). However, Marcia's identity status interview, which had been standardized on males, contains only three content areas, viz., occupation, religion and politics. When the identity status research was extended to women, it was recognized that the achievement of ego identity in women might involve different content areas from men. Both Erikson's theory (1968) and research by Douvan and Adelson (1966) on adolescent girls suggested that some combination of social relationships, attitudes to sexuality and the basis for choice of a future mate, were important. Consequently, in subsequent research on females, the content area involving decisions regarding pre-marital sex was added to the interview for women (Marcia and Friedman, 1970; Toder and Marcia, 1973; Schenkel and Marcia, 1972). At the same time, other researchers (Rossi, 1965; Horner, 1968; Josselson, 1973) were suggesting that women's

occupational goals and plans should be considered in the context of total life plans, which include the roles of wife and mother. Hence, the occupational interview was expanded to include a fifth content area, viz., sex roles (Schenkel, 1973; Howard, 1975; Lacks, 1978; Matteson, 1977). See Appendix 1 and 2 for Interview and Rating Manual.

When the individual has different status ratings for different areas, it is sometimes necessary to weigh certain content areas more heavily than others to arrive at a summary rating. Alan Waterman, who has done extensive research with the ego statuses, suggested (personal communication, August, 1978) a number of guidelines for deciding on an over-all status when a simple summary rating was not sufficient. One of these suggestions was to give more weight to the content area which was most important to the subject. This additional criteria was used in this study on the rare occasion when a summary rating was not sufficient.

The Self Description Questionnaire (S-D Q)

This questionnaire, which was developed by Boyd (1968), was used to assess an individual's position along the bipolar dimension of each ego stage, and to assess the pertinency of each ego stage.

There appears to be only two measures of Eriksonian ego stages in current usage at the time of this study, viz., those of Constantinople (1969) and Boyd (1968). Constantinople's questionnaire is a 60-item, 7-point Likert-type inventory based on an instrument developed by Wessman and Ricks (1966) and is used to assess "successful" and "unsuccessful" resolution of the

first six psychosocial stages of Erikson's theory. This inventory has recently been revised by Whitbourne (1978) and now includes measures of all eight psychosocial stages.

Boyd's measure, which is described below, was used in this study because, of the two measures, it appears to have better psychometric properties and adheres more closely to Eriksonian theory in its development. For example, the construct validity seems to have been developed more directly in terms of Eriksonian theory, the scales for each ego stage appear to have better internal consistency and there is less overlap between scales, and because the questions are less direct, it may present fewer problems in terms of social desirability bias. In addition, Boyd's measure includes a measure of Pertinency or concern for the positive and negative aspects of each ego stage. Thus, the Boyd instrument seems to more adequately meet the purposes of this study.

The S-D Q is a 160-item questionnaire (see Appendix 3) which was designed to gather data on an individual's perception of his behavior patterns. The behavior patterns were established within the eight ego stages defined by Erikson. The contents of the items were originally obtained from nondirective interviews of adults. Each item has been constructed to be a sample drawn from a universe of items of a given specific stage. The statements or items are phrased in the everyday language of middle-class America. The content validity of the items was tested by a panel of judges who showed total agreement.

The 160 items are divided equally between the positive and negative aspects of each ego stage. Thus, for each ego stage there are ten positive and ten negative items.

The S-D Q has two scales. The first scale, identified as the Like-Unlike Scale, provides data on the subject's reported perception of his behavior patterns. The data provides measures of the self perception of the individual on the positive and on the negative aspects of each ego stage. For example, ten items reflect unfavorable resolution of an ego stage (e.g., Basic Mistrust) and ten items reflect favorable resolution (e.g., Basic Trust) for each of the eight psychosocial stages of Erikson's theory. The individual scores his perception of his behavior on a series of six-point scales, the various points representing different degrees of how characteristic the phase is of the individual. A summing of the items for each stage yields scores on both "unfavorable" and "favorable" resolution of that stage.

In the present study, position on each stage-specific continuum for each individual was inferred from a ratio of the positive Like-Unlike scores to the sum of the positive and the negative Like-Unlike scores. This gives a range of 0 to 1.0 with scores above .5 reflecting favorable resolution of a given ego stage; those below reflecting unfavorable resolution of that ego stage. The ratio score was chosen because Erikson (1963, p. 271) seems to regard resolution as a ratio involving positive and negative valences of an ego stage and uses the concept of a "favorable ratio" of the positive aspects of a crisis over the negative aspects. This particular ratio form was suggested by Boyd (personal communication, Feb. 1979) as it yields a score that is readily interpreted in terms of degree of positive and negative resolution.

The second scale of the S-D Q is called the Pertinency Scale and is used to gather data on the level of concern a particular item has for the subject. For example, the statement "I haven't found my niche in this world yet" describes behavior involving nonresolution (unfavorable) of the identity stage. If the subject expresses concern over the contents of this statement, it suggests a concern regarding nonresolution of the identity stage or a concern regarding the negative aspects of the Identity stage. On the other hand, the statement "I have developed my own individual style of life" describes behavior involving favorable resolution of the identity stage. Thus, the pertinency scale consists of 16 subscales, and provides a measure of the hierarchy of concern among the positive and negative aspects of each of the eight ego stages. This scale was scored by summing the scores for each of the 16 subscales, i.e., the eight positive and the eight negative ego stages.

Boyd and Koskela (1970) provide construct validity for the S-D Q by identifying five basic postulates from Erikson's writings regarding ego stages. From these postulates they developed three theorems which provided the structures against which to test the instrument and to examine the theory in relation to evidence, the data provided. For example, Theorem I states:

Persons in a given critical step defined by the individual's given chronological age and the associated ego stage will produce a higher pertinency score on those items pertaining to that ego stage material than items pertaining to material of any other ego stages. (1970, p. 7)

The instrument (S-D Q) was then tested against the theorem in three separate studies. The findings from each study were in the predicted direction or significant at the .05 level or

beyond, and support the conclusion that the instrument does predict for a university population the ego stages that will be ascendant for a given age as postulated by Erikson. The instrument was tested against Theorem II and III in a similar manner and the findings from these studies, in each case, supported the theorems postulated by Erikson.

In developing the S-D Q, Boyd used a computer program which utilizes the Reciprocal Averages (RAVE) method (Baker, 1966) to maximize the internal consistency of the scales. The Method of Reciprocal Averages is a member of a class of scaling techniques which produces item response weights that maximize the internal consistency of an instrument for a population of subjects (Baker, 1969). The general mathematical model for this class was derived by Guttman (1941), who showed that internal consistency scaling is merely a special case of the principal components model due to Hotelling (1933).

Briefly, the procedure used was as follows: A set of a priori weight was assigned to each item in order to begin the iterative process of the RAVE program. The program produced a set of weights for each item and a total score for each subject. The internal consistency of the scales was compared from these weights and total scores by means of Hoyt's Analysis of Variance technique (Hoyt, 1941), which is a sub-routine of the RAVE program. The internal consistency reliability coefficients were thus obtained for each scale, and are shown in Table 2. The results on each scale show a fairly high degree of internal consistency, with correlation coefficients, ranging from .61 to .80 on the Like-Unlike Scale, and from .69 to .80 on the

Table 2

Hoyt Reliability Correlation Coefficient¹ Score on the
Self-Description Questionnaire ($n = 89$)

Variables	Like-Unlike Scale	Pertinency Scale
I +	.68	.72
I -	.64	.67
II +	.65	.72
II -	.76	.80
III +	.71	.78
III -	.65	.69
IV +	.77	.80
IV -	.76	.79
V +	.61	.78
V -	.68	.70
VI +	.67	.77
VI -	.73	.77
VII +	.80	.74
VII -	.64	.75
VIII +	.72	.75
VIII -	.69	.71

¹Obtained by the use of the TAP program with the RAVE sub-routine.

Note: From "A Test of Erikson's theory of ego-stage development by means of a self-report instrument" by R.D. Boyd & R.N. Koskela, Journal of Experimental Education, 1970, 38, p.1

Pertinency Scale ($N = 89$) for the eight ego stages. The range is from .64 to .77, with an average reliability correlation coefficient of .70 for the first four ego stage of the Like-Unlike Scale, which are the stages most relevant to this study.

Boyd claimed (personal communication, August, 1978) that through the RAVE technique they were able to ascertain that the weighted values were so high that the factors could not be included in each other and that the scales were exclusive one from another.

The average test-retest reliability correlation coefficients over a two-week period ($N = 48$) was .73 for both scales for a population of upperclassmen and graduate students. The Social Support Questionnaire (see Appendix 5):

This questionnaire was developed by the author, using portions of other well established instruments, and also including some items which are new for this study. Social support is regarded in this study as a personal resource and the questionnaire is designed to measure the individual's perception of the amount and type of support available to her. Each of the six questions in the questionnaire is designed to measure a different component of social support.

In A-part of the first three questions, individuals are asked about the nature of their relationships with 10 categories of people within their social networks, including family members, peers and professionals. In addition to the 10 categories specified, the subject has the option of adding up to three other categories of people. These questions are adapted

from a format that has been extensively used by Bronfenbrenner, at the Cornell Human Development and Family Studies Centre, in a number of studies (Bronfenbrenner, Devereux, Rodgers, 1974; Devereux, Bronfenbrenner and Suci, 1962; Seigelman, 1965; Thomas, Gecas, Weigert, & Rooney, 1974).

In A-part of the first three questions, the subjects answered three questions per network member, each designed to assess a unique component of social support. These components are, (a) instrumental or tangible support; (b) emotional support; (c) esteem support.

Instrumental or tangible support was measured by a five-point Likert-type rating of the extent to which each subject could count on each network category. A measure was taken for each network category and an index taken from the sum of items to get a measure of the amount of instrumental support available to each subject. The index consisted of the sum of measures divided by the number of measures. Missing data, e.g., a deceased parent or non-existent sibling, was given a score of nine which was later recoded to zero to represent an average value for that subject. This was done in an effort to distinguish between no contact with an available network member and a vacancy in that category of the network. There are obvious defects to this solution as it involves the question of timing and the relative value of quality and quantity of support which cannot be assessed in this questionnaire. For example, did the parent die six months ago or 16 years ago? If one does not have siblings or relatives does one compensate by having more friends?

Part A of emotional and esteem support (Q. 2 & 3) was scored in the same manner as Part A of instrumental support.

In Part B of the first three questions, subjects are asked to rate their satisfaction with the amount of instrumental, emotional and esteem support generally available to them on a five-point Likert-type scale. The score per subject was the total score of the rating scale.

In the fourth question, three broad indicators of social integration in the community were used to measure this construct. Question 4(a) was adapted from a measure used by Gottlieb (1977) in a study of new mothers, and is designed to measure the amount of participation in organized activities within the community. A measure is obtained for each category listed (i.e., club or organization) according to amount of participation and these measures are summed to yield a total score.

Question 4(b) and 4(c) are designed to measure the extent of belonging or integration in these groups or categories. This concept was measured on a five-point Likert-type scale. A measure was taken for each category (club or organization) listed and the mean value was obtained by summing the measures and dividing by the number of categories.

Question 5 is a measure of the amount and perceived adequacy of financial resources available to each subject, and was not scored. Question 6 is designed to measure the extent to which the subject perceives the culture as providing appropriate role models. The score per subject in Question 6 was the total score of the rating scale.

After the social support measure had been developed and put together as a questionnaire, it was given to 10 third or fourth year female undergraduates attending the University of Guelph. Individuals receiving the questionnaire were asked to list any problems or difficulties they encountered in using the questionnaire, any omissions or overlaps in the categories used in A-part of Questions 1, 2 and 3, and to comment freely on their thoughts and feelings while doing the questionnaire. In addition, the questionnaire was given to two professors of Social Psychology, one of whom was actively working in the field of social support. They were asked to evaluate and give comments regarding the questionnaire as an instrument.

The following modifications were made in the instrument following this small pilot study: (1) In Question 1(a) "closest friend" was added to the list of network members; (2) B-part was added to Questions 1, 2 and 3; (3) Parts B and C were added to Question 4.

In its final form, the social support measure consists of 11 separate measures of social support. Since this is a new test it was planned to do a factor analysis of the 11 subscales of items in order to see the patterning of correlations among the measures and to establish some validity and reliability for the measure. It should be pointed out that the test-retest reliability has not been established for the measure.

The Data Questionnaire (see Appendix 6):

The Data Questionnaire was used to collect: (a) demographic information concerning the respondent's age, marital status, place of residence, socioeconomic status, religion,

etc.; (b) impressions of respondents regarding the nature of the study and their ideas and feelings about the questionnaires and interview.

Scoring of Instruments:

Most of the data from the Data Questionnaire and from the Social Support Measure, as well as the identity status ratings for content areas and for overall identity status ratings, was coded on University of Ottawa computer scanner sheets (SA 15-AP02 5/77) and subsequently stored on a disk.

In order to answer the S-D.Q., subjects filled out answer sheets (see Appendix 3) that had been developed for the S-D.Q. and for use in the University of Wisconsin computer centre. Due to changes in program budgets, it was not possible to have these scanner sheets scored at the University of Wisconsin as originally intended. Consequently, the data was recoded onto two sets of University of Ottawa scanner sheets, (one set for the Like-Unlike Scale and one set for the Pertinency Scale), along with the identification and identity status of each subject. These sheets were subsequently fed into the IBM machine at the University of Ottawa Computer Centre and stored on disks to be available for statistical analyses.

The Procedure

All interviews and testing were conducted at the Guidance Centre of the University of Ottawa. Each subject was seen individually in an office, which was normally used for therapy or counselling, and administered the Identity Status Interview by the author, hereafter referred to as the

experimenter in this chapter, according to the procedures outlined in Marcia's manual. All interviews were tape recorded for further classification.

Following the interview, each subject was taken to a separate room and administered the three paper and pencil measures in the following order: Self-Description Questionnaire; Social Support Questionnaire; Data Questionnaire. The S-D Q was administered according to instructions in the test manual (see Appendix 4). After the initial test instructions were given, the experimenter was available on an intermittent basis to answer any questions regarding the testing material. All tests and interviews were administered by the experimenter. Total testing time, including the interview, was one and a half to two hours per subject.

Rating of Identity Status Interview and Reliability.

All interviews were taped in order to be further classified by the experimenter and a second judge. The second judge was a doctoral student in clinical psychology, who had had extensive experience in test administration and in interviewing, and who had been trained to rate the interviews according to Marcia's methodology for rating.

The first ten tapes were listened to and rated by both judges so that any differences of opinion could be discussed and resolved. Another five tapes were listened to by both judges because they seemed especially difficult to rate. Of these five, one subject was rated unscorable because she had a different rating for most parts of the interview. The remaining tapes were all rated by the experimenter and 30 of these were

randomly selected and independently rated by the second judge. Inter-judge reliability between the two dependent raters across the 30 randomly selected subject was 86 per cent using a criterion of unanimous agreement for content areas. When the two judges independently arrived at different ratings for a subject, the case was discussed. Where agreement could not be reached on a status, the subject was dropped from the study. In this study, one subject was dropped as unscorable and four were dropped for lack of agreement between the two judges yielding a total of 135 subjects in the final sample.

Subjects were interviewed and tested over a period of four weeks. The original research design called for a minimum of 30 subjects per cell. After three weeks of interviewing, the numbers for the Moratorium and Achievement statuses were well above the minimum while the numbers for the Foreclosure and Diffusion statuses were still below the minimum. Two factors seemed to be accounting for the lower numbers in the latter two statuses. First, there were probably proportionately fewer Diffusion and Foreclosure subjects in this third and fourth year college population. A possible effect of the Women's Liberation Movement with its emphasis on autonomy and working out one's own destiny, may be to reduce the actual number of Foreclosures in the population. With regard to the Diffusion status, Waterman, Geary & Waterman (1974), found that only 13 per cent of the subjects in their sample ($N = 88$) were in the Diffusion status in the areas of occupation and ideology in their senior year. Hence, one would expect to find proportionately fewer Diffusions in the present sample.

Secondly, Foreclosure status individuals by definition are more satisfied with the status quo and are not actively seeking change. Hence, they are less likely to volunteer for this type of project because they have little to gain from it. Diffusion status individuals often find it difficult to cope with their own responsibilities and are less likely than the other statuses to volunteer for an extra two hours of non-recreational activity. Also, by definition, they are low on commitment and so even if they do volunteer, they are prone to cancel or postpone an engagement. This was, in fact, what happened in a number of cases. Hence, for practical reasons, the minimum number of subjects per cell was lowered to 22.

In order to insure some predominance of the Foreclosure and Diffusion statuses among the remaining subjects volunteering to participate in the project, a screening device was used. Three scenes (see Appendix 7), each describing a conversation among four individuals, each representing a viewpoint likely to be typical of one of the statuses, was given to the subjects who volunteered. The volunteers were asked to indicate which participant in the scene was most like her and report back to the experimenter before being scheduled for an interview. Prescreening devices have been used previously by Toder and Marcia (1973) in the identity status research. This particular screening device was adapted from Schilling (1975). The scenes were used only as a screening device. All final identity statuses were determined by means of a standard interview. All subjects who were prescreened were independently rated by the second judge who was unaware of the status category in which the

subject had placed herself. However, a possible bias in rating existed as the experimenter who interviewed the subjects was aware of the status category in which the subject had placed herself.

The Plan of the Statistical Analysis

It was predicted in Hypothesis I that the identity statuses will differ significantly on the trust, autonomy, initiative, and industry components. Since descriptive data on the S-D Q (Boyd and Koskela, 1970, p. 10) indicate moderate to low positive intercorrelations between measures of resolution of ego stages and since Erikson's theory suggests an interrelatedness to psychosocial growth, it was planned to test this hypothesis by a multivariate analysis of variance of the S-D Q Like-Unlike ratio scores for ego stages one to four by identity status.

It was predicted in Hypothesis II that the Moratorium and Achievement statuses will differ significantly on pertinency scores for negative and positive elements for some of the ego stages. It was planned to test this hypothesis by a one-way multivariate analysis of variance of the pertinency scores for negative and positive scales by identity status for stages five to eight.

It was planned to perform post hoc comparisons, using intervals derived from Roy's critical value, following both multivariate analyses of variance, if the overall manova test was significant.

It was predicted in Hypothesis III that the identity

statuses will differ significantly on measures of social support. It was planned to do a factor analysis on the social support measure and then to follow this with separate one-way analyses of variance on each of the major factors that emerged from the factor analysis. Post hoc comparisons using the Scheffe method, were to be performed if the F test indicated significance.

All multivariate analyses of variance were to be computed using the Full Rank Multivariate Linear Model of analysis (Carlson, 1975). Scheffe's Simultaneous Confidence Intervals for single contrasts of means were to be computed using Instapak (Interactive Statistical Programme in APL by Cooper and Pelletier, 1977). All other statistical procedures were to be computed using the Statistical Program for the Social Sciences (2nd Edition, 1975).

CHAPTER III

PRESENTATION OF RESULTS

In this chapter the results of the study are presented in three main sections. In the first section, some demographic characteristics of the Identity Status groups are examined to see if there were any significant differences among groups that might present confounding factors when the main hypotheses are tested.

The second section of the chapter presents the statistical testing of the study's hypotheses. The final section reports on additional analyses which add interpretative information to the study.

The sample sizes for the Identity Status groups were: Achievements; 47, Moratoriums, 38; Foreclosures, 28; and Diffusions, 22. Homogeneity of variance was computed in all analyses of variance because of unequal cell sizes. In all computations, the alpha level was set at .05.

Preliminary Analyses

Prior to examining the individual hypotheses, some preliminary analyses were computed to assess if there were any systematic relationships between identity statuses and some of the demographic variables.

The variable of age was examined because of its possible importance in any study dealing with developmental characteristics and based on an epigenetic model. The variables dealing with living situation and socioeconomic status (SES)

were investigated because they could conceivably have an influence on measures of social support.

A one-way analysis of variance of age by identity status was computed and is presented in Table 3. No statistically significant difference was found among the four groups ($F(3,131) = 1.92$, n.s.). The variance was homogeneous (Cochran's $C = 0.273$, $p < .999$).

Next, chi-square analyses were performed between identity statuses and the following variables: (1) present living arrangements with regard to parents; (2) location of residence (on campus or off campus); (3) SES measures, including measures of Education of Father, Education of Mother, and Family Income. These chi-square analyses are presented in Tables 4 to 8, inclusive.

Table 4, representing living arrangements with regard to parents by identity status, displays a chi-square of 7.49 (3), n.s. Although this chi-square at $p < .06$ does not reach significance, it is close enough to warrant mentioning. Table 5, representing location of residence by identity status, displays a chi-square of 2.13 (3), n.s. Table 6, representing Education of Father by identity status, displays a chi-square of 4.48 (6), n.s. Table 7, representing Education of Mother by identity status, displays a chi-square of .816 (3), n.s. Table 8, representing level of income by identity status, displays a chi-square of 3.05 (6), n.s.

In summary, the results of the preliminary analyses, presented in Tables 3 to 8, inclusive, suggest that the demographic variables presented are statistically independent of

Table 3

Summary of Analysis of Variance: Age by Identity Status
($\underline{n} = 135$)

Source of Variation	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Between groups	7.790	3	2.597	1.920	n.s.
Within groups	177.209	131	1.353		
Total	184.999	134			

Table 4

Chi-Square Analysis of Results of Living Arrangements by
Identity Status

Living Arrangements	<u>n</u>	A	M	F	D	Row Total
At Home	N	13	11	11	13	48
	Row %	27.1	22.9	22.9	27.1	35.6
	Col %	27.7	28.9	39.3	59.1	
Not at Home	N	34	27	17	9	87
	Row %	39.1	31.0	19.5	10.3	64.4
	Col %	72.3	71.1	60.7	40.9	
Column Total	N	47	38	28	22	135
	%	34.8	28.1	20.7	16.3	100

Summary data of Living Arrangements by Identity Status

1. Chi-Square = 7.49; df = 3; $p < .06$

Note. Achievements (A)
Moratoriums (M)
Foreclosures (F)
Diffusions (D)

Table 5

Chi-Square Analysis of Results of Location of Residence by
Identity Status

Location of Residence	<u>n</u>	A	M	F	D	Row Total
On Campus	N	4	7	5	3	19
	Row %	21.1	36.8	26.3	15.8	14.1
	Col %	8.5	18.4	17.9	13.6	
Off Campus	N	43	31	23	19	116
	Row %	37.1	26.7	19.8	16.4	85.9
	Col %	91.5	81.6	82.1	86.4	
Column Total	N	47	38	28	22	135
	%	34.8	28.1	20.7	16.3	100

Summary data of Location of Residence by Identity Status

1. Chi-Square = 2.13; df = 3; $p < .55$

Note. Achievements (A)
Moratoriums (M)
Foreclosures (F)
Diffusions (D)

Table 6

Socioeconomic Status Themes: Chi-Square Analysis of Results of
Education of Father by Identity Status

Education Level	<u>n</u>	A	M	F	D	Row Total
Grade and High School	N	19	17	17	9	62
	Row %	30.6	27.4	27.4	14.5	46.3
	Col %	40.4	44.7	63.0	40.9	
Comm. Coll. & Univ.	N	18	12	7	9	46
	Row %	39.1	26.1	15.2	19.6	34.3
	Col %	38.3	31.6	25.9	40.9	
Post. Graduate	N	10	9	3	4	26
	Row %	38.5	34.6	11.5	15.4	19.4
	Col %	21.3	23.7	11.1	18.2	
Column	N	47	38	28	22	135
Total	%	35.1	28.4	20.1	16.4	100

Summary data of Education of Father by Identity Status

1. Chi-Square = 4.68; df = 6; $p < .59$

Note. Achievements (A)
Moratoriums (M)
Foreclosures (F)
Diffusions (D)

Table 7

Socioeconomic Status Themes: Chi-Square Analysis of Results
of Education of Mother by Identity Status

Education Level	<u>n</u>	A	M	F	D	Row Total
Grade and High School	N	24	18	16	11	69
	Row %	34.8	26.1	23.2	15.9	53.1
	Col %	55.8	47.4	57.1	52.4	
Post Secondary	N	19	20	12	10	61
	Row %	31.1	32.8	19.7	16.4	46.9
	Col %	44.2	52.6	42.9	47.6	
Column Total	N	43	38	28	21	130
	%	33.1	29.2	21.5	16.2	100

Summary data of Education of Mother by Identity Status

1. Chi-Square = .816; df = 3; $p < .85$

Note. Achievements (A)
Moratoriums (M)
Foreclosures (F)
Diffusions (D)

Number of Missing Observations = 5

Table 8

Socioeconomic Status Themes: Chi-Square Analysis of Level of
Family Income by Identity Status

Income Level	<u>n</u>	A	M	F	D	Row Total
\$5-10,000	N	6	4	1	2	13
	Row %	46.2	30.8	7.7	15.4	9.6
	Col %	12.8	10.5	3.6	9.1	
\$10-20,000	N	16	14	14	8	52
	Row %	30.8	26.9	26.9	15.4	38.5
	Col %	34.0	36.8	50.0	36.4	
over \$20,000	N	25	20	13	12	70
	Row %	35.7	28.6	18.6	17.1	51.9
	Col %	53.2	52.6	46.4	54.5	
Column Total	N	47	38	28	22	135
	%	34.8	28.1	20.7	16.3	100

Summary data of Level of Family Income by Identity Status

1. Chi-Square = 3.05; df = 6; $p < .80$

Note. Achievements (A)
Moratoriums (M)
Foreclosures (F)
Diffusions (D)

the identity status variable, and it would appear that they are randomly distributed across the identity statuses.

Statistical Testing of the Hypotheses

The first dependent variable analyzed was the ratio scores on the Like-Unlike Scale of the S-D Q for ego stages one to four, inclusive.

It was predicted in Hypothesis I that the identity statuses will differ significantly on the Trust, Autonomy, Initiative and Industry components. More specifically, the following hypotheses were made:

It was predicted in Hypothesis I (a) that Achievement women will obtain the highest scores on Basic Trust vs. Mistrust (ego stage one), followed by Foreclosure, Moratorium and Diffusion women, in that order.

It was predicted in Hypothesis I (b) that Achievement women will obtain the highest scores on Autonomy vs. Shame and Doubt (ego stage two), followed by Moratorium, Foreclosure and Diffusion women, in that order.

Two alternative hypotheses were predicted in Hypothesis I (c) regarding Initiative vs. Guilt (ego stage three): (i) Achievement women will obtain the highest scores, followed by Moratorium, Foreclosure and Diffusion women, in that order; or alternately, (ii) Achievement women will score highest followed by Foreclosure, Diffusion and Moratorium women, in that order.

It was predicted in Hypothesis I (d) that Achievement and Foreclosure women will obtain highest scores on the Industry vs. Inferiority stage (ego stage four), followed by Moratorium and Diffusion women, in that order.

First, descriptive statistics were obtained for the S-D Q ratio scores (measures of resolution of each ego stage) on the Like-Unlike scale. The means and standard deviations for each identity status for ego stages one to four are presented in Tables 9 to 12, inclusive. A graphic portrayal of mean scores on the resolution of ego stages by identity status is presented in Figure 4.

Table 9

Trust vs. Mistrust Scores: Means and Standard Deviations
for Identity Status Groups ($\underline{n} = 135$)

Identity Status	$\underline{n}$	Mean ¹	Standard Deviation
Achievements	47	.569	.084
Moratoriums	38	.568	.067
Foreclosures	28	.594	.056
Diffusions	22	.495	.123

1. Mean scores below .50 represent unfavorable resolution of an ego stage.

Table 10

Autonomy vs. Shame & Doubt Scores: Means and Standard Deviations for Identity Status Groups ($\underline{n} = 135$).

Identity Status	$\underline{n}$	Mean ¹	Standard Deviation
Achievements	47	.609	.070
Moratoriums	38	.595	.075
Foreclosures	28	.570	.055
Diffusions	22	.552	.099

1. Mean scores below .50 represent unfavorable resolution of an ego stage

Table 11

Initiative vs. Guilt Scores: Means and Standard Deviations
for Identity Status Groups ($n = 135$)

Identity Status	$\underline{n}$	Mean ¹	Standard Deviation
Achievements	47	.571	.087
Moratoriums	38	.544	.069
Foreclosures	28	.580	.054
Diffusions	22	.485	.097

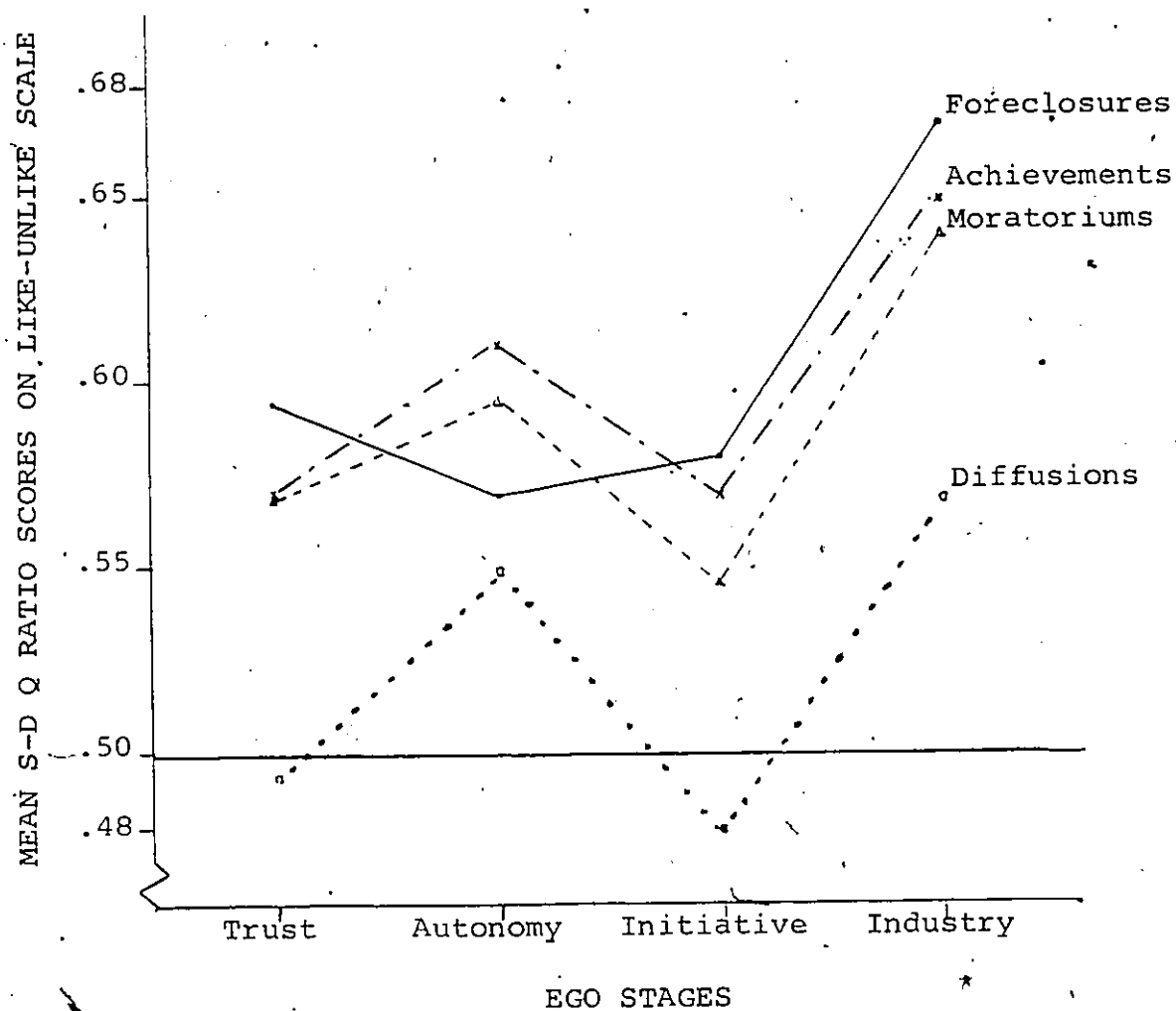
1. Mean scores below .50 represent unfavorable resolution
of an ego stage

Table 12

Industry vs. Inferiority Scores: Means and Standard Deviations
for Identity Status Groups ($n = 135$)

Identity Status	$\underline{n}$	Mean ¹	Standard Deviations
Achievements	47	.649	.091
Moratoriums	38	.638	.054
Foreclosures	28	.670	.065
Diffusions	22	.567	.132

1. Mean scores below .50 represent unfavorable resolution
of an ego stage



Note: Mean scores below .50 represent unfavorable resolution of an ego stage

Figure 4. Mean scores on the resolution of ego stages by Identity Status

The mean scores of the statuses for the resolution of each ego stage (Tables 9, 10, 11, 12 and Figure 4) show that, for this particular sample: (a) Achievements, Moratoriums, and Foreclosures all have scores reflecting favorable resolution (above .509) on all four ego stages; (b) Diffusions have scores reflecting favorable resolution of the Autonomy and Industry Stages; (c) Foreclosures tend to score highest of all statuses, except on the Autonomy stage. All four statuses tend to achieve their highest level of resolution on the Industry stage.

A correlation matrix between ego stage scores for stages one to four, inclusive, is shown in Table 13 and indicates that the correlations between these ego stages are moderate to somewhat low in a positive direction. These intercorrelations are slightly higher, but essentially similar, to those found by Boyd and Koskela (1970, p. 11, see Table 14).

To test Hypotheses I (a to d) a one-way multivariate analysis of variance of the S-D Q Like-Unlike ratio scores on the four ego stages across identity status groups was carried out. A significant difference among the status means of the four scales was found, since Roy's Largest Root Criterion¹ of .196 exceeded the critical value of .140 ($S = 3$, $M = 0.0$, $N = 63$; $p < .01$).

A post hoc analysis of contrasted status groups on ego stages using intervals derived from Roy's critical value (Timm, 1975, pp. 377, 378, 608), are presented in Tables 15 to 18.

¹Roy's Criterion is used here as it is more precise than the Multivariate F-Statistic

Table 13

Correlation Matrix Between Ego Stage Scales
(n = 135)

Ego Stage	1	2	3	4
1	1.00			
2	.33	1.00		
3	.52	.49	1.00	
4	.48	.54	.62	1.00

Note. All correlations are significant at the .001 level

Table 14

Correlation Between Ego Stage Scales¹
(n = 151)

Ego State	1	2	3	4
1	1.00			
2	.21	1.00		
3	.45	.23	1.00	
4	.41	.25	.60	1.00

Note. All correlations are significant at the .05 level

1. From "A test of Erikson's theory of ego-stage development by means of a self-report instrument" by R. D. Boyd & R. N. Koskela, Journal of Experimental Education, 1970, 38, p. 11.

Table 15

Post Hoc Analysis of Mean Basic Trust vs.
 Mistrust Scores in Contrasted Identity Status Groups:
 Confidence Intervals Derived from Roy's Largest Root Criterion
 Critical Value

Contrasted Groups	95% Confidence Intervals
A vs. D	-.010 to .160
A vs. M	-.072 to .074
F vs. A	-.056 to .106
M vs. D	-.015 to .163
F vs. M	-.065 to .111
F vs. D	.006 to .192*
A + F vs M + D	-.011 to .111
A + F vs D	.006 to .168*
A + M + F vs D	.005 to .159*

Note. Achievements (A)
 Moratoriums (M)
 Foreclosures (F)
 Diffusions (D)

Note. Roy's Critical Value = .112

Note. Contrast is significant if interval does not include zero

Table 16

Post Hoc Analysis of Mean Autonomy vs. Shame and Doubt
Scores in Contrasted Identity Status Groups: Confidence
Intervals Derived from Roy's Largest Root Criterion
Critical Value

Contrasted Groups	95% Confidence Intervals
A vs. D	.039 to .077*
A vs. M	-.070 to .100
A vs. F	-.033 to .113
M vs. D	-.038 to .124
M vs. F	-.052 to .102
F vs. D	-.067 to .103
A + M vs F + D	-.012 to .094
A + M vs D	-.023 to .123
A + F + M vs D	-.030 to .105

Note. Achievements (A)
Moratoriums (M)
Foreclosures (F)
Diffusions (D)

Note. Roy's Critical Value = .112

Note. Contrast is significant if interval does not include
zero

Table 17

Post Hoc Analysis of Mean Initiative vs. Guilt Scores in
Contrasted Identity Status Groups: Confidence Intervals
Derived from Roy's Largest Root Criterion Critical Value

Contrasted Groups	95% Confidence Intervals
A vs. D	.006 to .168*
A vs. M	-.042 to .096
F vs. A	-.068 to .086
M vs. D	-.026 to .144
F vs. M	-.041 to .113
F vs. D	.066 to .184*
A + F vs M + D	.004 to .118*
A + F vs D	.003 to .179**
A + F + M vs D	.007 to .153*

Note. Achievements (A)
Moratoriums (M)
Foreclosures (F)
Diffusions (D)

Note. Roy's Critical Value = .112

Note. Contrast is significant if interval does not include zero

**Significant ($p < .01$)

Table 18

Post Hoc Analysis of Mean Industry vs. Inferiority Scores
in Contrasted Identity Status Groups: Confidence Intervals
Derived from Roy's Largest Root Criterion Critical Value

Contrasted Groups	95% Confidence Intervals
A vs. D	-.007 to .171
A vs. M	-.078 to .100
F vs. A	-.064 to .106
M vs. D	-.021 to .165
F vs. M	.053 to .117
F vs. D	.002 to .204*
A + F vs M + D	-.004 to .118
A + M + F vs D	.005 to .167*
A + F vs D	.008 to .178*

Note. Achievements (A)
Moratoriums (M)
Foreclosures (F)
Diffusions (D)

Note. Roy's Critical Value = .112

Note. Contrast is significant if interval does not include zero

For ego stage one, Basic Trust vs. Mistrust (Table 15), the Foreclosure group has a significantly higher mean score than the Diffusion group but none of the other groups were significantly different one from another. The mean of the combined Achievement and Foreclosure groups and the mean of the combined Achievement, Moratorium and Foreclosure groups were both significantly higher than the mean of the Diffusion group suggesting that the Diffusions are a distinct group from the other statuses on the first ego stage.

For ego stage two, Autonomy vs. Shame and Doubt (Table 16), the Achievement group has a significantly higher mean score than the Diffusion group but none of the other groups were significantly different from one another, although the mean scores of the other groups were in the order predicted. None of the combined groups were significantly different from each other or from the Diffusion group.

For ego stage three, Initiative vs. Guilt (Table 17), the Achievements and Foreclosures are both significantly higher than the Diffusion group. None of the other groups are significantly different from one another, although once again, the mean scores were in the order predicted. The Achievement and Foreclosure groups combined have significantly higher scores than the Moratorium and Diffusion groups combined, and the mean score for the Achievement, Moratorium and Foreclosure groups is significantly higher than the mean score for the Diffusion group. In addition, the mean of the Achievement and Foreclosure groups combined is significantly higher than that of the Diffusion group at the .01 level.

For ego stage four, Industry vs. Inferiority (Table 18), the Foreclosure group has a significantly higher mean score than the Diffusion group but none of the other statuses were significantly different from one another. The mean of the combined Achievement and Foreclosure groups, and the mean of the combined Achievement, Moratorium and Foreclosure groups are both significantly higher than the mean of the Diffusion group.

In summary, inspection of the pattern of means across ego stages for identity statuses (Figure 4) and results of the post hoc comparisons for all four stages (Tables 15 to 18), indicate that Hypothesis I receives partial support from the results of this study. The Foreclosure group has a significantly more favorable resolution of the Trust, Initiative and Industry Stages (1, 3, & 4) than the Diffusion group. The Achievement group has a significantly more favorable resolution of the Autonomy and Initiative Stages (2 and 3) than the Diffusion group. When the Achievement and Foreclosure groups are combined they show a significantly more favorable resolution of the Trust, Initiative and Industry Stages (1, 3 and 4) than the Diffusion group. When the Achievement and Foreclosure group is contrasted with the combined Moratorium and Diffusion group, it is significantly higher on the Initiative stage (3). When the Achievement, Moratorium and Foreclosure groups are combined they show a significantly more favorable resolution of the Trust, Initiative, and Industry Stages (1, 3 and 4) than the Diffusion group.

The second dependent variable analyzed was the Positive and Negative Pertinency scores for the S-D Q for ego stages 5 to 8.

To review briefly, the 160 items of the S-D Q are divided equally between positive and negative aspects of each ego stage. Hence, there are ten positive and ten negative items for each ego stage which, respectively, make up the positive and negative scales for the ego stage. These two scales provide a measure of the hierarchy of concern the subjects expresses for the positive and negative aspects of a particular ego stage.

It was predicted in Hypothesis II that Moratorium and Achievement women will differ significantly on the Positive and Negative Pertinency scores for some of the ego stages. More specifically:

It was predicted in Hypothesis II (a) that Moratorium status women would have higher Positive and Negative Pertinency scores for the identity stage (ego stage five) than women in any of the other statuses.

It was predicted in Hypothesis II (b) that Achievement status women would have higher Positive and Negative Pertinency scores for the Intimacy, Generativity, and Integrity Stages (6, 7, & 8) than women in any of the other statuses.

First, descriptive statistics were obtained for the Positive and Negative Pertinency scores. The means and the standard deviations for each identity status for ego stages five to eight are presented in Tables 19 to 22, inclusive.

Inspection of Tables 19 to 22 indicates a high degree of variability in scores (SD ranges from 7.00 to 13.56) for stages 5 to 8. In addition, for this particular sample, there is a tendency for Diffusion women to score considerably lower on Pertinency scores for all four ego stages with the exception of PTN5 (concern for negative aspects of the identity stage).

Table 19

Positive and Negative Pertinency Scores for the Identity
Stage: Means and Standard Deviations for Identity Status
Groups ($n = 135$)

Identity Status	<u>n</u>	<u>M</u> ¹		<u>SD</u>	
		Pos.	Neg.	Pos.	Neg.
Achievements	47	34.06	31.43	10.33	8.49
Moratoriums	38	36.71	35.82	9.02	7.69
Foreclosures	28	34.21	30.79	10.81	7.51
Diffusions	22	31.09	32.41	11.38	10.58

1. Possible range in scores 10 to 60

Table 20

Positive and Negative Pertinency Scores for the Intimacy
Stage: Means and Standard Deviations for Identity Status
Groups ($n = 135$)

Identity Status	<u>n</u>	<u>M</u> ¹		<u>SD</u>	
		Pos.	Neg.	Pos.	Neg.
Achievements	47	36.83	30.72	11.16	9.67
Moratoriums	38	40.89	33.92	8.45	8.44
Foreclosures	28	35.93	30.61	12.22	7.56
Diffusions	22	33.23	29.82	13.56	10.60

1. Possible range in scores 10 to 60

Table 21

Positive and Negative Pertinency Scores for the Generativity
 Stage: Means and Standard Deviations for Identity Status
 Groups ($n = 135$)

Identity Status	n	M^1		SD	
		Pos	Neg	Pos	Neg
Achievements	47	35.06	29.57	11.52	9.44
Moratoriums	38	32.53	29.10	9.28	9.15
Foreclosures	28	34.14	30.04	11.01	8.26
Diffusions	22	26.73	27.09	11.50	10.18

1. Possible range in scores 10 to 60

Table 22

Positive and Negative Pertinency Scores for the Integrity
Stage: Means and Standard Deviations for Identity Status
Groups ($\underline{n} = 135$)

Identity Status	<u>n</u>	<u>M</u> ¹		<u>SD</u>	
		Pos	Neg	Pos	Neg
Achievements	47	27.70	25.06	9.51	8.88
Moratoriums	38	29.21	27.89	8.81	7.00
Foreclosures	28	29.71	26.00	11.62	9.31
Diffusions	22	25.27	24.90	9.32	6.98

1. Possible range of scores 10 to 60

A correlation matrix of positive and negative pertinency scores on ego stages five to eight, inclusive, is shown in Table 23, and indicates that the correlations between positive and negative pertinency scores of ego stages five to eight are moderate to somewhat high in a positive direction.

To test Hypothesis II (a and b), a one-way multi-variate analysis of variance of the positive and negative pertinency scores on ego stages five to eight across identity status groups was performed. A significant difference among the means of the four status groups was found, since Roy's Largest Root Criterion of .205 exceeded the critical value of .196 ($S = 3$, $M = 2.0$, $N = 61.0$; $p < .01$).

Post hoc analyses of contrasted status groups on the positive and negative pertinency scores for the Identity, Intimacy, Generativity, Integrity stages, using intervals derived from Roy's critical value (Timm, 1970, p. 608) are presented in Table 24. The Moratorium group is not significantly higher than any of the other groups. Hence, Hypothesis II (a) is not supported by these findings.

Post hoc analysis of contrasted status groups on the positive and negative pertinency scores for the Intimacy, Generativity and Integrity stages were performed on the data (see Tables 25, 26, and 27). None of these differences were significantly different one from another. Thus, Hypothesis II (b) is not supported by these findings.

Inspection of the Pertinency means of the statuses for this particular sample (Tables 19 to 22) revealed no particular trend except that the Diffusion group tended to score lowest of

Table 23

Correlations Between Negative and Positive Pertinency Scores
on Ego Stages 5 to 8 ($n = 135$)

Ego Stage	5Pos	5Neg	6Pos	6Neg	7Pos	7Neg	8Pos	8Neg
5Pos	1.00							
5Neg	.68	1.00						
6Pos	.82	.58	1.00					
6Neg	.79	.72	.69	1.00				
7Pos	.78	.55	.69	.69	1.00			
7Neg	.65	.55	.58	.71	.75	1.00		
8Pos	.77	.53	.70	.64	.71	.66	1.00	
8Neg	.60	.58	.43	.64	.65	.59	.66	1.00

Table 24

Post Hoc Analysis of Mean Pertinency Scores for Identity vs.
Diffusion Stage in Contrasted Identity Status Groups:
Confidence Intervals Derived from Roy's Largest Root Criterion
Critical Value

Contrasted Groups	95% Confidence Intervals	
	Positive	Negative
M vs. A	-8.644 to 13.938	-4.914 to 13.694
M vs. F	-6.808 to 11.800	-5.595 to 15.656
M vs. D	-8.243 to 19.483	-8.020 to 14.834

Note. Achievements (A)
Moratoriums (M)
Foreclosures (F)
Diffusions (D)

Note. Roy's Critical Value = .163

Note. Contrast is significant if interval does not include zero

Table 25

Post Hoc Analysis of Mean Pertinency Scores for Intimacy
vs. Isolation Stage in Contrasted Identity Status Groups:
Confidence Intervals Derived from Roy's Largest Root
Criterion Critical Value

Contrasted Groups	95% Confidence Intervals	
	Positive	Negative
A vs. M	-8.194 to 16.324	-6.812 to 13.208
A vs. F	-12.513 to 14.315	-10.834 to 11.069
A vs. D	-11.420 to 18.626	-10.951 to 12.761

Note. Achievements (A)
Moratoriums (M)
Foreclosures (F)
Diffusions (D)

Note. Roy's Critical Value = .163

Note. Contrast is significant if interval does not include zero

Table 26

Post Hoc Analysis of Mean Pertinency Scores for Generativity
vs. Stagnation in Contrasted Identity Status Groups:
Confidence Intervals Derived from Roy's Largest Root
Criterion Critical Value

Contrasted Groups	95% Confidence Intervals	
	Positive	Negative
A vs. M	- 9.372 to 14.444	- 9.723 to 10.651
A vs. F	-13.079 to 13.952	-10.680 to 11.601
A vs. D	- 5.763 to 22.437	- 9.569 to 14.537

Note. Achievements (A)
Moratoriums (M)
Foreclosures (F)
Diffusions (D)

Note. Roy's Critical Value = .163

Note. Contrast is significant if interval does not include zero

Table 27

Post Hoc Analysis of Mean Pertinency Scores for Ego Integrity
vs. Despair in Contrasted Identity Status Groups: Confidence
Intervals Derived from Roy's Largest Root Criterion Critical
Value

Contrasted Groups	95% Confidence Intervals	
	Positive	Negative
M vs. A	- 9.239 to 12.255	- 6.191 to 11.853
M vs. A	- 9.748 to 13.772	- 8.938 to 10.810
A vs. D	-10.299 to 15.157	-10.525 to 10.836

Note. Achievements (A)
Moratoriums (M)
Foreclosures (F)
Diffusions (D)

Note. Roy's Critical Value = .163

Note. Contrast is significant if interval does not include zero

all groups, i.e., they showed the least concern for the content areas of ego stages five to eight. For the other identity status groups, sometimes Achievements were highest, sometimes Moratoriums, and sometimes Foreclosures.

The third dependent variable analyzed was the Social Support Questionnaire, an 11 item questionnaire measuring various components of social support, and designed to test Hypothesis III.

It was predicted in Hypothesis III that the identity statuses will differ significantly on each of the six main measures of social support. More specifically:

Hypothesis III (a)- Achievement women will score highest, followed by Foreclosure, Moratorium, and Diffusion women, in that order, on each of the six measures of social support

Hypothesis III (b)- Achievement women will score highest, followed by Foreclosure, Moratorium and Diffusion women, in that order, on a combined measure of social support

Since this was a new test not previously validated statistically, the research plan called for a factor analysis of the 11 items or variables of the questionnaire. The factor analysis was to be used as a guideline for the possible combination of items into fewer factors and as a test of the validity of the rationale for the test as a whole.

To investigate the pattern of correlations across the 11 measures (see Table 28) and to see what underlying patterns existed, a principal components factor analysis, with . . . iterations, and using a varimax rotation, was performed. Three factors were extracted which accounted, respectively, for 37.3%, 21.6% and 10.2% of the total variance.

Table 28

Correlation Matrix of Social Support Variables
($\bar{n} = 135$)

Variables	Q.1A	Q.2A	Q.3A	Q.1B	Q.2B	Q.3B	Q.4A	Q.4B	Q.4C	Q.5B	Q.6
Q.1A	1.00										
Q.2A	.81	1.00									
Q.3A	.63	.75	1.00								
Q.1B	.53	.43	.41	1.00							
Q.2B	.44	.58	.52	.45	1.00						
Q.3B	.44	.45	.52	.62	.59	1.00					
Q.4A	.14	.15	.07	.19	.11	.17	1.00				
Q.4B	.17	.14	.11	.18	.10	.14	.74	1.00			
Q.4C	.20	.18	.13	.20	.11	.15	.74	.95	1.00		
Q.5B	.16	.20	.14	.19	.08	.01	.02	.10	.09	1.00	
Q.6	.20	.23	.25	.04	.09	.12	.03	.00	.04	.11	1.00

The varimax rotation yielded three orthogonal factors, which accounted for 69.1% of the total variance (eigenvalues ≥ 1.00). The varimax rotated factor loadings matrix is presented in Table 29. Those variables grouped under each factor and having a communality value of positive .50 or higher were selected as representative of each factor. This resulted in groupings of different theoretical components of social support under a single factor but since the major interest in this dependent variable lay with the global concept of social support as opposed to a specific focus on theoretical components of social support, it was deemed desirable to work with the basic factors underlying the overall measure rather than to split factors into theoretical components. The factors were labelled by the author according to the nature of the variables which loaded on them.

The first factor, which accounted for 37.3% of the total variance before rotation, was described by high positive loadings on the components of frequency of participation in clubs and organizations (Q. 4a), extent of belonging to these groups (Q. 4b), and the extent to which the subject feels she shares values and attitudes of these groups (Q. 4c). This factor, which was designed to measure the extent of social integration in a network of relationships, was labelled "belonging in the community".

The second factor, which accounted for 21.6% of the total variance before rotation, was described by high positive loadings on the components of instrumental support (Q. 1a), of emotional support (Q. 2a), and of esteem support (Q. 3a), and

Table 29

Varimax Rotated Factor Loadings of the Social Support Variables

Variables	Factors		
	I	II	III
Q1A-Instrumental Support	.11	.72	.38
Q2A-Emotional Support	.06	.91	.35
Q3A-Esteem Support	.01	.66	.44
Q1B-Satisfaction with Instrumental	.14	.29	.59
Q2B-Satisfaction with Emotional	.38	.37	.57
Q3B-Satisfaction with Esteem	.08	.11	.97
4A- Frequency of Participation	.75	.05	.11
4B- Belonging	.97	.07	.05
4C- Sharing Values & Attitudes	.97	.12	.06
5B- Adequacy of Financial Resources	.06	.23	.00
6 - Role Models provided by culture	.00	.26	.05

was labelled "support from others", which included both support from significant individuals and from classes of individuals. This factor represented a major theoretical focus of the research.

The third factor, which accounted for 10.2% of the total variance before rotation, was described by high positive loadings on the extent of satisfaction with instrumental support (Q. 1b), with emotional support (Q. 2b), and with esteem support (Q. 3b). It was labelled "satisfaction with support from others".

This accounted for nine of the 11 variables of the questionnaire. The two remaining variables, viz., adequacy of financial resources (Q. 5) and extent to which the culture provides role models (Q. 6), were deleted from further analysis because they seemed to bear little relationship to the rest of the test, contributing only 1.2% and 0.5% of the total variance before rotation, respectively.

Thus, factor analysis of the 11 scales of the social support questionnaire yielded a three factor solution. The three factors were labelled: belonging in the community; support from others; satisfaction with support from others. These factors were used in all subsequent data analysis as the operational measures of social support.

Since there were high loadings (.50 or above) from three variables on each of the three factors, respectively, it was decided to use the raw scores of each of these three variables in the statistical analyses of the factors. Thus the mean scores of the three variables for a factor were summed and

the sum became the score ~~for that factor~~. As one variable (Q. 4a) was on a 7-point scale and was based on a total score while the other variables were on a 5-point scale and were based on a mean score, it was decided to convert all raw scores to standardized Z scores. Thus, the standardized Z scores of the three variables for each factor were summed and the sums became the score for each factor, respectively.

The coefficient alpha (Cronbach, 1951) was determined for each factor in order to obtain a measure of internal consistency and provide a lower bound on the reliability of each test factor. This yielded the following coefficients: .928¹ for Factor I; .892 for Factor II; .790 for Factor III.

The means and standard deviations for each identity status for Factors I, II and III are presented in Table 30. A graphic portrayal of raw, standardized mean scores for Factors I, II and III by identity status is presented in Figure 5.

To test Hypothesis III, data from the three dependent measure scales, viz., Belonging in the Community (Factor I), Support from Others (Factor II) and Satisfaction with Support (Factor III), were submitted to three univariate analyses of variance. Univariate analyses of variance were judged to be appropriate statistical methods since the three scales were constructed from items which loaded highly on three orthogonal factors generated by a varimax rotation.

The Bonferroni method was used to control the error

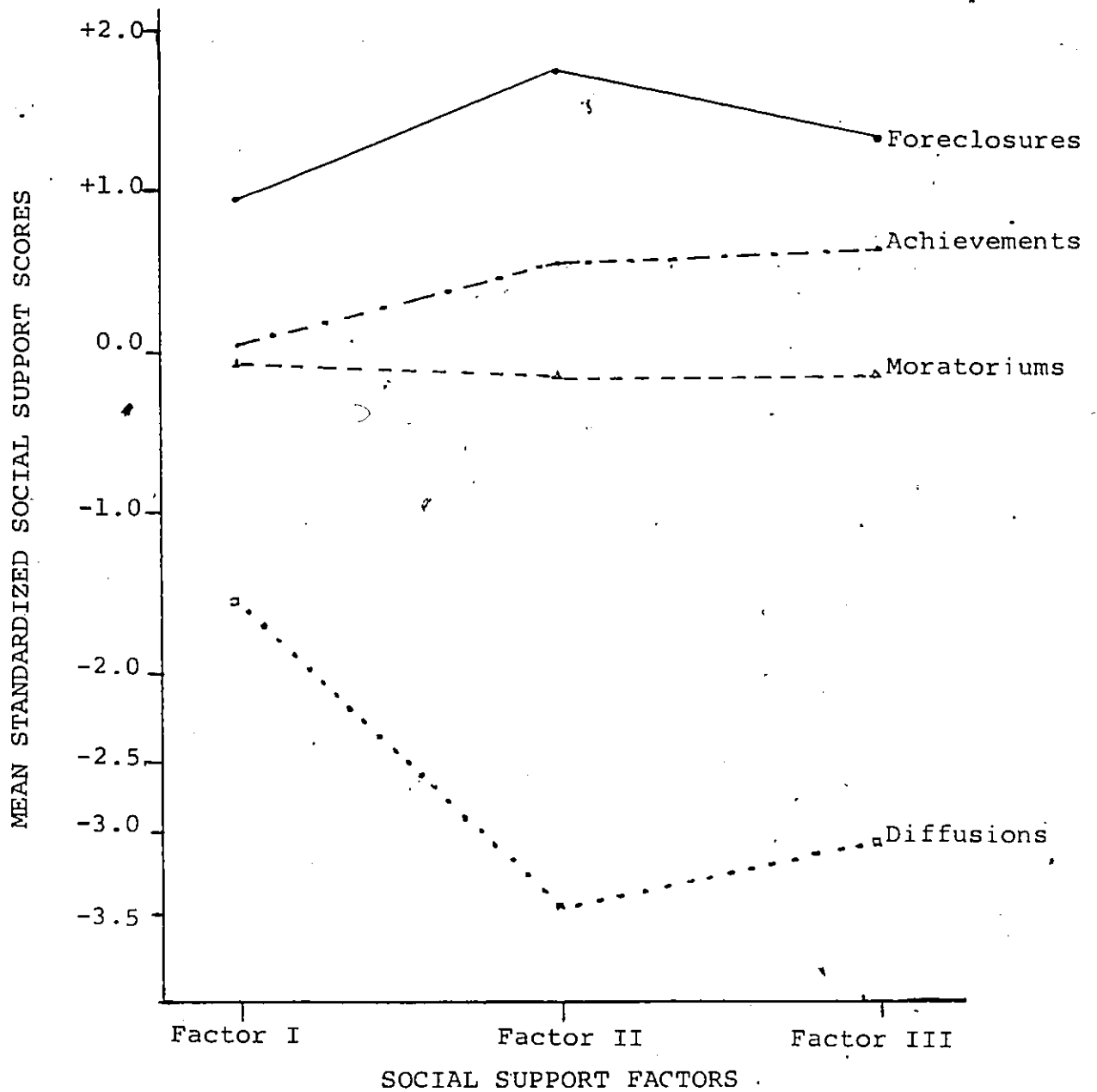
¹This is high because of the structural dependence between the parts of Question 4 (see SSM in Appendix 5)

Table 30

Factors I, II and III: Means and Standard Deviations for Identity Status Groups
($\bar{n} = 135$)

Identity Status	$\bar{n}$	Factor I		Factor II		Factor III	
		Mean	SD	Mean	SD	Mean	SD
Achievements	47	.09	2.91	.61	2.34	.66	2.06
Moratoriums	38	-.01	2.79	-.12	2.13	-.08	2.33
Foreclosures	28	1.05	2.67	1.78	1.93	1.36	1.46
Diffusions	22	-1.51	2.19	-3.36	2.33	-3.01	2.41

Note. Means and standard deviations are computed from raw, standardized scores



Note: Means are computed from raw, standardized scores.

Figure 5. Mean scores of the social support factors by Identity Status.

rate across the three analyses. Thus the alpha level which was originally set at .05 was reduced to .02² for both the F ratio and for post hoc procedures.

Analysis of variance of Factor I (Belonging in the Community) by identity status yielded a significant difference between groups ($F(3, 131) = 3.644, p < .02$; see Table 31). Variance was homogeneous (Cochrans C (3, 131) = .301, $p = .688$). The Scheffe post hoc comparisons (Table 32) indicate that the Foreclosures obtained significantly higher scores than the Diffusions but, taken singly, none of the other groups were significantly different one from another. The mean of the combined Achievement and Foreclosure groups was significantly higher than the mean of the Diffusion group. None of the other combined status groups were significantly different from each other or from the Diffusion group. The findings of this analysis must be interpreted with caution as the assumption of normality of the distribution was not met. All of those subjects not belonging to any clubs, organizations or community groups were given a score of zero on Question 4 (a, b and c). Inspection of the data revealed that approximately one third of the sample ($n = 135$) did not belong to any groups. A chi square analysis of those belonging and not belonging across identity status revealed no significant difference (chi-square (3) = 5.973, $p < .10$).

²This represents a slight modification of Bonferroni as strictly applied it should be .05/3 or .017. As the method is only an approximation, .02 was chosen for ease of calculations.

Table 31

Summary of Analysis of Variance of Factor I (Belonging in the Community) by Identity Status ($n = 135$)

Source of Variation	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between Groups	81.111	3	27.037	3.64*
Within Groups	972.076	131	7.420	
Total	1053.188	134		

$F_{.98}(3, 131) = 3.23$

* $p < .02$

Table 32

Scheffe Post Hoc Analysis of Factor I Mean Scores in Contrasted Identity Status Groups ($p < .02$)

Contrasted Groups	98% Confidence Intervals	
A vs. M	-1.753	to 1.946
A vs. F	-2.986	to 1.063
A vs. D	-.596	to 3.785
M vs. F	-3.169	to 1.054
M vs. D	-.774	to 3.769
F vs. D	.140	to 4.971*
A + F vs. M + D	-.1948	to 2.8468
A + F vs. D	.006	to 4.144*
A + M + F vs. D	-0.078	to 3.842

Note. Achievements (A)
 Moratoriums (M)
 Foreclosures (F)
 Diffusions (D)

Note. Scheffe's intervals were calculated with a critical value of 3.23

* Contrast is distinct from zero

Analysis of variance of Factor II (Support from Others) by identity status yielded a significant difference between groups ($F(3, 131) = 24.374, p < .02$; see Table 33). The variance was homogeneous (Cochrans C $(3, 131) = .286, p = .959$). The Scheffe post hoc comparisons (Table 34) indicate that the Achievement, Moratorium and Foreclosure groups all obtained significantly higher scores than the Diffusion group. In addition, the Foreclosure group obtained significantly higher scores than the Moratorium group.

The Achievement and Foreclosure groups combined have significantly higher scores than the Moratorium and Diffusion groups combined, the mean score for the Achievement and Foreclosure groups is significantly higher than the mean score for the Diffusion group, and the mean score for the Achievement, Foreclosure and Moratorium group is significantly higher than the mean score for the Diffusion group.

Analysis of variance of Factor III (Satisfaction with Support from Others) by identity status yielded a significant difference between groups ($F(3, 131) = 20.581, p < .02$; see Table 35). The variance was homogeneous (Cochrans C $= .330, p = .290$). The Scheffe post hoc comparisons (Table 36) indicate that the Achievement, Moratorium, and Foreclosure groups all obtained significantly higher scores than the Diffusion group.

Of the combined groups, the Achievements and Foreclosures have significantly higher scores than the Moratoriums and Diffusions, the mean score for the Achievement and Foreclosure groups is significantly higher than the mean score for the Diffusion group, and the mean score for the

Table 33

Summary of Analysis of Variance of Factor II (Support from Others) by Identity Status ($n = 135$)

Source of Variation	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between Groups	354.662	3	118.221	24.37*
Within Groups	635.379	131	4.850	
Total	990.042	134		

$F_{.98}(3, 131) = 3.23$

* $p < .02$

Table 34

Scheffe Post Hoc Analysis of Factor II Mean Score in
Contrasted Identity Status Groups ($p < .02$)

Contrasted Groups	98% Confidence Intervals	
A vs. M	- .772	to 2.219
A vs. F	-2.807	to .465
A vs. D	2.196	to 5.737*
M vs. F	-3.602	to -.187*
M vs. D	1.406	to 5.079*
F vs. D	3.185	to 7.091*
A + F vs. M + D	1.702	to 4.160*
A + F vs. D	2.880	to 6.224*
A + M + F vs. D	2.516	to 5.716*

Note. Achievements (A)
Moratoriums (M)
Foreclosures (F)
Diffusions (D)

Note. Scheffe's intervals were calculated with a critical value of 3,23

* Contrast is distinct from zero

Table 35

Summary of Analysis of Variance of Factor III (Satisfaction with Support from Others) by Identity Status (n = 135)

Source of Variation	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between Groups	271.603	3	90.534	20.581*
Within Groups	576.273	131	4.399	
Total	847.876	134		

$F_{.98}(3,131) = 3.23$

* $p < .02$

Table 36

Scheffe Post Hoc Analysis of Factor III Status Mean Scores in
Contrasted Identity Status Groups ($p < .02$)

Contrasted Groups	98% Confidence Intervals
A vs. M	- .690 to 2.159
A vs. F	-2.264 to .853
A vs. D	1.979 to 5.352*
M vs. F	-3.066 to .187
M vs. D	1.182 to 4.681*
F vs. D	2.510 to 6.231*
A + F vs. M + D	1.418 to 3.760*
A + F vs. D	2.425 to 5.611*
A + M + F vs. D	2.133 to 5.179*

Note. Achievements (A)
Moratoriums (M)
Foreclosures (F)
Diffusions (D)

Note. Scheffe's intervals were calculated with a critical
value of 3.23

* Contrast is distinct from zero

Achievement, Foreclosure and Moratorium group is significantly higher than the mean score for the Diffusion group.

Manipulation Check

Since group sizes varied considerably across statuses, viz., from 47 to 22, it was possible that spurious results could have resulted from such a large difference in cell size. To check out this possibility, it was decided to equalize the cells by randomly pulling out cases until all cells had an N of 22, and performing the data analysis on this reduced sample. The results (see Appendix 8) are fairly close to those obtained with the original sample except that the F ratio on Factor I does not reach significance ($F(3, 84) = 3.162; p > .02$), and there is no significant difference between the Foreclosure and Moratorium groups on Factor II. The findings suggest that unequal cell size was not contributing to the difference between statuses.

In summary, Hypothesis III receives partial support from the results of these analyses (see Figure 5). The Foreclosure group, and the combined Achievement and Foreclosure group emerge as being significantly different from the Diffusion group on Factor I. As already indicated, the findings from the analysis of Factor I must be interpreted with caution due to the violation of the normality assumption. Some of the difficulties involved in measuring community involvement in a University population will be discussed in the next chapter. The Achievement, Moratorium and Foreclosure groups each emerge as being different from the Diffusion group on Factors II and III. In addition, Foreclosures and Moratoriums are significantly

different on Factor II. Of the combined groups, Achievement and Foreclosure women are different from Moratorium and Diffusion women, Achievement and Foreclosure women are different from Diffusion women, and Achievement, Foreclosure and Moratorium women are different from Diffusion women, on Factors II and III.

Additional Analyses

This third and final section reports on three additional procedures which were undertaken to add interpretative value to the study's main hypotheses. These procedures include: (1) a correlation between Marcia's Identity Status measure and the measure of identity resolution (ego stage five) on the S-D Q; (2) a multivariate analysis of variance on the Positive and Negative Pertinency scores for ego stages one to four; (3) an examination of the answers to the open-ended questions on the Data Questionnaire (p. 3) of the subjects' impressions of the study, questionnaires used, and the interview.

To assess the relationship between Marcia's Identity Status measure (styles of coping with the identity crisis represented by the four statuses) and Boyd's measures of identity resolution (ratio scores on the Like-Unlike scale of the S-D Q for ego stage five), the S-D Q ratio scores were divided on a centile basis into Low (0-C₃₃ or .510), Medium (over C₃₃ to C₆₆ or .511 to .580), and High (over C₆₆ or .580), and a chi-square computed ($\chi^2 = 28.271$; $df = 6$; $p < .0001$). This was followed by a contingency coefficient of correlation to measure the strength of relationship between status groups and

the S-D Q scores, which yielded a correlation of .418 ($n = 135$), indicating a moderate relationship.

To assess if there were any significant differences between identity statuses on the Positive and Negative Pertinency scores for ego stages one to four, a multivariate analysis of variance of the Positive and Negative Pertinency Scores for ego stages one to four was performed. No significant difference was found among the status means of the eight scales (four negative and four positive pertinency), since Roy's Largest Root Criterion of .093 did not exceed the critical value of .164 ($S = 3$; $M = 2.0$; $N = 61$; $p = < .05$).

In an attempt to facilitate the interpretation of statistical nonsignificant findings for the effects hypothesized for the Pertinency scores, the comments from subjects regarding the study (Data Questionnaire, p. 3) were examined.

It was found that in answer to Question 4, "Is there anything about the Questionnaires which was unclear to you?", a number of subjects (approximately one-quarter to one-third) mentioned problems with the Pertinency Scale, particularly with regard to the later stages. Such terms as "vague", "confusing", "ambiguous", "unclear" were used. In addition, during test administration, most questions raised were with regard to the Pertinency Scale. Also, a number of subjects mentioned that they found the S-D Q long. On the positive side, a number of subjects said they found the S-D Q interesting.

It is conceivable that the subjects who found the questions unclear may have added their own interpretations and

this could very well have been a confounding factor in the results.

Overview of Results of the Study

The results of the entire statistical analyses are presented in Table 37. As can be seen, Hypothesis I receives partial support from the results of the multivariate analysis of variance and post hoc comparisons, as Achievement women obtain significantly higher scores than Diffusion women on Autonomy and Initiative components, while Foreclosure women are significantly higher than Diffusion women on Trust, Initiative, and Industry components. In addition, the Achievement and Foreclosure group combined is significantly higher than the Diffusion group, and the combined Achievement, Moratorium, and Foreclosure group is higher than the Diffusion group, on Trust, Initiative and Industry components.

Hypothesis II is not supported by the results of the post hoc comparisons, although there is overall significance among groups. In addition, there does not appear to be any pattern or trend to the mean results except that the Diffusion group tends to consistently score lowest of all the four groups.

Hypothesis III receives partial support from the results of this analysis as Foreclosure women are significantly higher than Diffusion women on Factor I, and Achievement, Moratorium, and Foreclosure women are each significantly higher than the Diffusion women on Factors II and III. In addition, Foreclosure women are significantly higher than Moratorium women on Factor II.

Table 37

Summary of Results

Hypothesis I:

Ego Stages	F > D	A > D	M > D	A & F > M & D	A & F > D	A & M & F > D	F > M
Trust	.05	---	---	---	.05	.05	---
Autonomy	---	.05	---	---	---	---	---
Initiative	.05	.05	---	.05	.01	.05	---
Industry	.05	---	---	---	.05	.05	---

Hypothesis II:

Ego Stages

Identity

Intimacy

Generativity

Integrity

NON SIGNIFICANT RESULTS

Hypothesis III:¹

Variables	F > D	A > D	M > D	A & F > M & D	A & F > D	A & M & F > D	F > M
Factor I	.05	---	---	---	.05	---	---
Factor II	.05	.05	.05	.05	.05	.05	.05
Factor III	.05	.05	.05	.05	.05	.05	---

1. Bonferroni correction applied to approximate .05 level

CHAPTER IV

DISCUSSION OF RESULTS

This chapter discusses the findings reported in the previous chapter in five sections: (1) Discussion of results; (2) Qualifications for interpreting these results; (3) Implications of the study; (4) Contributions of the study; (5) Suggestions for future research. The chapter concludes with the summary and the conclusions of the study.

Discussion of Results

The aim of the present study was to investigate two hypotheses from Erikson's psychosocial theory as they apply to identity formation in females. The implication in these hypotheses is that: (a) there is a positive relationship between identity resolution and the resolution of the preceding psychosocial stages; and (b) there is a positive relationship between identity resolution and social support.

To recapitulate, it was stated in Hypothesis I of this study that the identity statuses will differ significantly on the trust, autonomy, initiative, and industry components. It was stated in Hypothesis II that the Moratorium and Achievement statuses will differ significantly on the pertinency scores for some of the ego stages. It was stated in Hypothesis III that the identity statuses will differ significantly on measures of social support. Hypotheses I and III receive partial support from the findings of this study. The specific hypotheses and

findings for each of the four psychosocial stages subsumed under Hypothesis I, as well as those subsumed under Hypotheses II and III, will be presented and examined in the discussion that follows.

Psychosocial Stages

Basic Trust vs. Mistrust. It was predicted in Hypothesis I (a) that Achievement status women will achieve the highest scores on Basic Trust, followed by Foreclosure, Moratorium and Diffusion status women, in that order. The results of this study provide partial support for the above hypothesis in that the following comparisons were significant. The Foreclosures were higher in Basic Trust than the Diffusions; Achievements and Foreclosures combined were higher than Diffusions; and Achievements, Foreclosures and Moratoriums combined were higher than Diffusions. Neither the Achievement status group nor the Moratorium status group, when taken separately, were different from the Diffusion group.

The findings that the Achievements and Foreclosures combined scored higher than the Diffusions are in accordance with Erikson's theory. What is surprising is that when the statuses are taken singly, it is the Foreclosures that are significantly higher than the Diffusions, whereas the comparisons between Achievements and Diffusions does not reach significance.

As previously stated, the research findings in the area of Trust vs. Mistrust and Identity are conflicting. Waterman et al. (study I, 1970); Tan et al. (1977) and Mustello (1980) found no relationship between Rotter's (1967) Interpersonal Trust

Scale and ego identity scores, while others (La Voie, 1976); Herrmann, 1977), using other measures of trust, did find some relationship. In addition, Waterman et al. (study II, 1970), found a significant relationship between Basic Trust and Identity scores ($p < .01$) when using Constantinople's (1969) measure, and Boyd and Koskela (1970), when using the S-D Q, found Basic Trust was one of the best predictors of the ego identity stage. On the other hand, Rothman (1978), using Rasmussen's Ego Identity scale as a measure of ego stage resolution, did not find that scores on Basic Trust significantly discriminated among the statuses.

Some indirect support for the findings of this study come from Donovan's (1970) case study, in which he describes the Diffusions as having little trust in themselves or the world. Whereas, he describes the Foreclosures as coming from homes that emphasized strict superego functioning as well as warmth and closeness. Such a background might lead Foreclosures to be especially trusting of family, people and society, all components that feature in the measure of trust used in this study.

A possible reason for the conflicting results regarding the trust and identity relationship may lie in the nature of Erikson's concept of trust. Although, trust is sometimes referred to as the most crucial stage in psychosocial development (Adams, 1977, p. 159), it is also probably the most difficult to measure, as it usually involves assumptions about the trustworthiness of society. Greenberger and Sprensen (1974), when considering trust in their discussion of a proposed

measure of psychosocial maturity, seem to come close to Erikson's meaning when they note that "the effectively functioning person is capable of trust but knows that trust is not always warranted. He 'sizes things up' and makes an enlightened decision about when, whom and how much to trust". (p. 346). The authors also point out that Rotter's measure of trust assumes what we would consider "naive" trust as respondents get the maximum number of points for answering questions in the direction of unmitigated trust.

It is noteworthy that some of the subjects in this study indicated, either verbally or in the Data Questionnaire, that sometimes they would have liked to have been able to qualify their answers. For example, "on some occasions I do this, on others I do something else, or it depends on the situation". To illustrate, Question 64 of the S-D Q states "if I want help with a course I just ask the instructor". The respondent is asked to indicate on a scale of one to six how much the statement is like him. Some respondents suggested that "it depends on the instructor, on the situation, etc." While this is a limitation of any closed-type paper and pencil measure, it is perhaps especially problematic when dealing with a concept that varies markedly with the social situation. It may be that we need better ways of measuring Erikson's concept of Basic Trust.

In any case, the findings from this study, although not entirely as predicted, lend support to Erikson's psychosocial theory, as those statuses generally considered high in ego identity (Achievements and Foreclosures) are also high in resolution of Basic Trust.

Autonomy vs. Shame and Doubt. It was predicted in Hypothesis I (b) that Achievement women will achieve the highest scores on Autonomy followed by Moratorium, Foreclosure and Diffusion women, in that order. This hypothesis is partially supported by the results of this study as it was found that Achievement status women scored significantly higher than Diffusion status women. In addition, the rank order of means for Moratorium, Foreclosure, and Diffusion women are in the predicted direction, although they are not significantly different from each other. None of the combined statuses were significantly different from the Diffusion group or from each other.

The results of this study are thus supportive of Erikson's psychosocial theory, and in addition, add additional validity to Marcia's status concept. One would expect independence and self-reliance, both characteristics of the autonomous person, to be essential to the ability to explore and to make commitments, which are both criteria that define the Achievement status individual.

The findings that Achievements score higher than Diffusions are similar to previous research findings in this area for males (Orlofsky, Marcia, Lesser, 1973; Matteson, 1974; Waterman et al., 1970) and for females (Schenkel, 1975; Toder and Marcia, 1972; Howard, 1975). Rothman (1978) found that autonomy scores on Rasmussen's (1964) Ego Identity Scales significantly discriminated among the statuses. Other studies, using other measures of identity resolution, also found a significant positive relationship between identity and autonomy

scores (Waterman et al., 1970; Herrmann, 1977). Contrary to previous findings for autonomy (Howard, 1975), field-independence (Schenkel, 1975) and conformity (Toder and Marcia, 1972), the superior performance of Achievement and Foreclosure statuses vs. Moratorium and Diffusion statuses did not emerge in this study.

Initiative vs. Guilt. Two alternative hypotheses were proposed for Hypothesis I (c). It was predicted in the first hypothesis that Achievement women will score highest on Initiative, followed by Moratorium, Foreclosure, and Diffusion women, in that order. It was predicted in the second hypothesis that Achievement women will score highest followed by Foreclosure, Diffusion, and Moratorium women, in that order. The results of this study partially support both hypotheses as the following comparisons were significant. Taken singly, Achievement women were higher in resolution of the Initiative stage than Diffusion women, and Foreclosure women were higher than Diffusion women. Taking group comparisons, the Achievement and Foreclosure women combined were higher in Initiative than the Moratorium and Diffusion women combined, the Achievement and Foreclosure women combined were higher than the Diffusion women ($p < .01$), and the Achievement, Foreclosure, and Moratorium women combined were higher than the Diffusion women.

These findings, although not entirely as predicted, partially support Erikson's psychosocial theory, as those statuses generally considered high in ego identity (Achievement and Foreclosure) are also high in resolution of the Initiative stage. Similar findings are reported by Waterman et al. (1970),

who found a significant correlation between identity and initiative scores ($p .05$) for males, and Boyd and Koskela (1970) who found, in a study using both males and females, that the Initiative stage was one of the three best predictors of the Identity stage.

In this study since both the Achievement and Foreclosure status women score higher than the Diffusion status women in the resolution of the Initiative stage, the results suggest that initiative is necessary both to the ability to explore (Marcia's crisis criteria) and to the making of commitments but more so to the latter criteria since this is a distinctive quality of both the Achievement and Foreclosure statuses.

The results of the study also add additional validity to Marcia's identity construct for Diffusion individuals. One would expect this group, which are often unable to experience themselves as being "anything" and are sometimes depressed, to be singularly lacking in initiative.

The findings that Moratorium status women receive their lowest score (see Figure 4) on Initiative vs. Guilt lends support to Josselson's (1973) observations that Moratoriums have strong guilt feelings.

Industry vs. Inferiority: It was predicted in Hypothesis I (d) that Achievement and Foreclosure women will achieve the highest scores, followed by Moratorium and Diffusion women, in that order. This hypothesis is partially supported by the results of this study as the following comparisons were significant. Foreclosures are higher in Industry than Diffusions, Achievements and Foreclosures combined are higher than Diffusions, and Achievements, Foreclosures and Moratoriums combined are higher than Diffusions. Neither the Achievement group, nor the Moratorium group, when taken separately, were different from the Diffusion group.

Previous research has generally supported the idea of a significant positive relationship between resolution of the Industry and Identity stages. Rothman (1978), using male and

female subjects, found the Industry vs. Inferiority scores on Rasmussen's Ego Identity Scale contributed significantly to a measure discriminating among the identity statuses. Similarly Boyd and Koskela (1970) found that the Industry stage was one of the best predictors of the Identity stage. Others (La Voie, 1976; Gilmore, 1971; Bauer and Snyder, 1972; Waterman et al., 1970) also found evidence of a positive relationship between the Industry and Identity stages. Gruen (1964), who investigated the intercorrelations between all eight psychosocial stages, found that the highest correlations generally occur between adjacent stages in the developmental sequence.

The findings in this study that Achievement and Foreclosure groups combined, and that Achievement, Foreclosure and Moratorium groups combined, score significantly higher on Industry than the Diffusion group are in accordance with Erikson's theory. Once again, what is surprising is that when the statuses are taken singly, although Foreclosure women are significantly higher than Diffusion women as predicted, the comparison between Achievement and Diffusion women does not reach significance. This result bears little relationship to the hypothesis, which, following from Erikson's theory, would predict a significant difference between Achievement and Diffusion scores, nor to previous findings regarding the Industry and the Identity stages.

A possible reason for nonsignificant findings between the Achievement and Diffusion statuses may lie with the nature of the subject group. A certain level of competence and of

confidence in one's capacity for worthwhile work, and a reasonably positive attitude toward work, is probably required to reach third or fourth year in university. Thus the Diffusion status individuals in this study are probably higher in resolution of the Industry stage than Diffusion status individuals in a non-college group or a freshman group. This is a factor that might be expected to vary from university to university and from faculty to faculty within universities. Some support for this position is found in Constantinople's (1969) study. She found, in her cross-sectional data, significant differences between freshmen and senior scores on Industry, Inferiority and Identity for both sexes but only males showed a constant decrease in identity diffusion scores across the four years. Thus, according to Constantinople's data¹, the relative difference between identity resolution and industry resolution could be expected to decrease from freshman to senior year. Additionally, a selection factor may operate so that Diffusion women especially low in Industry resolution drop out of college before reaching third or fourth year.

Finally, a further selection factor may operate due to the volunteer nature of subject selection in this study. The Diffusion status individual who volunteers for two hours of non-paid, non-recreational activity is apt to be less pathological than the Diffusion status individual who does not volunteer and hence less different in ego qualities from the other statuses.

¹The identity resolution score in this study is a ratio of identity to identity diffusion scores.

Consequently, a possible reason for discrepancy between the findings of this study and the findings of previous studies regarding industry and identity resolution may lie with the age of the subjects, with the level of educational attainment, or with the volunteer nature of subject selection. Waterman et al.'s (1970) subjects were freshmen, La Voie's subjects were in middle adolescence (15-18 years) and Gilmore's subjects were high school age. Boyd and Koskela's (1970) subjects were university students, age unspecified, and Bauer and Snyder's subjects were between 17 and 25 years.

The argument advanced here is not that one should expect no difference between Achievement and Diffusion scores but that the difference is smaller than would ordinarily be the case with a younger or non-college population and hence more powerful statistical analyses, involving larger subject groups would be needed to detect it. Admittedly, post hoc explanations are not entirely satisfying, and this one is no exception.

A second possibility for nonsignificant findings between the Achievement and Diffusion statuses is that Erikson's concept of Industry may not have been adequately tested by the S-D Q. Given the recognized difficulty of operationalizing some of Erikson's concepts, this might seem a plausible explanation. However, the measure has served to discriminate in the predicted direction for the combined groups and for the Foreclosure group so this alternative seems unlikely.

A third possibility for nonsignificant findings is that there is no difference in Industry resolution between the Achievement and Diffusion statuses. This would reflect on

Erikson's theory and on Marcia's identity status paradigm. Given the amount of previous research supporting Erikson's theory and Marcia's identity statuses, and the fact that differences were found for the combined Achievement and Foreclosure group, this also seems unlikely.

The most plausible explanation for nonsignificant findings would appear to be that differences do exist between the Achievement and Diffusion groups but the differences are smaller in this type of population than in a non-college or younger or non-volunteer population and it would require a larger sample of subject to detect the difference.

In any case, the results of this study do not support the hypothesis that Achievement women are significantly higher than Diffusion women in the resolution of the Industry crisis. What can be concluded is that the combined statuses, viz., the Achievements and Foreclosures, and the Achievements, Foreclosures and Moratoriums, and the single Foreclosure status, are significantly higher in resolution of the Industry vs. Inferiority crisis than the Diffusion group.

In summarizing the findings for the identity statuses across the four ego stages (see Table 37 and Figure 4), the following factors emerge. For single group comparisons, the Foreclosure group is higher in Basic Trust, Initiative, and Industry than the Diffusion group; the Achievement group is higher in Autonomy and Initiative than the Diffusion group. For combined groups, the Achievement and Foreclosure group is higher in Initiative than the Moratorium and Diffusion group; and the Achievement and Foreclosure group, and the Achievement,

Foreclosure and Moratorium group, is higher in Trust, Initiative and Industry than the Diffusion group. It could thus be suggested that for stages one, three and four (Trust, Initiative, Industry) there are really only two groups, viz., a high identity group consisting of Achievement, Foreclosure and Moratorium women, and a low identity group, consisting of Diffusion women.

This suggestion is reasonably consistent with previous empirical and theoretical literature in the identity status field. Although, the majority of authors have presented evidence to suggest that, for females, the Foreclosure status is similar to the Achievement status and high in ego development (Schenkel, 1975; Toder and Marcia, 1972; Howard 1975; Miller, 1977; Marcia and Friedman, 1970), others have provided evidence and argument to suggest that the Moratorium status is high in ego functioning (Greenhouse, 1975; Raphael, 1975, 1977) and that Moratorium women resemble Achievements more than Foreclosure women do (Orlofsky, 1978). Some support for the idea of both Foreclosures and Moratoriums being high in ego development comes from a recent study by Adams and Shea (1979). These authors investigated the ego functioning of subjects in the four identity statuses, using Loevinger and Wessler's (1970) measure. They point out that their data suggests that the Foreclosed young adults are remarkably advanced in ego functioning. Perusal of their data (Table 1, p. 85) indicated that the ego functioning of the Moratorium student is at a similar or higher level than that of the Foreclosure student. Matteson (1975, p. 268) points out that, as both Moratorium and Achievement youth

have been involved in the search for alternatives and have moved toward making commitments, it cannot be decided theoretically which are the more mature. Raphael (1975) points out that the Moratoriums have not yet achieved an identity, but we do not know if this is due to personality characteristics or to circumstances.

The findings of this study regarding psychosocial stages would lend support to the idea that the Moratorium women are similar to Achievement and Foreclosure women in those personality components of Trust, Initiative and Industry.

In conclusion, the results of this study provide support for Erikson's psychosocial theory as a significant difference was found on each ego stage between Diffusion females (low identity status) and one or more of the other identity groups (higher identity statuses). The findings thus add further confirmation to Erikson's psychosocial theory and provide some additional validity to Marcia's identity status construct as it applies to women. As indicated earlier, the results of this study cannot be construed as providing support for a developmental difference among the individuals in the various statuses, rather the results support the idea of a difference in concurrent resolution of the ego stages.

Pertinency

It was stated in Hypothesis II that the Moratorium and Achievement statuses will differ significantly on the pertinency scores for some of the ego stages. More specifically, it was predicted in Hypothesis II (a) that Moratorium women will have higher scores on the positive and negative pertinency scores for

the identity stage than any of the other statuses. It was predicted in Hypothesis II (b) that Achievement women will have higher positive and negative pertinency scores on Intimacy, Generativity, and Integrity than any of the other statuses. Neither Hypothesis II (a) nor II (b) was supported by the results of this study as the post hoc analyses failed to reveal any significant differences between statuses on any of the measure for ego stages five to eight, although there was an overall significance among groups. In addition, an exploratory analysis of the positive and negative pertinency scores for ego stages one to four revealed no significant differences among the identity statuses. Each of the two hypotheses regarding pertinency will be examined separately in an attempt to determine the reasons for the nonsignificant findings.

Hypothesis II (a). It is clearly predictable from Erikson's theory and Marcia's operational definition of the identity statuses that the Moratorium status individuals should be more concerned with identity issues than the other statuses and thus achieve higher scores on the positive and negative pertinency measures. The writer proposes that the nonsignificant results obtained may have been due to methodological flaws due to problems with the S-D Q measure of pertinency. As already indicated, in the preceding chapter, perusal of the Data Questionnaire revealed that a number of subjects expressed difficulty with the pertinency scale. In addition, some subjects raised questions regarding the pertinency concept during the testing and other subjects mentioned at the end of the testing that they were unsure as to

whether they had answered the pertinency scale correctly. The pertinency scale was standardized on a different subject group (University of Wisconsin) than the one used in this present study and some of the difficulty in interpretation may have been due to that factor.

Hypothesis II (b). The prediction that Achievement status women will show more concern than women in the other statuses for the stages succeeding identity is based on a generalization following from the epigenetic nature of Erikson's theory but one could expect many exceptions and wide variations to the stage-specific sequence. Josselson (1973) has suggested, that the intimacy and identity stages are merged in women, Douvan and Adelson (1966) have suggested that the intimacy stage may actually precede the identity stage in females, and Joyce (1970), in her study of identity, intimacy, and generativity in Catholic teaching sisters, found no evidence to support the hypothesis that the three crises are encountered at successive chronological periods. Instead, Joyce's data suggest that the subjects were coping with a concern about all three crises simultaneously. It is noteworthy that Erikson himself allows considerable latitude in applying his concepts to developmental phases. For example, Luther is described as having his identity conflict around the age of thirty (Erikson, 1958).

As indicated earlier in this study, a definitive investigation of Erikson's epigenetic theory probably requires a longitudinal study. Due to the obvious difficulty of carrying out longitudinal studies, this has not been done. Ciaccio (1971), in his investigation of ego epignesis for stages one to

four, found that the psychosocial strengths emerged in the stage sequence postulated by Erikson but the conflicts (similar to negative pertinency issues) did not follow a sequential pattern. Thus, the findings regarding the epigenetic aspects of Erikson's theory, both preceding and following identity, have not been clear-cut.

Impressionistically, the women in this study did not seem to be concerned with the issue of generativity, although some seemed concerned with issues of integrity. Certainly, most subjects were concerned with issues of intimacy.

Thus, one possible reason for the nonsignificant findings for Hypothesis II (b) is that there is no difference in pertinency among the statuses.

A second possibility for nonsignificant findings may, once again, be due to problems with the pertinency scale of the S-D Q. Additionally, part of the confusion or ambiguity associated with the pertinency scale may have been due to a procedural error in retaining the questions regarding later stages when subjects may not have been developmentally ready for them.

In summary, the results of this study do not support Hypothesis II (a) or (b). It seems likely that the reason for nonsignificant findings for Hypothesis II (a) is due to problems with instrumentation. The reasons for nonsupport of Hypothesis II (b) may be due to methodological flaws involving instruments and/or procedure, or to the nature of the hypothesis itself.

Social Support

It was predicted in Hypothesis III that the identity statuses will differ significantly on each of the six components

of social support such that Achievement status women will score highest, followed by Foreclosure, Moratorium and Diffusion status women, in that order. The six components of social support were measured by an 11-item scale which was subsequently factor analyzed yielding three orthogonal factors. These three factors, labelled "belonging in the community," "support from others," and "satisfaction with support from others," respectively, were used in all subsequent data analysis as the operational measures of social support. The results obtained for each of the three factors will be presented and examined in the discussion that follows.

Factor I - Belonging in the Community. The results of this present study provide support for the above hypothesis in that the following comparisons were significant. The Foreclosure women scored higher than the Diffusion women, and the Achievement and Foreclosure women combined scored higher than the Diffusion women. Neither the Achievement nor the Moratorium women, when taken separately, were different from the Diffusion women. As previously indicated, the results of the analysis of variance on this factor must be interpreted with caution as the assumption of normality of the distribution was not met.

"Belonging in the community" is a somewhat global concept. It has been variously described as, a sense of social integration in a network of relationships (Weiss, 1974), a sense of community (Sarason, 1974), feeling tied in with society and not alone or isolated (Gore, 1973), or a feeling that one belongs to a network of communication and mutual obligations (Cobb, 1976).

Theoretically, the basis for hypothesizing a relationship between "Belonging in the Community" and identity resolution follows from Erikson's idea of the mutual relationship between the individual and society, and the idea that the individual searches for a place of his own in society, where he can be himself as well as a meaningful part of society. To do this effectively he must be in meaningful contact with society and to feel a part of it.

Understandably, such a broad concept as "Belonging in the Community" is difficult to operationally define and there appear to be special problems involved in doing so within a university setting. As noted in the previous chapter, inspection of the data revealed that approximately one third of the subject group ($n = 135$) did not belong to any clubs, organizations or community groups. This raised some questions about the adequacy of the measure.

Some students noted that their interest groups were their classes or certain classes, and a feeling of belonging came from participating in these classes. Other than the classroom participation, most of their activities were not structured. Rather they tended to engage in informal activities, such as meeting a friend for coffee, or supper or a movie. A number of students said that they belonged to organizations in the summer but had no time to do so during the school year. Impressionistically, the amount of participation in clubs and organizations varied somewhat with course majors and amount of nonstructured time available. For example, those students in recreology belonged to more sports clubs, while science students said they had little time left over after

laboratory classes. Also, the university community becomes increasingly departmentally based as one moves from freshman to senior years. One may have a feeling of belonging in the chemistry department but not in the university itself. These comments and observations suggest that a different type of measure may be required to adequately tap the concept of belonging in the university community.

The findings of high scores on Factor I -- "Belonging in the Community" for the Foreclosure status is consistent with previous theoretical and empirical writings on females.

Foreclosures, by definition are traditional. They tend to absorb an identity by accepting the conventional pattern laid down by their parents and by the culture rather than achieve an identity by going through a crisis of exploring alternatives (Marcia, 1966, 1967). Marcia and Friedman (1970) described the Foreclosure woman as "the culture-bearer" and note that society supports them for being this way. Hence, one would expect them to have a strong sense of community. Achievements, on the other hand, must achieve an identity by going through a period of exploration and consideration of alternatives. As Marcia and Friedman (1970) point out, society may be less accepting of, and provide less support for, this approach to identity resolution, than for the more traditional Foreclosure approach. Hence, Achievements may be less in tune with society and not feel as strong a sense of "belonging".

Raphael (1975) found the Foreclosure status female had the highest ego identity score, using Rasmussen's (1964) measure which he construes as being a measure of overall adjustment. Mustello (1980) found a similar pattern for male Foreclosures.

There appear to have been no previous studies that have investigated the relationship between identity resolution and "Belonging in the Community," although some other studies (Mustello, 1980; McClain, 1975; Schmiedeck, 1979) have considered identity resolution in relation to different environments.

Factor II - Support from Others. This factor represented a major theoretical focus of the study as it included the three components that are often taken to comprise social support, viz., instrumental, emotional and esteem support. The findings of this present study provide strong support for the hypothesis that the statuses would differ significantly on this measure as the following comparisons were significant. Taken singly, Foreclosure, Achievement, and Moratorium women, each scored higher than Diffusion women, and Foreclosure women scored higher than Moratorium women. For group comparisons, the Achievement and Foreclosure women combined scored higher than the Diffusion women, the Achievement, Foreclosure, and Moratorium women combined scored higher than the Diffusion women, and the Achievement and Foreclosure women combined scored higher than the Moratorium and Diffusion women combined. The last two comparisons are difficult to interpret as one does not know whether to rate the Moratorium women as a low identity status or as a high identity status. Taken singly, Moratorium women score higher than Diffusion women and lower than Foreclosure women. However, perusal of Figure 5 would suggest they can be rated with the high identity statuses.

The findings regarding "Support from Others" are generally as predicted except that once again, the Foreclosure status emerges as having the highest score.

Two possible interpretations are offered for this finding. The first interpretation is that the Foreclosure status actually has a higher level of support from others due to their closer ties with parents and society in general. The other interpretation is that the Foreclosures may be employing a denial mechanism in their assessment of the situation and are rating themselves higher than they actually are. Marcia and Friedman (1970) have offered this as a possible explanation for high Foreclosure scores in other areas.

The finding of a low score for the Diffusion individual on "Support from Others" is in accordance with previous research findings regarding Diffusion status individuals. Jordan (1970, 1971) reported, in a retrospective study, that Diffusion youth (males) were seen as experiencing "rejection and detachment" from their parents. Matteson (1964), in a Danish study of present interactions among family triads in a laboratory situation, noted that Diffusion individuals were particularly passive in the interaction situation, especially with same sexed (i.e. daughters with mothers) parents. Josselson (1972, 1973) notes that Diffusion women described their parents as "not there". Although, these research findings apply only to the interaction of Diffusion individuals with parents, they, nevertheless, describe an attitude to a relationship which is apt to be basic to all human relationships.

In general, the findings in this present study regarding "Support from Others" provide strong support for the idea that those individuals who are high in identity resolution (Achievements, Foreclosures and Moratoriums) feel they can count on other individuals, e.g., parents, other relatives, peers, teachers, to provide them with instrumental, emotional and esteem support.

There appear to have been no previous research that has directly investigated the relationship between identity resolution and support from others, although a number of studies have investigated the relationship between support from others and health and various aspects of well-being (see Kaplan, Cassel, and Gore, 1973 for a review; Burke and Weir, 1978). Gore (1978, p. 157) drawing on findings in the mental health area, points out that it is widely understood that social support increases coping ability. Hence, one can say that the theoretical and empirical literature provides indirect support for the positive relationship, found in this study, between levels of social support and ways of coping with identity resolution.

Factor III - satisfaction with support from others.

This factor constitutes a measure of satisfaction with the amount of instrumental, emotional and esteem support available to the respondent. It was originally intended as another approach to measuring the perceived level of support from others, but as it emerged as a separate factor on the factor analysis, it was considered separately in this study.

The findings of the present study provide strong

support for the hypothesis that the statuses will differ significantly on this measure as the following comparisons were significant. Taken as single groups, Foreclosure, Achievement and Moratorium women each scored higher than Diffusion women. For group comparisons, the Achievement and Foreclosure women combined scored higher than the Diffusion women; the Achievement, Foreclosure and Moratorium women combined scored higher than the Diffusion women; and the Achievement and Foreclosure women combined scored higher than the Moratorium and Diffusion women combined. In this case, as Moratorium women are not different from Foreclosure women but are different from Diffusion women it seems reasonable to assume an Achievement, Foreclosure and Moratorium combination versus the Diffusion group.

The findings of this analysis provide strong support for the idea that those individuals who are high in identity resolution (Achievements and Foreclosures), or are in process toward identity resolution (Moratoriums), feel satisfied with the level of instrumental, emotional, and esteem support they receive from others.

In summary, the results of the analysis of Factor II and III clearly support the hypothesis that the ability to resolve the identity crisis is positively related to levels of social support. The results of the analysis of Factor I, although less clear-cut, provide partial support for the hypothesis.

Qualifications for Interpreting these Results

The results obtained in this study are indicative only

of the population sampled, viz., third and fourth year college females, from a bilingual university, who volunteered to participate in a research project. In addition, the subjects agreed to participate for one and a half to two hours without receiving monetary incentives, although, the experimenter agreed to send group results to all participants. Although, volunteers were solicited from a wide variety of classes to ensure obtaining as representative a population as possible, there could have been a selection factor operating between those who volunteered and those who did not. It may be that different results would have been obtained from non-volunteers, from volunteers who were paid for their time, or from students from another university. Thus, the results of this study can only be generalized to this type of population.

Implications of the Study

The results of this study would seem to have implications in the following areas: (1) counselling of college women; (2) social planning; (3) theoretical.

To summarize, the results suggest that:

(1) Achievement, Foreclosure and Moratorium status women are similar in the personality components of Trust, Initiative, and Industry, in levels of Satisfaction with Support from Others, and to some extent, in levels of perceived Support from Others. The major difference between the Foreclosure and Moratorium statuses seems to be in level of perceived Support from Others. Indeed, one possible reason for Moratorium individuals taking longer than Achievement and Foreclosure individuals to

achieve an identity may be due to the lower levels of perceived support from others.

(2) Achievement and Foreclosure status women are similar in the personality components of Trust, Initiative, and Industry, and in all three measures of social support, although, taken singly, only the Foreclosure women are significantly different from the Diffusion women in the areas of Trust and Belonging in the Community. The major difference between the Achievement and Foreclosure statuses seems to be in the area of autonomy.

(3) Diffusion women are lower than the other statuses on Trust, Autonomy, Initiative, and Industry, and in all three levels of social support. In addition, they are especially low in level of Trust and Initiative as they have not yet achieved a favorable resolution of these stages (Figure 4).

(4) Although, Foreclosure women do not score significantly higher than Achievement women, and except for Factor II, they do not score significantly higher than Moratorium women, they score consistently higher than Diffusion women, with the exception of the Autonomy stage.

Counselling

The implications for counselling would seem to be the following: (1) The Moratorium status individual may need assistance in utilizing or in building up her resources in the area of support from others; (2) Both the Foreclosure and Moratorium individual may need to develop autonomy, although, as the Foreclosure person is committed and not seeking change, she is

unlikely to present herself for counselling; (3) The Diffusion individual may be particularly in need of help in the areas of trust and initiative, as well as in all three areas of social support.

Social Planning

The results of this study provide strong support for the importance of perceived social support in the area of identity resolution, and this would seem to have important implications for social planning. Henderson and Byrne (1977, p. 170) point out, in looking at the concept from a transcultural viewpoint, that a major attraction in studying social support is that "it is something, which, unlike adversity, is amenable to modification". Hence, if it is possible to identify the components of social support that are important in helping young people resolve the identity crisis, then it may be possible to structure more of these components into the social system. The results of this study suggest that it is an important area for future research, and this will be discussed more fully in the next section.

Theoretical

The results of this study would seem to have some theoretical implications. First, it would appear that Erikson's psychosocial theory has relevance for college women in our society since the results of this study partially support the hypotheses derived from the theory. Secondly, social support emerges as a possible contributor to the developmental task

of resolution of the identity crisis. By implication, it may also have relevance for the other developmental tasks. In this respect, Erikson's theory appears to provide a useful way of looking at the relationship between the individual and society.

Thirdly, what are the implications of the high scores obtained by Foreclosure status women for Marcia's identity status construct? Although, the Foreclosures do not score higher than the Achievements, and except for Factor II, they do not score higher than the Moratoriums, they consistently score as high as Achievements on all measures except autonomy. To go through a period of seriously considering occupational choices and ideological alternatives is supposed to be a good thing in terms of ego development, yet Foreclosures achieve high scores on ego stage measures of trust, initiative, and industry without going through this period of exploration. Does this mean that the Foreclosure route to identity is just as valid as the Achievement route?

Some of the women in this study seemed to have always known what they wanted to be and never really seemed to question this. Is a period of questioning and exploration necessary for them? Do the high Foreclosure scores mean, as has been suggested by Marcia and Friedman, (1970), that the Foreclosure status may be particularly adaptive for women as traditionally there has been high social support for females being the culture-bearers and becoming what their parents intended them to become. Thus, it is not as important for them to develop their own beliefs and life styles and become autonomous, as it is for men. This seems less likely to be the case in 1978 for a college population that has grown up in the era of Women's Liberation than it would be for a similar population in 1970.

An alternate explanation for this patterning of scores may be, that since Foreclosure women score as high as

Achievement women on all measures except autonomy, that autonomy is the focal crisis of the first four ego stages as has been suggested by others (Ciaccio, 1969; Bettelheim, 1967).

Rothman's (1978) findings that the autonomy crisis stage was the most discriminating variable among the four identity statuses also provides support for this view.

Another alternative explanation may be that the Foreclosure status group, who are characteristically un insightful and tend to set and maintain unrealistically high goals for themselves, may have a strong need to "look good". Hence, they may have rated themselves higher on ego stage resolution, and even on social support measures, than they actually are. Ideally, one would require something other than a paper and pencil measures of the dependent variables to assess this factor.

Unfortunately, the design of this study does not permit an answer to the above theoretical questions and they thus remain unanswerable from the results of this study.

A fourth theoretical implication involves the Moratorium status. There are two ways of looking at the Moratorium status, i.e., as a distinct personality group or as a group in process toward identity resolution and hence Achievement status. The results of this study, although they are not all that clear-cut with regard to the resolution of stages for the Moratoriums, would seem to support the latter view of Moratoriums as they do not appear to be very different from the Achievement and Foreclosure groups in personality components but are different from the Foreclosure group in terms of social support.

Finally, the Diffusion status emerges as a distinct group as they are consistently different in terms of both personality components and all forms of social support.

Contributions of the Study

The most important contribution of this study lies in the investigation of the relationship between social support and identity resolution. The results obtained suggest that social support may be an important factor in the developmental task of identity resolution and thus provide empirical support for an important aspect of Erikson's psychosocial theory.

The results of the investigation of the relationship between the psychosocial stages and identity resolution are less clear-cut and offer only partial support for Erikson's epigenetic theory as they deal with current resolution of the ego stages and not resolution that occurred at an earlier age. The results obtained do add some construct validity to Marcia's identity status paradigm as the "higher" ego statuses are distinct from the Diffusion group on personality components or on the ego stages that are compatible with ego strength. Also, the Achievement group emerges high on Autonomy and Initiative, and the Foreclosure group high on Trust, as one would expect from the nature of these statuses.

Finally, the design of this study permitted an investigation of both intrapsychic and interpsychic factors as they relate to identity resolution and thus provided a more global approach to the concept than has previously been attempted.

Suggestions for Further Research

The finding of significant differences among the identity statuses on measures of social support would seem to suggest that this is an area worthy of further consideration. The following suggestions are made for further research in this area.

First, there is a need for better measures in the area of social support. It is clear from the present study that more adequate measures are needed to tap the concept of "belonging in the community", at least for the university population. Other writers (Dean and Lin, 1977; Henderson and Byrne, 1977) have also pointed to the need to develop reliable and valid measures of social support.

Secondly, there is a need to look more closely at the various components of support from others, i.e., the separate contributions of the instrumental, emotional, and esteem components. This study was a step in that direction but the final measure of support from others ended up being a composite measure of all three components:

Thirdly, the relationship between social support and Erikson's other psychosocial stages could be investigated. Does social support also bear a positive relationship to the resolution of the Autonomy, Initiative, and Industry stages, and to the stages following identity, as would be expected from Erikson's psychosocial theory?

Finally, the research on identity formation and social support should be extended to other populations, e.g. college males, the non-college population, married women.

Summary and Conclusions

In summary, the results of the study provide support for Hypothesis I as there is a significant difference between Diffusion status women (low identity status) and one or more of the higher identity statuses (Achievement and Foreclosure), or a combination of the higher identity statuses (Achievement and Foreclosure, or Achievement, Foreclosure and Moratorium) on each of the four ego stages. It would thus appear that favorable resolution of the identity stage is positively related to favorable resolution of "preceding" psychosocial stages.

The results of the study provide even stronger support for Hypothesis III as there is a significant difference between Diffusion status women and all three of the higher identity statuses on Factors II and III, and between Foreclosure and Moratorium groups on Factor II. It would thus appear that favorable resolution of the identity stage, and style of coping with the identity stage, is strongly related to perceived levels of support from others and satisfaction with support from

others. This has important implications for counselling and social planning.

It is concluded that the results of the study provide support for Erikson's psychosocial theory as it applies to college females and add validity to Marcia's identity status construct. The identity status construct, which provides a new and broader definition of the identity crisis than was postulated by Erikson, appears, once again, to be a useful instrument for investigating factors relating to resolution of identity. In addition, the identity status interview, although time-consuming to administer, helps in establishing rapport with participants and has the additional benefit of keeping the experimenter in touch with the thoughts, attitudes, perceptions, and frustrations of the participants in the study.

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BIOGRAPHICAL STATEMENT

Lesly Merrill was born August 7, 1927 in Gladstone, Manitoba. She attended United College in Winnipeg and the University of British Columbia, graduating with an Honours B. A. in Geography in 1949. She earned an M. A. in Geography from McGill in 1953. During the next eleven years, she worked part-time in the teaching and research areas. In 1964 she began taking courses in Psychology at Carleton University, earning an M. A. in Psychology in 1971. Experience in psychology over the next four years has included the following; (1) psychological consultant with Grove's Consultants; (2) psychological intern at the Ottawa Civic Hospital and at the Royal Ottawa Hospital (Children's Services); (3) training and qualification as an Intensive Journal Consultant with Dialogue House in New York, and giving a course and a workshop in the Intensive Journal at the University of Ottawa and at St. Paul's University, respectively; (4) research psychologist with the Public Service Commission in Ottawa. In Sept., 1975, she entered the doctoral program in clinical psychology at the University of Ottawa. Pre-doctoral internships were served at Psychological Services and the Guidance Centre at the University of Ottawa. She was married in 1950 to Gordon Merrill, divorced in 1977, and has two daughters, born 1951 and 1955, respectively.

APPENDICES

APPENDIX I
IDENTITY STATUS INTERVIEW USED IN THIS STUDY

IDENTITY STATUS INTERVIEW USED IN THIS STUDY

Introduction

What year are you in?

Where are you from?

How did you decide to come to the University of Ottawa?
Had you considered any other schools?

What does your father do?
Did he go to college? Where?

What does your mother do?
Did she go to college? Where?

Occupation

What are you majoring in? What do you plan to do with it?

When did you decide on this?
Had you ever considered anything else?

What seems attractive about _____?

Most parents have some plans for their children, things they'd like to see them do or go into. Did yours have any plans like that?

How do your parents feel about what you're doing into now?

How willing do you think you'd be to change this if something better came along? (If S responds: "What do you mean by 'better'?")

Well, what might be better in your terms?

Religion

Do you have any particular religious preference?

How about your parents?

Were you ever very active in your religion? How about now?
Belong to any groups? Get into any discussions, etc.,?

Are your beliefs now different from those of your parents?
How do they feel about your beliefs now?

Is there any time when you've come to doubt any of your religious beliefs? When? How did it happen? How did you resolve things?

Premarital Sex

With the changes brought about with the Women's Lib Movement and the increasing availability of birth control methods, there have been changes in attitudes towards sex, morality, etc. Do you have any thoughts on this?

How do you feel about premarital intercourse? If favor--How do you decide if you will or you won't sleep with someone? What kind of a relationship (quality, intensity, length) do you need?

Under what circumstances would you not sleep with someone?

Have you always felt this way about premarital sex? Do you have any doubts? If yes---how do you resolve them? Have you ever changed your mind about this?

Do you have any conflicts about these issues? Can you give a specific example and talk about how you resolved it?

What do your parents think about your attitudes towards premarital sex? How do your views differ from their's?

Sex-Role Identity

Do you plan to get married some day?

If yes, when do you expect to get married?

Have you always felt this way?

Who do you think should propose?

Do you expect to have children?

Do you plan to work?

How do you plan to combine marriage, children and work?

Have you always planned it this way?

How do you feel about the distribution of responsibilities of running a household?

Who do you feel should have the major responsibility in raising children?

Have your views changed at all since you've come to college? Or at any time you can remember?

Do you think your views would be likely to change?

Do your views differ any from those of your parents? How?

Politics

Do you have any particular political preferences?

How about your parents?

Have you ever taken any kind of political action---
joined any groups, written letters, protested, etc.?

Are there any issues about which you feel strongly now?

Is there any particular time when you decided upon your
political beliefs?

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APPENDICES 2 to 7, LEAVES 176 to 223,

NOT MICROFILMED

- 176 - 187 - Appendix 2. Manual for identity status tapes.
- 188 - 202 - Appendix 3. Self-Description Questionnaire by Dr. Robert D. Boyd, University of Wisconsin. Form AELP-2A-180ES.
- 203 - 209 - Appendix 4. Instructions for the Administration of the Self-Description Questionnaire. Copyright 1968. Dr. Robert D. Boyd, University of Wisconsin, Madison.
- 210 - 216 - Appendix 5. Social Support Questionnaire. "... developed by the author, using portions of other well established instruments, and also including some items which are new for this study." (p. 68).
- 217 - 220 - Appendix 6. Data questionnaire.
- 221 - 223 - Appendix 7. Screening device for identity statuses.

APPENDIX 8

Manipulation Check on Analysis of Social Support Factors

Appendix 8-A

Summary of Analysis of Variance of Factor I (Belonging in the Community) by Identity Status for Equal Cell Size ($n = 88$)

Source of Variation	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between Groups	68.413	3	22.804	3.162
Within Groups	605.894	84	7.213	
Total	674.306	87		

$F_{.98} (3, 84) = 3.55$

* Would indicate $p < .02$

Appendix 3-B

Summary of Analysis of Variance of Factor II (Support from Others) by Identity Status for Equal Cell Size ($n = 38$)

Source of Variation	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between Groups	288.525	3	96.175	29.986*
Within Groups	384.950	84	4.582	
Total	673.475	87		

$$F_{.98}(3, 84) = 3.55$$

$$*p < .0001$$

Appendix 8-C

Scheffe Post Hoc analysis of Factor II Status Means
($p < .02$)

Contrasted Groups	98% Confidence Intervals	
A vs. M	-1.810	to 2.401
A vs. F	-3.864	to .348
A vs. D	1.175	to 5.386*
M vs. F	-4.159	to 5.217
M vs. D	.879	to 5.091*
F vs. D	2.933	to 7.144*

Note Achievements (A)
 Moratoriums (M)
 Foreclosures (F)
 Diffusions (D)

Note-- Scheffe's intervals were calculated with a critical value of 3.55--

*Contrast is distinct from zero

Appendix 8-D

Summary of Analysis of Variance of Factor III (Satisfaction
with Support from Others) by Identity Status for Equal Cell Size
($n = 88$)

Source of Variation	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between Groups	255.849	3	85.283	20.456*
Within Groups	350.207	84	4.169	
Total	606.056	87		

$F_{.98}(3, 84) = 3.55$

$= *p < .0001$

Appendix 8-E.

Scheffe Post Hoc Analysis of Factor III Status Means
($p < .02$)

Contrasted Groups	98% Confidence Intervals
A vs. M	-1.779 to 2.239
A vs. F	-3.227 to .791
A vs. D	1.388 to 5.407*
M vs. F	-3.458 to .561
M vs. D	1.158 to 5.176*
F vs. D	2.606 to 6.625*

Note Achievements (A)
 Moratoriums (M)
 Foreclosures (F)
 Diffusions (D)

Note Scheffe's intervals were calculated with a critical value of 3.55

* Contrast is distinct from zero