

Ego Identity Status, Locus of
Control, and Tolerance of Ambiguity
in Late Adolescent Youth in Religious
and Secular Academic Settings

BY

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Abstract

Erik Erikson's (1958) notion of identity-crisis in adolescence has been effectively operationalized by James Marcia's (1966) identity-status paradigm. Marcia's paradigm was used in this study to explore religious identity formation as part of the overall identity formation process. Ego identity statuses were assessed globally by Adams' (Bennion & Adams, 1986) Extended version of the Objective Measure of Ego Identity Status-Revised (EOM-EIS) and domain-specifically by the Dallas Identity Status Inventory (1981).

Identity status distributions were established for two groups of late adolescents, one embedded within an ideologically homogeneous (religious) academic environment (n=116), the other within an ideologically heterogeneous (secular) academic environment (n=162). A chi-square analysis was conducted to test for significant differences.

Identity statuses were then compared on Levenson's Internal Locus of Control Scale (Levenson, 1981) and Budner's (1962) Tolerance of Ambiguity Scale, while the identity statuses of the religiously oriented subjects

were examined further on the Religious Problem-Solving Scales (Pergament et al, 1988). A series of one-way ANOVA'S were used to test for significant differences.

It was hypothesized that (a) the ideologically homogeneous group would contain a significantly larger number of Foreclosures, (b) Achievers would be significantly more Internal on locus of control, (c) Foreclosures would be significantly more intolerant of ambiguity, (d) for religiously oriented subjects, the Collaborative religious problem-solving style would be more closely associated with Achievers, while the Deferring style with Foreclosures, and (e) the Religiously Foreclosed individuals capable of self-reflective and exploratory skills would show greater Internality, Tolerance of Ambiguity, and a Collaborative religious problem-solving style in contrast to Foreclosures lacking in these skills.

The results supported hypotheses a, b, and c, but not d, while hypothesis e, though not supported, showed some trends in the expected direction. The findings were discussed in the light of the relevant literature and some suggestions for future research were made.

CHAPTER I

INTRODUCTION

Many developmental psychologists see identity formation as the most central task to be accomplished during adolescence. In fact, over the past couple of decades the concept of identity has gained significant research attention. Furthermore, it is primarily the rich theoretical writings of Erik Erikson (1956, 1968, 1980) and the practical research orientation of Marcia's (1966) identity-status paradigm that has stimulated the most productive research in this area.

Erikson (1968) observed that a young person, in order to develop a sense of identity, needs to make a series of increasingly narrowing selections of personal, occupational, sexual, and ideological commitments. For Erikson, "ideology" describes a "way of life", a "world view" by which the individual chooses to live. "We will call what young people in their teens and early twenties look for in religion and in other dogmatic systems an ideology" (1958, p. 41). How salient is the ideological

domain to the ego-identity-formation process for the adolescent? Erikson (1968) states: "It is in adolescence. . . that the ideological structure of the environment becomes essential for the ego, because without an ideological simplification of the universe the adolescent ego cannot organize experiences according to its specific capacities and its expanding involvement" (p. 27).

Closely related, is the notion expressed by Erikson that one of the many functions of identity is to provide a means of protection for the individual against experiences of sudden discontinuities that could arise from biological development or from events in one's social environment (Waterman & Archer, in press). Therefore, since religion and politics are considered facets of the ideological domain; and ideological commitments, among others, need to be made by the adolescent; it follows that religious identity formation as part of the overall identity formation process is worthy of more research attention than has been given it to date.

Ego Identity Construct

Erikson's Perspective

Although trained in the Freudian tradition, Erikson has developed an approach to personality that has moved considerably beyond Freud, while at the same time maintaining much of the core of Freud's thought. For example, he has (a) elaborated extensively upon Freud's stages of development, (b) emphasized the ego much more than the id, and (c) recognized the impact of culture, society, and history on the shaping of the individual's total personality.

Erikson's psychosocial theory is cast into eight "epigenetic" stages. That is to say, Erikson sees human development proceeding according to the epigenetic principle, which states that "anything that grows has a ground plan, and that out of this ground plan the parts arise, each part having its time of special ascendancy, until all parts have arisen to form a functional whole" (Erikson, 1968, p. 92). Therefore, according to the

epigenetic principle, the ability to cope successfully with the demands of later developmental stages rests upon the foundation established during the earlier stages of the life-span.

For Erikson, each stage has its own distinctive goal to be attained if "healthy" personality is to be achieved. The central theme moving through the stages is the search for ego-identity; that is, a movement toward mature ego differentiation. Each of the eight stages in the development of the ego is characterized in terms of polarities of ego qualities. These ego qualities, or basic attitudes, develop as a result of the interaction between the developing potentialities of the individual and social pressures from the environment.

At each of the hypothesized stages from infancy to adulthood, a particular crisis emerges which leads to a developmental task to be mastered. Again, according to Erikson's epigenetic principle, the relative success in the resolution of each crisis leaves the individual with a residual orientation, or attitude, toward self and the

world which contributes to the successes of later stages.

The first four core conflicts--trust versus mistrust, autonomy versus shame and doubt, initiative versus guilt, and industry versus inferiority--span infancy and the childhood years. In the adolescent period the conflict is between identity and identity confusion, and in adulthood the core conflicts include intimacy versus isolation, generativity versus self-absorption, and integrity versus despair. Thus, although it is in adolescence that we see the identity conflict most clearly, Marcia (1980) reminds us that "the identity process neither begins nor ends with adolescence. It begins with the self-object differentiation at infancy and reaches its final phase with the self-mankind integration at old age" (p. 160).

However, the period of adolescence does have a pivotal position in Erikson's stages. When the individual reaches this stage, it appears that the usefulness of identification as a mode of adjustment ends and identity formation proper begins. "What is important about identity in adolescence, particularly

late adolescence, is that this is the first time that physical development, cognitive skills, and social expectations coincide to enable young persons to sort through and synthesize their childhood identifications in order to construct a viable pathway toward their adulthood" (Marcia, 1980, p. 160). Consequently, it is in adolescence that the identity crisis is most pronounced. Erikson (1958) sees the critical psychosocial task of adolescence as the resolution of the identity crisis. "I have called the major crisis of adolescence the identity crisis; it occurs in that period of the life cycle, when each youth must forge himself some central perspective and direction, some working unity, out of the effective remnants of his childhood and the hopes of his anticipated adulthood. . ." (p. 14).

Erikson's definitions of identity and his descriptions of identity formation imply that a sense of identity serves several important psychological functions:

1. A sense of identity is equivalent to a subjective sense of wholeness, which implies a sense of inner coherence. "Young people must become whole people in

their own right. . .The wholeness to be achieved at this stage I have called a sense of inner identity" (Erikson, 1968, p. 87). "It thus assures to the individual a sense of coherent individuation and identity; of being one's self, of being all right, and of being on the way to becoming what other people, at their kindest, take one to be" (Erikson, 1963, p. 35).

2. A sense of identity provides a sense of consistency and communality. "A sense of identity means a sense of being at one with oneself as one grows and develops; and it means at the same time, a sense of affinity with a community's sense of being at one with its future as well as its history--or mythology" (Erikson, 1974, p. 27-28).

3. A sense of identity implies a sense of purpose, of being alive. ". . .In the social jungle of human existence, there is no feeling of being alive without a sense of ego identity" (Erikson, 1963, p. 240).

4. A sense of identity implies a sense of continuity over time. "The young person, in order to experience wholeness, must feel a progressive continuity between that which has come during the long years of childhood and that which he promises to become in the anticipated future;. . ." (Erikson, 1968, p. 87).

However, Erikson makes it clear that the identity formed in adolescence should be considered a "unique" product, not merely the sum of previous identifications:

Individually speaking, identity includes, but is more than, the sum of all the successive identifications of those earlier years when the child wanted to be, and often was forced to become, like the people he depended on. Identity is a unique product, which now meets a crisis to be solved only in new identifications with age mates and with leader figures outside the family (Erikson, 1968, p. 87).

Therefore, in order to achieve a positive resolution of the identity crisis, the adolescent must sift through all the attitudes toward self and the world which have accrued over the years from earlier resolutions, and now fashion a "unique" self that will remain relatively constant across situations and can be shared in interaction with others. The positive resolution of the identity crisis paves the way for the

positive resolution of the crisis in the next stage which involves intimacy.

Marcia's Perspective

In dealing with the ego-identity construct Marcia has focused more on the structure of identity, particularly with regard to its functions to organize and harmonize diverse identity elements. He describes identity as: "an internal, self-constructed, dynamic organization of drives, abilities, beliefs and individual history" (Marcia, 1980, p. 159). He further discriminates between a mature and less mature identity structure:

The better developed this structure is, the more aware individuals appear to be of their own uniqueness and similarity to others and their own strengths and weaknesses in making their way in the world. The less developed this structure is, the more confused individuals seem about their own distinctiveness from others and the more they

have to rely on external sources to evaluate themselves (Marcia, 1980, p. 159).

Regarding identity development during adolescence, Marcia's view is an expansion of Erikson's. Erikson (1958) used William James' distinction between those who are once born and those who go through a second birth or growth crisis in the shaping of their identity. As Waterman (1982) elaborates: "The former experience no difficulties in fitting themselves into their society. They translate their childhood identifications into adult experiences without serious doubt or conflict. In contrast, the twice born undergo a crisis of purpose of faith in which their adult commitments are formed as an act of personal choice" (p. 342).

Similarly, Marcia (Marcia, Waterman, Matteson, Archer, & Orlofsky, 1987) draws a distinction between the formation of an identity and the construction of an identity. The formation of an identity describes a given or conferred identity, elements of which the individual becomes progressively aware. For example, as they grow, children become increasingly aware of their separateness from others, their particular skills and

needs, their belonging to a particular school, race or religious group, etc.

On the other hand, "identity begins to be constructed when the individual begins to make decisions about who to be, with what group to affiliate, what beliefs to adopt, what interpersonal values to espouse, and what occupational direction to pursue" (Marcia et al., 1987, p. 9).

Marcia expands further: "Most individuals 'have' an identity in the original Eriksonian sense. But only some have a self-constructed identity that is based upon the superimposition of a decision-making process on the given or conferred identity" (Marcia et al., 1987, p. 9).

For Marcia, then, adolescence provides a period in which the realization of a self-constructed sense of identity becomes a real possibility. Numerous decisions are made at this time that have identity-forming implications. The decisions themselves and what they are based on appears to contribute to the "core structure" of identity that provides the sense of

inner coherence. However, Marcia again reiterates the distinction between "conferred" and "constructed" identity:

Individuals having either a conferred or a constructed identity have this sense of inner coherence. However, individuals who choose to construct their identity, to modify or reject some conferred elements, have, in addition, a sense of self-initiated and self-directed process. They know not only who they are, they know how they became that, and that they had a hand in the becoming. Furthermore, they have developed skills useful in the adaptive process of further self-construction and self-definition (Marcia et al., 1987, p. 10).

Marcia's Identity-Status Paradigm

While Erikson's concept of ego identity has come to be regarded "as the central integrating construct for the understanding of psychosocial development during the adolescent stage" (Waterman, 1985, p. 5), the problem has been in trying to assess it. Like much of Erikson's work, this construct is rich with insights but vague and

difficult to operationalize, making it difficult to empirically validate.

However, some of the most productive research in identity formation has been stimulated by Marcia's (1966) identity-status paradigm, which proved to be an effective conceptual tool to operationalize Erikson's concept of identity crisis in adolescence. Beginning with his doctoral work in 1964, Marcia developed a semi-structured interview technique by which he was able to assess the processes employed in the task of identity formation in late adolescence. In his research he observed four identity statuses, each representing a different style or approach in dealing with identity concerns.

Description of Identity Statuses

The four identity statuses or modes of dealing with identity issues are: (a) Identity Achievement, (b) Moratorium, (c) Foreclosure, and (d) Identity Diffusion. Clearly, the Identity Achievement and Identity Diffusion statuses correspond to the polarities on Erikson's Identity versus Identity Confusion dimension occurring

during the identity crisis in the adolescent stage of development. However, Marcia brings greater differentiation to this stage by going beyond Erikson's simple dichotomy.

Two conceptual dimensions, "crisis" and "commitment", provide the defining criteria that discriminates among the four statuses in Marcia's paradigm. A crisis involves self-reported exploration and active examination of identity issues in the areas of occupation and ideology, the latter consisting of religion and politics. These three domains (occupation, religion, and politics) were the initial ones studied by Marcia. Therefore, the "crisis" dimension consists of active exploration. On the other hand, commitment relates to self-reported personal investment in the values, beliefs, and goals that one professes.

Relating these two conceptual dimensions, "crisis" and "commitment", to the statuses, we find that an Identity Achiever is a person with relatively firm identity commitments after having gone through a period of crisis or exploration. On the other hand, a Foreclosed person has never experienced a crisis but is

nevertheless committed to particular goals, values, or beliefs.

Both the Achievers and Foreclosures, as Waterman (1985) stresses, may have the same "content and strength of commitment but what distinguishes them is the process they go through to develop those commitments" (p. 12). Both are high on commitment but only the former (Achievers) have experienced serious, self-reflective exploration, and to that degree have a greater self-constructed identity. It appears that the Foreclosure's commitments to certain identity elements unlike Achievers, tend to be established relatively early in life and tend to reflect a strong sense of identification with parents and/or other authority figures.

On the low end of the commitment dimension are Moratoriums and Identity Diffused, with the former having no commitments yet, but are currently engaged in active exploration, while the latter have neither commitments nor give any indication of serious exploration of alternatives.

To summarize then, since the "examined life" and the reflective appraisal of identity issues are of high priority in the establishment of a self-structured identity--thus providing a clearer self-definition with the concomitant skills to effectively cope in a pluralistic society--the four statuses can be grouped into "high" and "low" identity. High identity statuses would be Achievement (exploration and commitment) and Moratorium (exploration and no firm commitment yet). Whereas, the low identity statuses would be Foreclosure (no exploration but a firm commitment, usually to parental identity) and Diffusion (no exploration and no firm commitments in sight).

On the other hand, in more self-contained societies or communities the commitment dimension may be more highly valued than the exploration of alternatives. In this case Achievement and Foreclosure (both have firm commitments) would be the valued statuses, as opposed to Moratorium and Diffusion (neither of which have firm commitments). However, should the environmental support configurations change and/or the implementation of particular goals or beliefs be blocked, Foreclosures become particularly vulnerable, since they lack

exploratory experience and, thus, a self-constructed identity, they can readily regress to the Diffusion status. Such individuals can become dysfunctional, experiencing confusion and despair, since they are not psychologically prepared to consider alternative possibilities (Marcia et al., 1987; Waterman, 1985).

The construct validity of Marcia's identity statuses has been amply demonstrated. For extensive literature reviews see Bourne, 1978a, 1978b; Marcia, 1980; Marcia et al, 1987; Matteson, 1975; Waterman, 1982.

Measuring the Identity Statuses

Marcia's methodology involved a 15-30 minute semi-structured interview. The interviews were taped and then replayed for judging. Following the criteria set out in his scoring manual, each subject was evaluated in terms of the presence or absence of crisis (exploration) and commitment for three domains: occupation, religion and politics. He obtained adequate interjudge reliability. Over the intervening years more

refined scaling procedures were applied to the identity status interview. More recently, Grotevant (Grotevant, Thorbecke, & Meyer 1982) extended Marcia's interview format to include three interpersonal areas that have identity salience for adolescence: friendship, dating, and sex roles.

However, because of some of the disadvantages inherent in the interview technique, such as; (a) time consuming, (b) expensive, (c) lack of standardization, (d) possibility of interviewer response bias, (e) length of time involved to train interviewers, and (f) the problem of rapport (since some individuals are not comfortable in interview situations) --some researchers turned to alternative measures that could be more easily administered and reliably scored.

Adams (Adams, Shea, & Fitch 1979) produced a group-administered identity status measure called the Objective Measure of Ego Identity Status (OM-EIS), an instrument that covers Marcia's three original domains: occupation, religion, and politics. Each of the four statuses are represented by two items in each of the three domains, giving a total of 24 items. The Likert-

type self-report inventory included six possible responses ranging from strongly agree to strongly disagree.

Adams et al., (1979) established (a) predictive validity for DM-EIS, (b) showed it to be relatively free of social-desirability-response tendencies, (c) established a relative degree of concurrent validity, and (d) showed a test-retest reliability ranging from 0.71 to 0.93 for the four status subscales. Like the general procedure used in Marcia's semi-structured interview technique, the DM-EIS merges domains to obtain a global-identity-status score. Response statements are rated on the Likert-type scale and then cut-off points are established to locate individuals in identity-status categories. One major drawback that has concerned some researchers is that the DM-EIS, in order to obtain "pure" types, leaves many of the subjects in the sample "unclassifiable." Consequently, they must be dropped from the analysis. However, the instrument has good psychometric properties and has produced a large number of published research articles.

In 1984 Grotevant and Adams produced an extended version of the OM-EIS. This EDM-EIS extended the original scale of 24 items (covering the occupational, religious, and political domains) to 64 items covering such additional areas as: friendship, dating, sex roles, philosophical styles, and recreation. For each of the four status subscales two items were generated for each of the five new domains added.

However, the newly formed interpersonal items appeared to be less consistent in ego-identity classification than the ideological items. Consequently, a revision of EDM-EIS appeared, which revised the interpersonal items (Bennion & Adams, 1986). The results of the revision produced convergent, discriminate, concurrent, and predictive validity and internal consistency or reliability.

Numerous reviews (e.g., Adams & Gullotta, 1983; Bourne, 1978; Marcia, 1980, Marcia et al., 1987; Newman & Newman, 1978; Waterman, 1982) integrate the research findings on identity processes and the characteristics of the identity statuses. Generally, high identity statuses tend to correlate with behaviors considered to

be "most desirable" and "psychologically mature," given the pluralism and complexity of our modern society.

Persons who make predominant use of the Identity Diffusion status, for example, among other things, tend to function at the preconventional/conventional levels of moral reasoning, are most likely to be isolates or stereotyped regarding social relationships, and tend to be low on measures of self-directedness.

Individuals who make use of the Foreclosed status, among other things, tend to be authoritarian, frequently show difficulties in problem-solving under stress, tend to be at the conventional level of moral reasoning, and tend to experience stereotypic/pseudointimate relationships. However, on the positive side they tend to be low in anxiety, have good relationships with their parental family, tend to be satisfied with their education, and are clearly opposed to drug use.

On the other hand, persons in the Moratorium status are currently experiencing a crisis, or an exploratory period, and, therefore, tend to show high measures of anxiety. On the positive side, they are likely to

employ postconventional moral reasoning and tend to be high on intimacy in regard to interpersonal relationships.

Individuals who make use of the Identity Achieved status tend to work effectively under stress, tend to be culturally sophisticated, show reflectivity in their approach to decision-making, tend to be at the postconventional level of moral reasoning, and are most likely to be in intimate relationships.

However, the majority, if not all of the studies cited in the reviews mentioned above, used a global identity status index which merged multiple domains of identity concern (e.g., merging occupational, political and religious domains). This practice of averaging across domains can obscure the identity-status picture since individuals can manifest, simultaneously, a different identity status in each domain of identity concern (Dellas & Jernigan, 1987; Grotevant & Thorbecke, 1982; Waterman, 1988; Waterman et al., 1974).

Consequently, for some Foreclosures the global index would underestimate their identity-status

standing. For example, an individual may be Foreclosed in the religious domain but may show Moratorium status in occupation. Clearly, such an individual not only has the self-reflective exploratory skills essential for high identity status but is also actually using them in a currently salient domain (e.g., occupation). It would be inaccurate, then, to label such an individual as "low" identity for choosing Foreclosure in a particular domain. Therefore, there is a definite need, in identity-status research, to complement the global status index with a more domain-specific approach.

Although a domain-specific approach is possible using the semi-structured interview technique, only recently has a group-administered objective scale been developed. The Deltas Identity Status Inventory (Occupation) (DISI-O, Deltas and Jernigan, 1981) was developed to assess occupational identity. It is a 35-item forced choice, paper-and-pencil instrument. The DISI-O is based on Marcia's (1964) definition of the statuses and the interview technique he used for measuring them. Later Deltas and Jernigan (1986) added a 70-item inventory focusing on religion and politics in the same manner. Consequently, we now have an objective

instrument that is able to look at identity statuses within three separate and important domains.

"Process" versus "content"

So far we have dealt with the identity construct primarily as a "process" variable. That is, we have focused on the technique or style the individual uses in dealing with identity issues. But as Waterman (1985) rightly points out, "identity cannot exist apart from the specifics of the goals, values and beliefs to which commitments have been made" (p. 7). Therefore, there is also the need to look more closely at the influence of commitments to specific values and beliefs (i.e., content) upon the identity processes selected.

For example, a conservative Christian (as opposed to liberal) may see the Bible as the inerrant Word of God containing absolute propositional statements to guide human behavior. Such a perspective (content) may well override the individual's capability of self-reflective exploration (process), if such an exploration is perceived by the individual as possibly leading to a humanistic and relativistic mode of functioning.

A similar situation is, perhaps, seen in the research relating religious orientation to moral reasoning. Both the Foreclosure status and a conservative religious orientation are often seen as functioning at the preconventional or conventional levels of moral reasoning, according to Kohlberg's stages of moral development. For example, Getz (1984), after reviewing the research on the relationship existing between religion and moral reasoning concluded: "people who are active in conservative religious groups may let their religious or ideological rules override their own independent thinking" (p. 106). In a number of studies mentioned by Getz, "all found an inverse relationship between preference for (or use of) principled moral reasoning and conservative religious belief" (p. 107). On the other hand, people "who were religious liberals are more likely to prefer principled moral reasoning" (p. 107).

Consequently, it appears that commitment to specific "content" may be influencing "process" more than we have realized. In the case of moral reasoning, it appears that individuals can place more value on specific ideological commitments than on critical and

independent thinking, even though they may possess these "process" skills to a greater degree than anticipated.

Need for Differentiating within Statuses

A similar situation may well be operating in identity formation in the religious domain. By using a domain-specific analysis of identity statuses, we might be able to discriminate within the Foreclosure status those that possess "high identity" skills and those that do not, even though specific content commitments may be equivalent in the two groups.

Furthermore, Marcia (1980) indicates that the ego-identity-statuses tend to have a "well-adjusted" and a "poorly-adjusted" dimension. For example, a Foreclosed individual in the domain of religion may have appropriate or healthy reasons for being Foreclosed. For such an individual this commitment might be personally expressive and/or, at this point of development, might be working very well. As Waterman (1985) points out, "if the early commitments are successful in providing direction and meaning to life, there is no need to explore other options. When the

course of development proceeds relatively smoothly, the motivation to question one's assumptions is not likely to be strong" (p. 12). For such an individual Foreclosure commitments are maintained because they are personally expressive and afford an opportunity to deal effectively with the world. Such individuals have no need for defensively rejecting others for holding differing views.

On the other hand, the "poorly-adjusted" dimension of Foreclosure emerges when:

individuals may fear that, were they to question the ideas with which they were raised, they would be adrift, purposeless, unable to make decisions or exert effective impulse control. As a result, there may be a rigidity of beliefs and a defensiveness of behavior. Such people are likely to be intolerant and hostile toward others with differing values because they represent a challenge to their own sense of identity (Waterman, 1985, p. 12, 13).

Therefore, there is a need to differentiate between "well-adjusted" and "poorly-adjusted" or pathological dimensions within the statuses. For example, as Marcia (1980) has pointed out:

Foreclosures may be seen either as steadfast or rigid, committed or dogmatic, cooperative or confirming; Moratoriums may be viewed either as sensitive or anxiety-ridden, highly ethical or self-righteous, flexible or vacillating; Identity Diffusions maybe considered either carefree or careless, charming or psychopathic, independent or schizoid (p. 161).

Therefore, there is a need for identity-status research to probe the statuses more closely in order to differentiate within them.

Locus of Control

Rotter's Perspective

The concept of locus of control was outlined, within the context of social-learning theory, by Julian Rotter

in 1966. Locus of control refers to a set of beliefs about the relationship between an individual's behavior and the subsequent occurrence of rewards and punishments. According to Rotter (1966) whenever positive or negative reinforcements are perceived to be the result of the individual's own behavior, efforts, or disposition, this is an example of an Internal control. External control, on the other hand, involves perceptions that reinforcements occur as a result of luck, chance or fate.

According to Rotter, who viewed the locus of control as only one variable embedded within a larger social learning theory scheme, also distinguished between specific and generalized expectancies of control. Specific expectancies of control are operative in situations that are very familiar to the individual. By repeated exposure to that given situation the individual has learned that a particular behavior has a higher probability of obtaining a desirable outcome than other behaviors. Consequently, there will be a strong, specific internal locus of control expectancy that the outcome is contingent upon personal action. Conversely, if the individual's history is such that little or

nothing the individual has done has affected the likelihood of the outcome, then a strong, specific external locus of control expectancy will exist. Clearly, different situations will bring about either internal or external expectancies depending on past learning.

On the other hand, generalized expectancies or control will have the greatest impact in novel or ambiguous situations. If for most situations the individual experiences a predominance of internal locus of control expectancies, then he or she is likely to generalize this belief to novel or ambiguous situations. Likewise, a person that experiences a predominance of external locus of control expectancies in specific situations will also tend to generalize this predominant experience into novel situations.

The Intrinsic-Extrinsic (I-E) scale produced by Rotter and his colleagues is a 23-item scale for assessing the extent to which events are perceived as contingent upon personal behavior or disposition (i.e., internal control) or are perceived as resulting from luck, chance, or fate (i.e., external control) (Rotter,

Siemen, & Liverant, 1962; Rotter, 1966). Over the years thousands of studies have been published which reported on various aspects of the locus of control construct. Although initial findings suggested that Rotter's I-E scale was unidimensional, later work showed it to be multidimensional.

Levenson's Perspective

In response to the increasing evidence that the I-E scale developed by Rotter was not unidimensional, Levenson (1973) explored externality further. He questioned the validity of placing the expectancies of fate, chance, and powerful others all under one rubric of external control. Consequently, he proposed a multidimensional conceptualization differentiating between "two types of external orientation. . . belief in the basic unordered and random nature of the world and belief in the basic order and predictability of the world, coupled with the expectancy that powerful others are in control. In the latter case there is a potential for control" (Levenson, 1981, p. 15). He further elaborates: "It is quite conceivable that a person who believes in control by powerful others may also perceive

enough regularity in the actions of such people as to believe that he or she can obtain reinforcements through purposeful action. Such a view of externality would be quite similar to Rotter's conceptualization of internality" (p. 15).

Therefore, Levenson (1973) constructed three scales to assess expectations of control; expectations of internal control (I), expectations of control by powerful other (P) and expectations of control by chance (C). Both groups, P and C classified as external by Rotter, were expected to behave and think differently, with the former perceiving the world as controllable while the latter perceiving the world as unordered. Similarly, both groups P and C were expected to differ in behavior from persons who feel they are in control of their own lives (I).

Locus of Control and Identity Statuses

With identity formation conceptualized as a self-reflective, self-constructive process, it would be expected that high-identity statuses (Achievements and Moratoriums) be more internal, while low identity

statuses (Foreclosures and Diffusions) be more external.

Studying a male population, Waterman, Beubel, and Waterman (1970) found more high-identity than low-identity men to be internal. Both Howard (1975) and Marcia and Miller (1980) obtained similar results for women. However, in studying Danish youth, Matteson (1977) found no differences between the statuses in regard to locus of control. Furthermore, Ginsburg and Orlofsky (1981) studying women found Achievement and Foreclosure women to be more internal than other statuses.

It appears that most of the studies exploring the relationship between locus of control and identity statuses used Rotter's I-E scale. One exception was the Adams and Shea (1979) study which used Levenson's Locus of Control scale. Results from this study showed a main effect on Levenson's Internal control (I) and Chance control (C) subscales. For the I-subscale there was a rank-order relationship in which Achievers and Foreclosures were significantly more internal than Diffusions, while Moratoriums were not significantly different from other statuses. A reverse rank-order relationship was found for the C-subscale in

which Achievers and Foreclosures scored low and Diffusions scored high.

Therefore, in studies comparing identity status and locus of control the results are not as clear as expected. On the one hand the exploration criteria appears to be predictive of internality (Achievers and Moratoriums), on the other hand, commitment appears to be the important variable (Achievers and Foreclosures). However, Marcia et al., (1987) summarizes it well: "What can be said with some certainty in summarizing these studies is that Achievements tend to have an internal locus of control and Diffusions are external; the placement of Moratoriums and Foreclosures is generally intermediate and their relative positions are questionable" (p. 6).

Religious Problem-solving Style

The whole distinction between internal control and external control beliefs presented by social learning theory appears to cut across conservative Christian ideology. To force an either/or distinction can be of

great concern to a Christian. For example, to assume that an event depends either on the individual's behavior or an external variable such as God's will, fails to recognize the joint responsibility of both the Christian and God. The forced either/or distinction allows no room for collaboration and a sharing of responsibility, a perspective that is important to Christian theology.

Recently, Pergament (Pergament, Kennell, Hathaway, Grevengoed, Newman, & Jones, 1988) made an attempt to reconceptualize the relationship between an active God and an active believer. In this particular study they developed a Religious Problem-Solving Scale that differentiated three styles of problem-solving among religious believers: (a) self-directing, (b) deferring, and (c) collaborative. Two dimensions were seen as underlying the styles of problem-solving, namely, locus of responsibility and level of activity.

Consequently, they posit that the locus of responsibility for problem-solving can rest (a) with self (self-directing style), with God (deferring style), and (c) with both (collaborative style). Regarding the

level of activity of the self and God the three possibilities are: (a) "high in self, low in God" (self-directing style), (b) "low in self, high in God" (deferring style), and (c) "high in self, high in God" (collaborative style).

In describing the type of person found in the three styles of problem-solving categories, Pergament et al., (1988), suggest that the individual using the Self-directing style can attend and be affiliated to a religious group, but such an individual tends to rely on personal rather than religious resources to resolve problems. They tend to have personal humanistic goals of self-realization and see God's role in human affairs as passive. On the other hand, both the Deferring and Collaborative styles are associated significantly with higher levels of involvement in religion.

However, the Deferring style individual tends to be more authoritarian in religious orientation. There is greater reliance on external rules, beliefs and authority to meet particular needs. In contrast, the Collaborative style individual tends to have a more internalized, committed form of religiousness that is

founded on an intimate and interactive relationship with God.

Since the concept of psychological differentiation is a major assumption underlying the identity-formation process, the related concepts of internality, autonomy and independence are seen as a necessary precondition to the successful resolution of the identity crisis. Given the ideological perspectives and commitments of the religiously oriented individual, the Religious Problem-Solving Scale, which reflects the perceived locus of responsibility and activity, should give us additional information about identity formation in the religious domain. Thus, the rationale for including this scale in this study.

Tolerance of Ambiguity

Budner's (1962) Scale of Tolerance-Intolerance of Ambiguity is another variable included in this study. He defines intolerance of ambiguity as "the tendency to perceive (i.e., interpret) ambiguous situations as sources of threat," and tolerance of ambiguity as "the

tendency to perceive ambiguous situations as desirable" (p. 29). A situation which cannot be adequately structured or categorized by the individual is one that is ambiguous. As the individual seeks to impose a meaningful structure on a situation, to that degree the individual is intolerant of ambiguity. Budner suggests that belief in a divine power "serves to reduce the amount of ambiguity with which the individual must contend" (p. 38). Similarly, the "attendance at religious services, which may reflect both the effects of conventionality and religious beliefs, would show a positive association with intolerance of ambiguity" (p. 38).

The purpose of including Budner's scale in this study is to see how the tolerance-intolerance of ambiguity variable related to the statuses generally, and to see if it can help differentiate within the Foreclosure status, specifically.

Empirically, the ambiguity scale was shown to correlate with conventionality, belief in divine power, attendance at religious services, dogmatism about one's religious beliefs, authoritarianism, and submission to

parents. Rigidity and flexibility are also closely related to the notion of tolerance of ambiguity.

Another point that Budner (1962) makes which is important to identity formation is that if children are always expected to defer their judgments to that of their parents, they are not experiencing essential decision-making skills. "Since confidence in one's ability to judge among alternatives is partly a function of successful experiences in such choosing, those who have had limited experience can be expected to be relatively fearful of choice, that is, of ambiguous situations" (p. 42).

Problem, Purpose, and Hypotheses

Summary of Problem

To summarize the problem, first, there is need for more research on religious identity formation as part of the overall identity formation process. More specifically, the identity processes within religiously homogeneous populations should be compared to

ideologically heterogeneous populations.

Second, there is need for identity status research to complement the usual global status score with a more domain-specific approach, and in this way provide a more accurate identity status profile for the individual.

Third, there is need to differentiate between the reasonably "well-adjusted" and "poorly-adjusted" dimension within the identity statuses generally, and within the religiously Foreclosed status, specifically.

Purpose and Plan of the Study

The purpose of this study is to try and contribute to meeting the needs mentioned above. In order to do this, first, two late adolescent populations are compared. One group coming from religiously oriented colleges (i.e., ideologically homogeneous environments), the other from a secular university (i.e., ideologically heterogeneous environment). Both groups are then compared on ego identity statuses using a global and

domain-specific approach. The identity statuses themselves are then compared on three dependent variables; locus of control, tolerance of ambiguity, and religious problem-solving style.

Second, in order to differentiate within the religiously Foreclosed status an attempt is made to separate these individuals into two groups. (a) Those that are Foreclosed in the religious domain but showed high identity standing (i.e., exploratory skills) in other domains are designated as "open." (b) Those Foreclosed in the religious domain and did not show any indication of high identity standing in the other domains are designated as "closed." The "open" and "closed" groups are then compared on locus of control, tolerance of ambiguity, and religious problem-solving styles, to see if there are any significant differences.

Hypotheses

This study contains the following hypotheses:

1. Given that homogeneous communities tend to reduce exposure to identity alternatives and therefore

provide an environment that is conducive to forming and maintaining Foreclosure commitments, it is expected that the religiously homogeneous group will contain a significantly larger number of Foreclosed individuals on the global identity measure.

2. The self-reflective and self-constructive processes inherent in the notion of "favorable" ego identity formation presupposes internality, autonomy and independence. Consequently, it is expected that Identity Achievers will be significantly more Internal than the other statuses.

3. Given the association between dogmatism, authoritarianism, and conventionality to intolerance of ambiguity, it is expected that the Foreclosure status will be significantly more intolerant of ambiguity compared to the other statuses.

4. Regarding the three styles of problem-solving among religiously oriented subjects, it is expected that the Collaborative style will be associated with the Identity Achieved status, while the Deferring style will be associated with the Foreclosed status.

5. Discriminating within the Foreclosure status, it is predicted that the religiously Foreclosed individuals, capable of self-reflective exploratory skills, will show greater (a) Internality, (b) a Collaborative Religious Problem-solving Style, and (c) Tolerance of Ambiguity, when compared to Foreclosures lacking in exploratory experience and skills.

CHAPTER II

METHOD

Subjects

Two samples of subjects were obtained for this study from two different populations; one from religiously oriented colleges (n=116), and the other from a secular university (n=162). The subjects' ages ranged from 18 to 21 years. The subjects that participated in this study were generally first year students. However, the subjects from the University of Manitoba were enrolled in the Introduction to Psychology course and were given course credit for their participation. This was not the case for subjects volunteering from the religiously oriented colleges. Furthermore, regarding the location of the religious colleges; three were in the city of Winnipeg, one was outside of Winnipeg but in Manitoba, and one was in a rural community in Alberta.

Instrumentation

Objective Measure of Ego Identity Status (EOM-EIS)

The Extended Version of the Objective Measure of Ego Identity Status-Revised (EOM-EIS) (Bennion & Adams, 1986) was used to categorize subjects into four ego identity statuses. The 64-item EOM-EIS employs a Likert-scale format ranging from 1 (strongly disagree) to 6 (strongly agree). The content of ideological issues include assessments of occupational, political, religious, and philosophical commitment and exploration. The content of interpersonal issues include assessment of friendship, dating, sex role, and recreational commitments and exploration. Raw scale scores for each of the four statuses are derived, and an identity status can be assigned for ideological, interpersonal, or a combined ideological/interpersonal identity.

Each individual is assigned an overall identity-status rating in accordance with Adams et al., (1979) scoring instructions. This requires the calculation of a mean and standard deviation for each stage scale, with the mean plus one standard deviation

producing the cut-off points. For example, an individual whose score falls one standard deviation above the mean on a given scale is scored as being in that identity status, if all other stage scores fall below their cut-off point. Individuals with no scores above any of the four cut-off points are scored as Moratorium. A transition label (e.g., Diffusion-Moratorium) is assigned to individuals with more than one score above the scale cut-off points. Estimates of content validity, construct validity, and predictive validity have been established for EDM-EIS. The reliability estimates for the revised EDM-EIS used in this study show adequate internal consistency for all subscales. Cronback alphas ranged from .62 to .75 for the Ideology subscale and .58 to .80 for the Interpersonal subscale.

Dellas Identity Status Inventory (DISI)

The Dellas Identity Status Inventory (DISI, 1981) is a 105-item forced-choice paper-and-pencil inventory focusing only on three identity domains: occupation, religion, and politics. The 105-items are grouped into

21 sets of five alternative statements each representing an identity status. Factor analysis produced five status subscales. However, since very few people find themselves in the Diffused-Luck status, Dellas has suggested that the Diffused-Luck and Diffused-Diffused status be combined and labelled "Diffused."

Subjects are forced to select one statement, "most like you", from each of the 21 sets containing five statements each, resulting in 21 statements selected by the individual. There are seven sets of statements for each of the three domains; vocation, religion, and politics. Selection of four or more statements belonging to a particular identity status places the subject within that status. An individual who does not select at least four statements belonging to a particular status is considered Unclassified.

Since the complete DISI is a relatively new instrument, validity and reliability information is still being accumulated. However, reliability estimates of the Foreclosed, Achieved, and Moratorium, scales of the Identity status Inventory for Religion were .93, .93, and .88 respectively (Dellas and Jernigan, 1986).

These researchers further reported that the two Diffused scales, Diffused-Diffused, and Diffused-Luck have coefficient alphas of .91 and .89.

Levenson's Locus of Control Scale

The Levenson's Internal Locus of Control Scales (Levenson, 1981) assess the degree to which an individual views chance (C), powerful other (P), or self (I) as the agent of one's own personal destiny. The I, P, and C scales comprise three 8-item subscales giving a 24-item instrument. Using a Likert-response format, the responses can range from "strongly disagree" (-3) to "strongly agree" (+3). The internal consistency estimates are only moderately high with the Kuder-Richardson reliabilities yielding .64, .77, and .78 for the I, P, and C scales, respectively. Convergent and discriminant methods have shown satisfactory validity (Levenson, 1981).

Religious Problem-solving Scales

The Religious Problem-solving Scales (Pergament et al., 1988) cover six phases of problem-solving and three styles. For each of the three problem-solving styles, two items were generated for each of the six phases. Consequently, each style scale consisted of 12-items giving a total of 36-items. However, a shorter version of the scales consisting of 18-items will be used in this study.

The shorter version was developed by selecting the one item from the pair of items for each of the problem-solving dimensions with the higher factor loading. The three 6-item scales that resulted had a high internal consistency: Collaborative style, .93; Self-Directing style, .91; and Deferring Style, .89. The short form also correlated highly with the full form: Collaborative ($r=.97$), Self-Directing ($r=.98$), and Deferring ($r=.97$). Respondents were asked to indicate how often each of the statements applied to them. For example, "After I've gone through a rough time, I try to make sense of it without relying on God." Responses are made on a five-point Likert scale ranging from "Never" to "Always."

Tolerance-Intolerance of Ambiguity Scale

The Tolerance-Intolerance of Ambiguity Scale (Budner, 1962) is a 16-item Likert-type scale, half of which are positive and half negative. The scale was shown to be free of acquiescence and social desirability. Validation data included correlations with other scales of intolerance of ambiguity, peer ratings, and with rankings of individuals on the basis of short autobiographies.

Religious Commitment Measure

In order to obtain some measure of religious orientation and commitment subjects were asked to classify themselves as; very religious, moderately religious, or not religious.

Procedure

The subjects were tested in groups ranging from 25 to 60. The five separate questionnaires were stapled

together to form a questionnaire booklet. Subjects were requested not to write in the questionnaire booklet. On the first page of the questionnaire booklet was (a) a general statement of appreciation for volunteering to participate in the study, (b) a debriefing statement indicating the general nature of the study and the availability of the results when the study was completed, and (c) general instructions regarding responding to the questionnaire. For each of the questionnaires there was a response sheet which were stapled together to form a response booklet. The front page of the response booklet was used to gather some demographic and related data.

Statistical Design and Data Analysis

To test the first hypothesis percent distributions of the various statuses were tabulated and the two groups were compared. A Chi-square test was conducted to establish significant differences between groups.

To test hypotheses two, three, and four a series of one-way between subject ANOVA's (Analysis of Variance)

were conducted. In each case the Independent Variable was Identity at five levels (four statuses and one "unclassified" category), and the Dependent Variables for the three hypotheses were: three aspects of locus of control; tolerance of ambiguity; and three aspects of religious problem-solving, respectively. A test of significance was conducted for each hypothesis, and if significant, was followed-up by post hoc comparison of the statuses.

To test hypothesis five a series of one-way ANOVA's was conducted. In each case the Independent Variable was the "type" of Foreclosed person at two levels, "open" and "closed." The Dependent Variable in each successive one-way ANOVA's was locus of control, tolerance of ambiguity, and religious problem-solving style, respectively. A test of significance was conducted for each analysis.

CHAPTER III

RESULTS

Preliminary Remarks

First, in this study all tests of significance were made at the conventional .05 level. When significant results are reported with probabilities smaller than .05, it is not intended to imply that these findings are "more significant". Inclusion of these probability levels are simply for information, degrees of significance are not intended.

Second, in instances where standard deviations were calculated these deviations did not appear to be very different among subgroups and, therefore, not a major source of error.

Third, after an overall significant difference was found using the Analysis of Variance (ANOVA) procedure, a multiple comparison procedure was used to test for more specific pairwise contrasts among means. In all

such instances follow-up contrasts were made utilizing Tukey's Studentized Range (Honestly Significant Difference) procedure. There were a couple of important reasons for the selection of this particular multiple comparison method. First, Tukey's HSD procedure was designed specifically for pairwise contrasts, and as such provided the most powerful test for the specific pairwise concerns of this study. Second, given that sample sizes were unequal in this study Tukey's procedure provided a safe, though somewhat conservative method for controlling the type I experimentwise error rate. That is, Tukey's method "is exact when all sample sizes are equal, and it is a conservative method when the sample sizes are unequal with the confidence coefficient of at least $1-\alpha$ " (Neter, Wasserman, & Kutner, 1985, p. 574).

Overview of Main Results

The main results are as follows:

1. Both a global and a domain-specific status analysis (in the domain of religion) indicated a

significantly larger proportion of Foreclosures in the religious institutional setting in support of hypothesis one. However, when comparing only the religiously oriented subjects in both institutional settings, the proportion of Foreclosures was not significantly different.

2. An overall global status analysis indicated that Achievers were significantly more Internal on locus of control compared to other identity statuses. This finding supported hypothesis two.

3. Comparing identity statuses on the tolerance of ambiguity variable, resulted in Foreclosed subjects being significantly more Intolerant of Ambiguity compared to other statuses. This finding supported hypothesis three.

4. Hypothesis four involved comparing identity statuses of religiously oriented subjects on Religious Problem-solving style. The only significant findings were seen in the global and the domain-specific measure in the domain of religion. Globally, Diffused subjects were significantly lower than all other statuses on the

Collaboration and Deferring subscales. The domain-specific analysis showed Diffused subjects to be significantly higher than Achievers and Foreclosures on the Self-directing subscale. Consequently, hypothesis four, which expected Achievers to be associated with the Collaborative style and Foreclosures with the Deffering style, was not supported.

5. When religiously Foreclosed subjects were categorized as "open" or "closed" in order to explore differentiation within the Foreclosure status, no significant results appeared. However, there were a couple of important trends approaching significance to lend partial credence to notions expressed in hypothesis five.

This brief overview of the main results will now be followed by a detailed description of the relevant findings in this study.

Status Comparisons of the Two Groups

Global Status Analysis

A 5 X 2 (status x institution) chi-square analysis, using the global identity measure, resulted in an

overall significant difference between the two institutional settings, $\chi^2 (4, N=278)=14.79, p < .01$. However, having obtained a significant difference between the two groups, the question as to which of the statuses were significantly different still remained. Specific status comparisons between the two groups indicated that Achievement and Moratorium statuses were not significantly different. In contrast, there was a significantly larger percentage of Foreclosed individuals in the religious institutional setting, but a significantly larger percentage of Diffused subjects in the secular institutional setting (see Table 1).

Table 1

Global Identity Status Distribution in relationship to the Two Institutional Settings

Identity Status	Institutional Setting				χ^2
	Religious		Secular		
	n	%	n	%	
Achieved	19	16.38	20	12.35	.912
Moratorium	68	58.62	94	58.02	.010
Foreclosure	16	13.75	10	6.17	4.63*
Diffusion	2	1.75	20	12.35	10.47**
Unclassified	11	9.48	18	11.11	

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

Domain-specific Status Analysis

Similarly, the two institutional groups were compared using the Deltas Identity Status Inventory (DISI) which measures identity status in three specific domains: vocation, religion, and politics. Focusing first on the Vocational domain, the two groups were found to be significantly different, $\chi^2 (4, N=278) = 15.06, p < .01$. More specifically, two statuses were significantly different between the two groups; Achievement and Moratorium. Although over 33% of Achievers were seen in the secular group, the religious group approached only 19%. The converse was true for the Moratorium status; little over 35% in the religious group compared to approximately 19% in the secular group. Therefore, regarding vocational identity, the religious group had a significantly larger percentage of subjects who were still actively exploring vocational alternatives, not yet having made any firm vocational commitments.

Focusing on the Religious domain, there was an overall significant difference between the two groups, $\chi^2 (4, N=278) = 35.11, p < .001$. More specifically, three statuses were significantly different between the two

groups; Identity Achievement, Foreclosure, and Diffusion. While only about 11% were Achieved in the secular group, a little over 24% were Achieved in the religious group. Regarding Foreclosure, a little over 60% were seen in the religious group, but only about 48% in the secular. Furthermore, while only approximately 3% of the subjects were classified as Diffused in the religious group, a little over 27% were Religiously Diffused in the secular group. In contrast to the vocational and religious domains, the political domain did not produce any significant differences between the two groups. (For the results of the Dallas inventory see Table 2).

Religious Subjects Compared

Given the considerable disparity of the percentage of Diffused subjects between the two settings, using both the global identity measure and the domain-specific identity measure in the area of religion, a reasonable question to consider was: to what extent were the non-religiously oriented subjects in the secular setting

Table 2

Domain-specific Identity Status Distribution in
relationship to the two Institutional Settings

Domain	Status	Institutional Setting				χ^2
		Religious		Secular		
		<u>n</u>	%	<u>n</u>	%	
Voc.	Achieved	22	18.97	54	33.33	7.03 **
	Moratorium	41	35.34	31	19.14	9.25 **
	Foreclosure	5	4.31	5	9.88	3.00
	Diffusion	35	30.17	46	28.40	
	Unclassified	13	11.21	15	9.26	
Rel.	Achieved	28	24.14	17	10.49	9.28 **
	Moratorium	8	6.90	9	5.46	.21
	Foreclosure	70	60.34	77	47.53	4.45 *
	Diffusion	3	2.59	44	27.16	29.06 ***
	Unclassified	7	6.03	15	9.26	
Pol.	Achieved	12	10.34	24	14.81	1.20
	Moratorium	29	25.00	30	18.32	1.70
	Foreclosure	13	11.21	10	6.17	2.26
	Diffusion	49	42.24	86	53.09	3.18
	Unclassified	13	11.21	12	7.41	

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

contributing to the magnitude of this disparity? Consequently, to differentiate among those subjects in the secular institution who were professing or not professing religious commitments, two groups were formed; those who regarded their religion as being very important or moderately important being placed together in one group, and those in another group who regarded religion as of no importance in their lives.

The status comparisons were then made on all three groups: those in the religious institutions; the religious in the secular institution; and the nonreligious in the secular institution. A 5 X 3 chi-square analysis using the global identity measure resulted in an overall significant difference among the three groups, $\chi^2 (8, N=278)=59.53, p < .001$. There were 42 nonreligious subjects, 120 religious subjects in the secular institutional setting, and 116 subjects in the religious setting.

The following results show the proportional status distribution for the nonreligious subjects: Achievement, 9.52%; Moratorium, 38.10%; Foreclosure, 2.38%; Diffusion, 35.71%; Unclassified, 14.29%. Furthermore, there was a

noticeable difference in the number of Diffused subjects when comparing the nonreligious and religious subjects in the secular institution. The latter had only 4.17% in the Diffusion status as opposed to 35.71% for the non-religious subjects. Eliminating the 42 subjects that were classified as nonreligious in the secular institution and focusing on a more specific comparison of the religious subject in both types of institutions, there were no significant differences between the two groups using the global identity measure (see Table 3).

Table 3

Global Identity Status Distribution of Religious Subjects in the Two Institutional Settings

Identity Status	Institutional Settings			
	Religious		Secular	
	<u>n</u>	%	<u>n</u>	%
Achieved	19	16.38	16	13.33
Moratorium	68	58.62	78	65.00
Foreclosure	16	13.79	9	7.50
Diffusion	2	1.75	5	4.17
Unclassified	11	9.48	12	10.00

However, using the domain-specific identity measure produced significant results and some interesting findings as religious subjects of the two different institutional settings were compared. In the Vocational domain the two groups were found to be significantly different, $\chi^2 (4, N=236)=14.95, p < .01$. More specifically, three statuses were significantly different; Achievement, Moratorium, and Foreclosure.

While there were approximately 19% of Achievers in the religious institution there were 35% in the secular institution. Similarly, a little over 4% of subjects in the religious setting were in the Foreclosure status as opposed to almost 11% in the secular institution.

However, a larger percentage of subjects were found to be in Vocational Moratorium in the religious institutions (35%) than in the secular one (21%). Therefore, subjects with a religious orientation in a secular institution appear to be more decided and committed to their vocational goals, since they tend to be more Vocationally Achieved or Vocationally Foreclosed than those attending religious institutions (see Table 4).

Table 4

Domain-specific Identity Status Distribution of Religious Subjects in the Two Institutional Settings

Domain	Status	Institutional Setting				χ^2
		Religious		Secular		
		<u>n</u>	%	<u>n</u>	%	
Voc.	Achieved	22	18.97	42	35.00	7.67 **
	Moratorium	41	35.34	25	20.83	6.17 **
	Foreclosure	5	4.31	13	10.38	3.56 *
	Diffusion	35	30.17	32	26.67	
	Unclassified	13	11.21	8	6.67	
Rei.	Achieved	28	24.14	12	10.00	8.38 **
	Moratorium	8	6.90	8	6.67	.005
	Foreclosure	70	60.34	73	60.83	.006
	Diffusion	3	2.59	17	14.17	10.20 **
	Unclassified	7	6.03	10	8.33	
Poi.	Achieved	12	10.34	20	16.67	2.01
	Moratorium	29	25.00	24	20.00	.847
	Foreclosure	13	11.21	7	5.83	2.20
	Diffusion	49	42.24	59	49.17	1.14
	Unclassified	13	11.21	10	8.33	

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

The identity analysis in the domain of religion was also very revealing and significant, $\chi^2(4, N=236)=16.73$, $p < .005$. Approximately 24% were Achieved in the religious institutional setting compared to only 10% in the secular. Conversely, only about 3% of the subjects in the religious institutions were Diffused in contrast to approximately 14% in the secular environment (see Table 4). Therefore, even though the religiously oriented subjects in both institutional settings had an almost identical proportion of Religiously Foreclosed subjects (a little over 60% in both), there was a significantly larger proportion of Religiously Diffused subjects in the secular institutional setting, but a larger proportion of Religiously Achieved subjects in the religious setting.

Consistent with the previous analysis of 278 subjects, this analysis of 236 religious subjects also indicated no significant differences in the domain of politics between the two institutional settings (see Table 4).

Gender differences

Further analysis of the data was carried out to see if there were any gender differences in the distribution of the identity statuses. Of the 278 subjects in this study 98 were male, while 180 were female. Identity status distributions according to gender were not significantly different using the global identity measure. However, the domain-specific identity measure did show significant differences. A chi-square analysis showed a significant gender difference in all three domains: Vocation, χ^2 (4 $N=278$)=17.09 $p < .01$; Religion, χ^2 (4 $N=278$)=10.78 $p < .05$; and Politics, χ^2 (4 $N=278$)=22.98, $p < .001$, respectively.

The results of this study indicate that females, compared to males, appear to be more Vocationally Achieved, less Vocationally Diffused, more Religiously Foreclosed, and more Politically Diffused. For status by gender comparisons within domains, see Table 5.

Table 5

Domain-specific Identity Status Distribution between Males and Females

Domain	Status	Gender				χ^2
		Male		Female		
		<u>n</u>	%	<u>n</u>	%	
Voc.	Achieved	19	19.39	57	31.67	4.82 *
	Moratorium	19	19.39	53	29.44	3.34
	Foreclosure	6	6.12	15	8.33	.44
	Diffusion	38	38.78	43	23.89	6.81 **
	Unclassified	16	16.33	12	6.67	
Rel.	Achieved	19	19.39	26	14.44	1.14
	Moratorium	6	6.12	11	6.11	
	Foreclosure	44	44.90	103	57.22	3.87 *
	Diffusion	15	15.31	32	17.78	.28
	Unclassified	14	14.29	8	4.44	
Pol.	Achieved	10	10.20	26	14.44	1.01
	Moratorium	26	26.53	33	18.33	2.55
	Foreclosure	9	9.18	14	7.78	.17
	Diffusion	35	35.71	100	55.56	10.00 **
	Unclassified	18	18.37	7	3.89	

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

Identity Status and Locus of Control

Global Status Analysis

In looking at how the various identity statuses relate to the locus of control variable, as specified by the notions of Internality, Powerful Others, and Chance, the results support the second hypothesis. The analysis of variance procedure, using the identity statuses as the independent variable and Internality as the dependent variable, produced a significant finding, $F(4,273)=5.56, p < .0005$.

Follow-up contrasts utilizing Tukey's Studentized Range (HSD) procedure showed that the mean of the Identity Achieved status was significantly higher than all the other statuses. This comparison was significant at the .05 level. The status means and standard deviations are shown in Table 6.

The Powerful Others subscale of the locus of control variable also produced a significant finding,

Table 6

Global Identity Status Distribution in relationship to
Locus of Control

Status	<u>N</u>	Locus of Control			
		Internal	Powerful Others	Chance	
		<u>M</u> (<u>SD</u>)	<u>M</u> (<u>SD</u>)	<u>M</u>	(<u>SD</u>)
A. Ach.	39	35.13 (6.45)	15.82 (8.23)	15.56	(6.38)
B. Mor.	162	30.35 (6.54)	18.22 (7.02)	19.51	(7.09)
C. Fore.	26	28.96 (5.28)	19.23 (7.19)	21.00	(7.19)
D. Diff.	22	29.82 (4.96)	18.46 (5.99)	20.73	(5.99)
E. Uncl.	29	30.45 (6.12)	21.52 (6.03)	21.03	(7.51)
<u>F</u> value		5.56 ***	2.83 *	3.90 **	
Post hoc comparisons		A > all	A < E	A < all	

NOTE. Post hoc comparisons (HSD) at .05 level

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

$F(4,273) = 2.83, p < .05$. However, the follow-up contrast showed no significant differences among the statuses except that the Unclassified group had a mean that was significantly higher than the Identity Achieved status (see Table 6).

A significant finding was also indicated regarding the Chance subscale, $F(4,273) = 3.90, p < .005$. As would be expected, given that the Identity Achieved status had the highest mean on Internality, it comes as no surprise that this status has the lowest mean on the Chance subscale. The follow-up contrast showed the Identity Achieved status to be significantly different from all the other statuses including the Unclassified group at the .05 level (see Table 6).

This global analysis of identity statuses in relationship to the three measures of locus of control clearly shows that the Identity Achieved status is the most Internal-control oriented and least Chance-control oriented of all the statuses.

Domain-specific status analysis

The three measures of locus of control were also analyzed in terms of identity statuses within specific domains. Within the domain of Vocation the Identity Achieved subjects were significantly more Internal-control oriented than were subjects that were Vocationally Diffused.

Similarly, in the domain of Religion the Religiously Diffused subjects, in contrast to the Religiously Achieved subjects, were more External-control oriented as shown by their significantly larger mean values on the Powerful Others and the Chance subscales.

In the domain of Politics the only significant finding was seen on the Internality subscale. The Politically Achieved subjects were significantly more Internal than the Politically Foreclosed and Diffused subjects (see Table 7).

Table 7

Domain-specific Identity Status Distribution in
relationship to Locus of Control

Domain	Locus of Control							
	Status	N	Internal		Power. Others		Chance	
			M	(SD)	M	(SD)	M	(SD)
Vocation								
A. Ach.	76	32.38	(5.83)	17.33	(6.77)	17.87	(6.38)	
B. Mor.	72	31.32	(6.50)	17.33	(6.29)	18.53	(7.17)	
C. For.	21	31.76	(7.54)	18.62	(7.32)	17.43	(6.86)	
D. Dif.	81	29.28	(5.97)	19.16	(7.75)	20.73	(6.66)	
E. Uncl.	28	29.39	(7.75)	21.11	(7.70)	22.93	(8.66)	
	$F(4,273)$		2.87 *		2.09		4.16 **	
Post hoc comparisons			A > D		E > A,B,C			
Religion								
A. Ach.	45	31.60	(6.60)	15.51	(6.77)	16.36	(6.62)	
B. Mor.	17	33.24	(5.03)	19.88	(8.42)	19.53	(6.61)	
C. For.	147	30.80	(6.61)	17.89	(6.89)	19.11	(6.79)	
D. Dif.	47	30.11	(5.72)	20.85	(7.33)	21.26	(7.42)	
E. Uncl.	22	29.46	(7.65)	20.55	(6.02)	22.86	(7.79)	
	$F(4,273)$		1.14		4.27 **		4.43 **	
Post hoc comparisons					A < D,E		A < D,E	

Table continues....

Table 7 (continued)

Domain		Locus of Control					
		Internal		Power.Others		Chance	
Status	<u>N</u>	<u>M</u>	<u>(SD)</u>	<u>M</u>	<u>(SD)</u>	<u>M</u>	<u>(SD)</u>
Politics							
A. Ach.	36	33.97	(4.74)	18.61	(7.50)	17.58	(6.50)
B. Mor.	59	32.12	(5.27)	17.14	(6.93)	18.19	(6.78)
C. For.	23	29.22	(6.37)	17.48	(6.39)	18.49	(8.34)
D. Dif.	135	30.04	(6.58)	18.51	(6.84)	20.18	(6.68)
E. Uncl.	25	29.28	(8.88)	20.68	(9.10)	20.96	(9.15)
	<u>F (4,273)</u>		4.08 **		1.21		1.83
Post hoc comparisons		A > C,D,E					

NOTE. Post hoc comparison (HSD) at .05 level

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

Religious Subjects Compared

The religious subjects in both institutional settings were also compared on the three measures of locus of control. The two groups were significantly different on all three measures, with the religious subjects in the secular setting having the highest mean values on all three measures. This would suggest that these subjects were not only more Internal-control oriented but, paradoxically, also significantly more External-control oriented in terms of Powerful Others and Chance factors (see Table B).

Table B

Religious Subjects in the Two Institutional Settings in relationship to Locus of Control

Religious Subjects By Institution	N	Locus of Control		
		Internal	Powerful Others	Others
Religious	116	29.21	16.65	17.69
Secular	120	31.87	19.19	20.25
E (1,234)		9.55 *	5.18 *	5.38 *

* Significant at .05 level or better

Identity Status and Tolerance of Ambiguity

Global Status Analysis

When comparing the identity statuses to the Tolerance of Ambiguity variable a statistically significant difference was seen between the statuses, $F(4,273)=4.47$, $p < .005$. Follow-up contrasts utilizing Tukey's Studentized Range (HSD) procedure indicated that the Foreclosure status was significantly different from the Identity Achieved and Moratorium statuses at the .05 level.

In other words, the Foreclosed subjects were found to be significantly more intolerant of ambiguity when compared to Achievers and those in the Moratorium status. This finding supports the third hypothesis of this study. However, it is not clear why the Diffusion status was not included as being significantly different from Foreclosure, given that it's mean value is slightly smaller than the Moratorium status, other than the sample size differential having a possible influence. See Table 9.

Table 9

Global Identity Status Distribution in relationship to
Tolerance of Ambiguity

Identity Status	Tolerance of Ambiguity		
	<u>N</u>	<u>M</u>	<u>SD</u>
A. Achieved	39	45.31	6.42
B. Moratorium	162	47.62	6.06
C. Foreclosure	26	51.39	4.08
D. Diffusion	22	47.59	4.48
E. Unclassified	29	48.83	6.16
<u>F</u> (4,273)		4.47 *	
Post hoc comparisons		C > A,B	

Note. The higher the mean, the greater the intolerance of ambiguity. Post hoc comparisons at the .05 level

* $p < .01$

Domain-specific Status Analysis

A domain-specific analysis of the statuses in relationship to the Tolerance of Ambiguity variable indicated a significant finding in all three domains. In the domain of Vocation the subjects who were in Vocational Moratorium were significantly more tolerant of ambiguity than the Vocationally Diffused subjects. Similarly, in the religious domain the subjects in Religious Moratorium were significantly more tolerant of ambiguity than the Religiously Foreclosed subjects. Regarding the domain of politics, subjects classified as Politically Achieved or Moratorium were significantly more tolerant of ambiguity than the Politically Foreclosed or Diffused subjects (see Table 10).

Religious Subjects Compared

The Tolerance of Ambiguity variable was also used in comparing the religious subjects in both institutional settings. The mean values for the two groups were not significantly different.

Table 10

Domain-specific Identity Status Distribution in
relationship to Tolerance of Ambiguity

Domain	Status	Tolerance of Ambiguity		
		<u>N</u>	<u>M</u>	<u>SD</u>
Voc.	A. Achieved	76	47.42	6.46
	B. Moratorium	72	45.83	6.42
	C. Foreclosure	21	48.33	4.49
	D. Diffusion	81	49.00	5.17
	E. Unclassified	28	49.71	5.66
	<u>F</u> (4,273)		3.71 *	
	Post hoc comparisons			B < D,E
Rel.	A. Achieved	45	46.02	6.04
	B. Moratorium	17	44.00	8.00
	C. Foreclosure	147	48.68	5.80
	D. Diffusion	47	47.60	5.36
	E. Unclassified	22	48.55	5.33
	<u>F</u> (4,273)		3.72 *	
	Post hoc comparisons			B < C

Table continues...

Table 10 (continued)

Domain	Status	Tolerance of Ambiguity		
		<u>N</u>	<u>M</u>	<u>SD</u>
Pol.	A. Achieved	36	45.64	5.74
	B. Moratorium	59	45.90	6.49
	C. Foreclosure	23	49.87	6.50
	D. Diffusion	135	49.01	5.48
	E. Unclassified	25	46.64	5.48
	<u>E</u> (4,273)		5.23 **	
	Post hoc comparison		A, B < C, D	

NOTE. Post hoc comparison (HSD) at .05 level

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

Status and Religious Problem-solving StyleGlobal status analysis

In comparing the identity statuses to the Religious Problem-solving Style variable, only subjects that considered themselves religious and actually filled-out this particular questionnaire were included in the analysis. This reduced the overall number of subjects from 278 to 230. Each of the three Religious Problem-solving Style subscales were analysed separately using the analysis of variance procedure with the identity statuses as the independent variable. There were no significant differences among the statuses for the Self-directing style. However, there were significant differences for the Collaborative and the Deferring styles; $F(4,225)=6.13, p < .001$ and $F(4,225)=5.20, p < .001$ respectively. Follow-up contrasts of these two latter styles showed that Diffused subjects had the smallest means compared to all other statuses including the Unclassified group, in both instances (see Table 11).

Table 11

Global Identity Status Distribution in relationship to
Religious Problem-solving Style

Status	N	Religious Problem-solving Style		
		Collab. M (SD)	Self-dir. M (SD)	Deferring M (SD)
A. Ach.	35	19.00 (4.62)	17.03 (3.73)	15.83 (5.57)
B. Mor.	136	17.60 (4.55)	17.63 (4.24)	14.49 (5.10)
C. For.	23	20.48 (3.49)	15.70 (2.44)	17.35 (2.67)
D. Dif.	11	12.55 (5.61)	19.82 (6.42)	9.55 (4.99)
F. Uncl.	25	18.40 (5.58)	17.68 (4.53)	15.48 (4.98)
<u>F</u> (4,225)		6.13 *	2.06	5.20 *
Post hoc comparisons		D < all		D < all

NOTE. Post hoc comparisons (HSD) at .05 level. * $p < .001$

Domain-specific Status Analysis

A domain-specific analysis of the statuses in relationship to Religious Problem-solving Style produced no significant differences in the Political domain, and no really meaningful significant differences in the Vocational domain. However, the domain of religion did produce significant results on all three measures of Religious Problem-solving Style (see Table 12).

In both the Collaborative and Deferring styles the Diffusion status had the significantly lowest mean compared to all other statuses. This would suggest that the Religiously Diffused have the least internalized form of religion, but at the same time show the least reliance on external rules. This result appears to be consistent with the general conceptualization of the Religiously Diffused individual, that is, one who is neither seriously exploring religious identity issues nor forming any kind of religious commitments.

In contrast, on the Self-directing measure, the Religiously Diffused subjects have a significantly

Table 12

Domain-specific Identity Status Distribution in
relationship to Religious Problem-solving Style

Domain		Religious Problem-solving Style					
		Collab.		Self-dir.		Deferring	
Status	<u>N</u>	<u>M</u>	<u>(SD)</u>	<u>M</u>	<u>(SD)</u>	<u>M</u>	<u>(SD)</u>
Vocation							
A. Ach.	63	17.38	(4.76)	18.37	(4.05)	14.51	(5.35)
B. Mor.	63	18.94	(3.66)	17.03	(3.48)	14.92	(4.51)
C. For.	16	18.56	(5.05)	18.13	(4.05)	15.69	(5.50)
D. Dif.	67	17.72	(5.04)	17.58	(4.48)	15.21	(5.24)
E. Uncl.	21	16.91	(6.98)	15.10	(5.29)	13.86	(6.03)
<u>F</u> (4,225)		1.21		2.73 *		.45	
Post hoc comparisons				A > E			
Religion							
A. Ach.	40	19.58	(4.96)	16.70	(4.27)	16.28	(5.66)
B. Mor.	16	17.13	(3.26)	19.31	(2.77)	13.31	(3.54)
C. For.	131	18.79	(4.13)	16.65	(3.76)	15.92	(4.64)
D. Dif.	26	11.81	(3.36)	21.19	(5.45)	8.77	(3.14)
E. Uncl.	17	17.77	(5.95)	18.00	(3.00)	14.00	(4.69)
<u>F</u> (4,225)		16.00 **		8.42 **		14.44 **	
Post hoc comparisons		D < all		D > A,C		D < all	

Table continues...

Table 12 (continued)

		Religious Problem-solving Style					
Domain		Collab.		Self-dir.		Deffering	
Status	<u>N</u>	<u>M</u>	(<u>SD</u>)	<u>M</u>	(<u>SD</u>)	<u>M</u>	(<u>SD</u>)
Politics							
A. Ach.	29	17.79	(4.07)	18.83	(4.05)	13.66	(5.03)
B. Mor.	53	17.72	(4.88)	17.42	(3.97)	14.30	(5.47)
C. For.	18	19.67	(4.52)	16.28	(4.14)	16.44	(4.76)
D. Dif.	111	17.66	(5.18)	17.43	(4.49)	14.87	(5.24)
E. Uncl.	19	18.90	(4.01)	16.74	(3.38)	16.58	(3.78)
	<u>F</u> (4,225)		.88		1.26		1.52

NOTE. Post hoc comparisons (HSD) at .05 level. Total N=230

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

larger mean than the Religiously Achieved and Foreclosed subjects. This would suggest that the Religiously Diffused subject tends to rely on his or her own personal resources more than on religious resources, in contrast to the Religiously Achieved and Religiously Foreclosed subject.

Religious Subjects Compared

When comparing the religious subjects of both institutional settings on Religious Problem-solving Style, no significant differences were found on the Self-directing subscale.

However, both the Collaborative and Deffering subscales produced significant differences between the two groups. In both instances the religious subjects in the secular institutional setting had significantly lower mean values (see Table 13).

Table 13

Religious Subjects in both settings compared on
Religious Problem-solving Style

Religious Subjects by Institution	Religious Problem-solving Style			
	<u>N</u>	<u>M</u>	<u>M</u>	<u>M</u>
Religious	116	19.92	15.52	16.85
Secular	120	13.58	15.73	11.04
<u>F</u> (1,234)		61.38 *	.17	59.93 *

* $p < .001$

Foreclosure Status Differentiation

Procedure for "open" and "closed" groups

Subjects that were Foreclosed in the religious domain now became the population of interest in order to differentiate within the Foreclosure status and to test the fifth hypothesis. All Religiously Foreclosed subjects showing exploratory skills, as indicated by a

status of Achievement or Moratorium in either of the other two domains (vocation or politics), were labelled "open". Conversely, if no such skills were indicated in the other domains they were labelled "closed".

However, an unanticipated problem arose when subjects were Foreclosed in the domain of religion but "unclassified" in one or both of the other domains. In such instances, in order to minimize the loss of subjects, a closer examination of each protocol was undertaken. If the "unclassified" subject indicated a predominantly low identity showing (e.g., Foreclosure-Diffusion) in that particular domain in which they were labeled "unclassified", they were included in the "closed" category. If, on the other hand, they appeared to have predominantly high identity characteristics (e.g., Achievement-Moratorium) they were labelled "open".

Furthermore, the categorization of the subject in this manner was generally confirmed by the subject's overall identity status as indicated by the global identity measure. For example, a Foreclosed subject was Diffused in Politics but Unclassified in Vocation. A

closer look at the vocational protocol indicated a greater combination of high-identity responses as opposed to low. The indication of high-identity standing was further confirmed when the subject was shown to be classified as high identity on the global identity measure (e.g., Achievement or Moratorium). Therefore, such a subject was labelled "open" in spite of being Diffused in Politics and Unclassified in Vocation, simply because the unclassified category covered a predominantly high-identity protocol.

Comparisons of "Open" and "Closed" Groups

Following the above procedure resulted in 132 subjects that were Foreclosed in the domain of religion. Of these 132, 94 were "open" and 38 were "closed". The two categories of subjects were then compared on locus of control, tolerance of ambiguity, and religious problem-solving style. Because the sample sizes for the two groups were relatively small, no significant differences were seen below the .05 level. However, meaningful trends were seen when comparing the two groups on the locus of control and the tolerance of ambiguity variables. For example, even though not

significant, the "open" group had a higher mean on Internality, a lower mean on Chance, and a lower mean on Tolerance of Ambiguity, when compared to the "closed" group (see Table 14).

Gender Differences

In comparing Religiously Foreclosed males and females in terms of being "open" and "closed" a significant difference was seen, $\chi^2(1, N=132)=11.91$, $p < .05$. Only 48.57% of males were classified as "open" compared to 79.38% of females. Conversely, 51.43% of males were classified as "closed" compared to only 20.62% of females. Therefore, it appears that Religiously Foreclosed females tend to be more "open" than Religiously Foreclosed males.

Table 14

Differentiating Subjects within the Foreclosure Status

Religiously Foreclosed Subjects					
Dependent Measure	"Open"		"Closed"		F (1,130)
	<u>M</u>	<u>(SD)</u>	<u>M</u>	<u>(SD)</u>	
<u>Locus of Control</u>					
Internality	31.43	(6.61)	30.66	(6.19)	.38
Powerful Others	18.18	(6.57)	16.66	(5.97)	1.53
Chance	18.20	(6.12)	20.53	(6.00)	3.94 *
<u>Tol. of Ambig.</u>	47.94	(6.03)	50.00	(5.75)	3.25 *
<u>Rel.Prob-sol.Style</u>					
Collaborative	16.43	(6.77)	16.63	(7.96)	.02
Self-directing	14.90	(6.00)	14.87	(7.29)	.00
Deferring	13.85	(6.33)	13.82	(7.48)	.00

Note. "Open" (n=94), "Closed" (n=38)

* approaching the .05 level of significance

CHAPTER IV

DISCUSSION

This study attempted to look at religious identity formation as part of the overall identity formation processes. Subjects were compared from ideologically homogeneous (religious) and ideologically heterogeneous (secular) academic environments. A global status analysis was accompanied by a domain-specific approach in order to provide more accurate and meaningful identity status profiles. This domain-specific analysis also provided an opportunity to enable a differentiation within the Foreclosure status for subjects classified as Religiously Foreclosed.

Hypothesis One

The first hypothesis expected to find a significantly greater percentage of identity Foreclosed subjects in the religious setting as opposed to subjects in the secular institutional setting. The rationale

being that the religious institutional setting would provide a relatively homogeneous environment, ideologically speaking, that would tend toward maintaining rather than challenging existing beliefs and commitments.

In contrast, an ideologically heterogeneous academic environment is more likely to stimulate an identity crisis because it provides greater exposure to new and different perspectives. This forces the subject to re-evaluate his or her original commitments.

Developmentally, Identity-status theorists would also predict that once an identity crisis has begun it is likely to end with the individual either forming personally meaningful commitments (i.e., movement toward Achievement), or renouncing the challenge as unresolvable (i.e., becoming Identity Diffused).

The significant finding that 13.75% of subjects in the religious setting were in the Foreclosure status, as opposed to only 6.17% in the secular institutional setting, provides support for the first hypothesis. The first hypothesis was also clearly supported by the

domain-specific approach in the domain of religion; 60.34% were religiously Foreclosed in the religious setting compared to 47.53% in the secular setting.

Furthermore, given that enrollment within a specific religious institutional setting would involve considerable deliberation followed by choice and commitment, it comes as no surprise when comparing the religious and secular settings that almost twice as many subjects in the religious setting were in the committed statuses (Achievement and Foreclosure). Approximately 30% in the religious setting compared to 18% in the secular setting.

Consistent with identity-status theory and research on late adolescents, the status containing the largest proportion of subjects was the Moratorium status. This was true for both institutional settings. That is, in spite of the ideological differences in the academic environments, the proportion of subjects in the Moratorium status were almost identical; a little over 58% in both institutional settings (Table 1). This would imply that the bulk of the subjects in the religious setting are just as active in exploring

identity issues as their counterparts in the secular institution.

In looking further at these results, a major concern has to be the large proportion of Diffused subjects in the secular institutional setting. Whereas, in the religious setting the proportion of Diffused subjects approached only 2%, the secular setting had a little over 12% (Table 1).

This finding is not surprising and is consistent with the finding of three longitudinal studies (Adams & Fitch, 1982; Waterman, Geary & Waterman, 1974; and Waterman & Goldman, 1976) that traced identity development through the college years. One finding in these studies that is particularly relevant here was the discovery that colleges often undermine traditional religious beliefs without necessarily helping students develop meaningful alternative belief systems.

However, a finding in this study that seems to go contrary to theoretical expectations resulted when only the religiously oriented subjects were compared from both academic settings. In this instance the domain-

specific approach in the domain of religion showed that the proportion of religiously Foreclosed subjects was almost identical in both settings; 60.34% compared to 60.83% (Table 4). Such a large percentage of Foreclosed subjects are expected in the religious setting where peers and adults reinforce and accept the subject's commitments, but not in the secular setting where such commitments are frequently challenged.

A possible explanation for this finding is that the subjects in the secular setting were, generally, first year students. A religiously Foreclosed subject in his or her first year is still likely to have a circle of friends with similar beliefs, a situation that is likely to change over time. Another possibility for sustaining religious Foreclosure in a secular institutional setting is the increased activity of religiously sponsored groups on campus. These groups may provide the necessary peer reinforcement to sustain Foreclosure commitments.

Furthermore, it is quite possible that, at least for adolescents, being Foreclosed in a particular domain is functionally adaptive. It can provide some continuity

and stability to the ego while at the same time enabling energy to be expended on a great deal of exploration in a currently more salient identity domain.

Perhaps this can be seen when comparing subjects in the religious institutional setting (Table 2). More than 84% are in the high commitment classification in the domain of Religion (Achievement, 24.14% and Foreclosure, 60.34%). Being highly committed in the religious domain allowed for greater exploration and noncommitment in the domain of vocation, more than 65% (Moratorium, 35.34% and Diffusion, 30.17%), without the negative effects of an overall identity diffusion scenario setting in.

That is to say, Religious Foreclosure could be providing a safe ego anchorage that enables these adolescents to focus on more pressing identity concerns. Perhaps this is quite dramatically seen when comparing religious subjects in the religious setting and nonreligious subjects in the secular setting. The proportion of subjects classified as globally diffused among the religious subjects was 1.72% compared to 35.71% among non-religious subjects. Therefore, it

appears that being highly committed in one domain, even Foreclosed, can provide a temporary anchorage while sorting through identity elements in another domain.

Hypothesis Two

The second hypothesis in this study looked at the identity statuses in terms of locus of control. It was hypothesized that Achievers would be more Internal compared to other identity statuses. This hypothesis was clearly supported.

A glimpse of the rank ordering of the means of each status on the three measures of locus of control is interesting:

1. Internality: Ach > Mor > Dif > For
2. Powerful Others: For > Dif > Mor > Ach
3. Chance: For > Dif > Mor > Ach

Therefore, in regard to externality (Powerful Others and Chance) Foreclosed subjects ranked the highest followed by Diffused subjects. Furthermore, the rank order duplication on the external dimension seems to confirm the robust nature of Rotter's original, dichotomous,

Intrinsic-Extrinsic dimension, at least according to the way the identity statuses are ranked in this study.

From these findings there is no indication to support the notion that belief in Powerful Others is similar "to Rotter's conceptualization of internality" (Lenenson, 1973, p.15), given that Foreclosures and Achievers appear to be at opposite ends on each measure of locus of control.

Previous results relating statuses to locus of control were somewhat equivocal, some studies associating high internality with the identity status criteria of exploration (Achievement and Moratorium) while others showed the commitment criteria to be important (Achievement and Foreclosure). The rank ordering of identity statuses in this study would associate the exploration criteria with high internality.

Hypothesis Three

In the third hypothesis it was predicted that the Foreclosure status would be significantly more intolerant of ambiguity than the other statuses. This hypothesis was also supported by this study. The finding suggests that Foreclosures are actively involved in seeking to impose a meaningful structure on ambiguous situations in order to avoid the discomfort brought on by such ambiguity.

The discomfort toward ambiguity among Foreclosed subjects is probably reflective of the fact that they have been satisfied with a conferred identity and have not been personally involved in the construction of an identity. Construction implies a sorting through of previously acquired childhood identifications and the synthesizing and fashioning of a "unique" self.

The construction of an identity presupposes the imposition of an active decision-making process which results, not only in a "self" that is more constant across situations and less dependent on external

support, but also in the development of skills useful for adapting and handling ambiguity in the environment.

The construction and use of identity decision-making processes is most fully experienced in Identity Achieved subjects, which probably explains why it is the most tolerant of ambiguity among the statuses. For example, the rank ordering of the mean values of the global status analysis on Tolerance of Ambiguity (see Table 9) reveals: For > Mor > Dif > Ach. The greater the mean value, the more intolerant the status is of ambiguity.

Hypothesis Four

The fourth hypothesis, relating identity statuses to Religious Problem-solving style, expected identity Achievers to be associated with the Collaborative problem-solving style and Foreclosures with the Defferring style. Hypothesis four was not supported. This finding is, perhaps, indicative of the fact that the two constructs, one involving identity problem-solving styles (statuses) and the other religious

problem-solving styles, are only an approximate parallel.

However, by collapsing statuses on the commitment criteria the results appear to be more meaningful. That is, by first summing the mean values for Achievers and Foreclosures, and then contrasting this value with the summed means of the Moratorium and Diffused statuses (see Table 12, religious domain), the results show that on the Collaborative style the high commitment mean equals 38.37 compared to the low commitment mean of 28.94. This gives a 10-point difference between the two. A similar differential is seen for the Deferring style: high commitment (32.20) compared to low commitment (22.08). The Self-directing style, on the other hand, goes in the opposite direction with a smaller spread: high commitment (33.35) compared to low commitment (40.50).

Given that the high commitment statuses are associated with higher mean values on the Collaborative and Deferring styles would lend support to the notion that these two styles are associated significantly with higher levels of involvement and commitment in religion.

Conversely, low commitment statuses in the religious domain are associated more with the Self-directing style, which is synchronous with a more humanistic type of religion that leans on its own resources.

Furthermore, given the pervasive humanistic presence in the secular institutional setting, it is not surprising that on both the Collaborative and Deferring religious problem-solving styles, the religious subjects in the religious settings score significantly higher than the religious subjects in the secular institutional setting.

Hypothesis Five

The expectations of the fifth hypothesis, in attempting to differentiate between "open" and "closed" religiously Foreclosed subjects, were not confirmed with significant findings. A possible reason why the Religious Problem-solving style failed to discriminate between the "open" and "closed" groups is suggested by the findings in the previous hypothesis. Given that the religious problem-solving measure was found to be more

helpful in discriminating along the status commitment criteria, and the "open" and "closed" groups were separated on the basis of the exploratory criteria, it is no surprise that this measure did not discriminate between the two groups.

However, trends in a number of important areas were in the expected direction, with differences on Internality and Tolerance of Ambiguity approaching the .05 level of significance. These trends give partial support to the notions and rationale behind this particular hypothesis.

The basic idea being that if, indeed, the "open" Foreclosed subjects had experienced identity-exploratory skills, as manifested in high identity standing in other domains, then they should manifest a greater degree of internality and tolerance compared to "closed" Foreclosed subjects that give no such evidence of employing these skills. The notion of "open" Foreclosed contrasted with "closed" Foreclosed subjects implies a slightly greater degree of flexibility and less defensive rigidity on the part of "open" subjects, and also a greater degree of tolerance of differing view-points.

It would also imply a greater likelihood for successful resolution should the environmental support configurations change and an identity crisis be initiated.

Contributions and Future Considerations

This study looked at religious identity formation, generally, as part of the overall identity formation process, and specifically, through the identity status paradigm. It compared late adolescent subjects in religious and secular academic institutional settings. After comparing identity status characteristics on Locus of Control, Tolerance of Ambiguity, and Religious Problem-solving Style, it attempted to use these measures in further differentiating within the religious Foreclosure status.

The findings of this study have contributed to our knowledge by providing more information regarding religious identity formation, an area that has been somewhat neglected by identity-status researchers. This study has also contributed to the very few attempts at

discriminating within a status, and probably the first attempt at discriminating within the religiously Foreclosed status.

However, there are a couple of things that could be considered in future research in this area. First, increasing the sample sizes, particularly from religious institutions, would enable a further comparison between religious institutions themselves. It would be interesting to see how "content" affects "process" more clearly by discriminating among religious institutions along the liberal-conservative dimension.

Furthermore, increasing sample sizes would not only enable more effective gender comparisons, but also facilitate a more effective comparison between religiously oriented subjects in religious settings, religiously oriented in secular settings, and non-religious in secular settings.

Second, where feasible longitudinal studies covering the college years on ideologically differing campuses could be compared. Furthermore, a description of the quality and the nature of religious support systems on

these campuses could be explored in relationship to identity status shifts over the given period.

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