

REGRESSION IN THE SERVICE OF EGO IDENTITY

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## ABSTRACT

This study has attempted to explain ego-identity formation in adolescence by considering it in terms of the "adaptive regression" model formulated by Heinz Hartmann. Hartmann's model holds that such processes as creative inspiration, fantasy, and hypnosis depend on a temporary regression by the ego to a more primitive mode of psychological function, which is imagistic, autistic, and nonlogical. It was <sup>Hypothesis 2</sup> proposed, in this study that the identity-forming adolescent may utilize such a process in the service of identity synthesis. Specifically, it was proposed that adolescents engaged in identity formation would be more prone to regressive experience than adolescents not so engaged.

Identity formation was measured with Marcia's Identity Status interview. With this measure, adolescents are classified as Moratorium (actively engaged in identity formation), Foreclosure (not yet entered into an identity formation process and maintaining parentally-defined commitments), Achievement (having completed the identity formation process), or Diffusion (neither engaged in identity formation nor maintaining parental commitments).

It was hypothesized: 1) that Moratorium adolescents would be more disposed to regressive experience in daily life than Foreclosure and Achievement adolescents, as measured by the Taft Ego Permissiveness Inventory; 2) that Moratorium adolescents would be more disposed to regression in a hypnosis situation than Foreclosure and Achievement adolescents, as measured by the

Field Inventory of Hypnotic Depth and the Creative Imagination Scale.

Seventy-one adolescents were tested, thirty-five females and thirty-six males. Each was administered the Identity Status Interview followed by an audiotaped hypnosis procedure and the three measures.

It was found that, as predicted, Moratorium adolescents reported significantly more regressive experience than Foreclosure and Achievement adolescents. However, the second hypothesis was not supported, as the Moratorium group did not report more regression in the hypnosis situation. In fact, it was the Foreclosure group who reported the most regression in hypnosis. This result was explained in terms of the substantial interpersonal-influence component of hypnosis, which is independent of regressive tendency, and thus elicits maximal response from the highly acquiescent Foreclosure group.

It was also found that females report more regressive experiences than males, and that the relationship between Identity Status and regressive experience is much stronger for females.

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## A. Introduction

## I. An approach to identity formation

A major direction in current personality theory is the ego-analytic approach. Theorists of this approach maintain the essential constructs of traditional Freudian psychoanalysis while insisting upon a stronger focus on ego functions, ego development, and the adaptation of ego to environment. Led by such writers as Kris (1952) and Hartmann (1958), they have advocated the recognition that many psychological functions are not derived from intrapsychic conflict, but rather constitute an autonomous "conflict-free" sphere of mental functioning. Such autonomous functions would include accurate perception of the world, control of motility, and cognitive processes. This is not to deny that such functions can be affected in operation or development by psychological conflicts, but to assert that they are not always dependent on or derived from such conflicts. The ego, in short, maintains an existence and functioning which is relatively independent of the vicissitudes of instinctual energies.

This study will relate two theoretical models which come under the ego-analytic rubric. These models have been developed quite independently, with application to apparently unconnected problems. Nonetheless, it is here proposed that theoretical uncertainties of one model may be clarified by concepts derived from the other.

The first model is that of Erik Erikson, who has developed a theoretical scheme within which the evolution of ego through the life-span can be understood. His theory postulates eight stages of ego development, each requiring the resolution of a particular psychological "task." Mastery of each of these developmental tasks constitutes the maturation of the ego as it becomes able to cope with the coordinate demands of instinctual gratification and social achievement. Sandwiched between organismic needs and social demands, the individual grows through successive stages of increased ego complexity and adaptive capacity.

Although Erikson's theory provides a framework within which the successive stages of ego development and the conditions for such development can be described, it fails to provide a model for the process of developmental change itself. Using Erikson's scheme, we can describe an individual at a specific Stage One and expect that he will move to some Stage Two in response to particular organismic and environmental demands; yet we are unable to describe the psychological mechanisms by which the person is transformed. Given the "what" (the stage) and the "why" (to cope with new demands), we are missing the "how" of psychological change.

In this study, the problem of structural change will be addressed via a second model which has been developed within ego-analytic theory. This is the "adaptive regression" model of Hartmann (1958). The concept of adaptive regression is that the

ego may temporarily engage in a controlled shift to a more primitive mode of function ("regression") in order to reap ultimate adaptive gain. This concept has been used to explain the creative process in that this regressed mode is considered to facilitate novel insight and combination of ideas.

The relevance of adaptive regression to change in ego structure lies in its explanation of the introduction of novel patterns into the ego's domain. The process by which the ego temporarily alters its control of psychological function so that new structures may arise can be applied as fruitfully to the emergence of new identity-structures as to the emergence of new patterns of ideas. Specifically, the hypothesis to be examined is that adaptive regression can serve as a model for the process of structural change which underlies the formation of ego-identity.

Each of the ideas briefly covered above (Erikson's model of ego development, the adaptive regression model, and the hypothesized relation between them) will be more fully considered in the sections which follow.

## II. Identity formation

### Erikson's model of ego development

Prior to Erikson's theory of ego development, psychoanalytic theory was concerned primarily with the genesis of libidinal expression. The individual was charted as he moved through oral, anal, phallic, latent, and genital phases of psychosexuality. When the ego was considered, it was with regard to its handling of libidinal energies, the extent to which such energies were permitted or denied expression (as in A. Freud, 1955).

Erikson, however, shifted his focus to the ego's own unique process of development. Rather than treating the ego solely as an instrument of defense against the id, he considered its broader adaptive functioning. Mediating between instinctual pressures and social demands, the ego must constantly evolve so as to cope with systematic changes in each of these domains. Changes in the nature of libidinal drive or social demand cause the ego to adjust, according to a predetermined pattern, so as to balance the new set of forces. Thus, stages of ego development can be understood in terms of an adjustment to coordinated changes in instinctual and social variables. (A1)

Developmental changes in instinctual factors have been well formulated in psychoanalytic theory; Erikson links each

libidinal phase to a specific stage of ego development. Social factors, however, have been largely neglected by psychoanalytic theorists, who tend to consider the psyche in isolation. Erikson remedies this by formulating the new social demands and external challenges associated with each stage of ego and id development.

His approach can be illustrated by examining his first stage of ego development. In this stage, the child is required to coordinate his own hunger and his mother's offer of food. His libido is invested in the oral zone. As Erikson presents it, "he lives through, and loves with his mouth; and the mother lives through, and loves with, her breasts" (1959, p.56-57). The developmental task of this stage is to achieve a "sense of trust" so that the child is able to accept nurturance from his environment.

Each of the developmental stages which follows has its associated task to be completed. Stage Two involves the establishment of a "sense of autonomy" and self-control, and is linked to the anal phase of libidinal investment. Stage Three involves the establishment of a sense of initiative and goal-directedness, and is linked to the phallic phase of libidinal investment. Stage Four involves the establishment of a "sense of industry," the capacity for pleasurable work and learning, and is linked to the latency phase of libidinal investment.

Several points can be made about this developmental sequence. First, it is considered by Erikson to follow an "epigenetic" principle (like embryonic growth) in that a

fundamental plan predetermines that each stage occur at one point in the sequence, and builds each stage on the gains of the previous one. Thus, successful establishment of a sense of initiative is largely dependent on the previous establishment of a reasonable degree of trust in the world. A second point is that, in each of these stages, a biologically-determined libidinal style produces a style of behavioural interaction with the environment. If the social environment provides sufficient opportunities and feedback, this behavioural style is added to the child's adaptive repertoire. A third point is that it is the interaction of internal/biological state and external/social conditions which determines the ego's resolution of the stage. A final point is that the outcome of a stage is not dichotomous, but involves some unique synthesis of trust/mistrust, initiative/shame, etc.

Following the initial four stages, ego development is described in rather different terms. No longer is libidinal investment of crucial importance in defining the nature of each stage. As Erikson notes about the post-puberty stage, "It is not within the confines of libido theory, however, to give an adequate account of a second period of delay, namely, adolescence" (1959, p.111).

It is this fifth stage, adolescence, which receives the most attention and theoretical stress in Erikson's work. In this stage, the "ego-identity" is achieved, the unique structure of identity is constructed from the building blocks provided by



earlier stages of development: "the ego values accrued in childhood culminate in what I have called a sense of ego identity...the accrued confidence that one's ability to maintain inner sameness and continuity (one's ego in the psychological sense) is matched by the sameness and continuity of one's meaning for others" (1959,p.89). The failure to achieve a sense of one's unique goals, values and being results in "identity confusion", the lack of experienced continuity or specific goals.

This stage is followed by several more stages of ego development in adulthood. Each has its own task and social imperatives. The sixth concerns the ability to engage in intimate sexual and emotional relationships; the seventh involves the establishment of creative expression through work; the eighth involves a new sense of integrity and fulfillment of the life work. While each of these stages raises unique and important issues, they will not be discussed in detail. These latter stages, as well as the initial four, will be neglected in favor of a close examination of the fifth stage of identity formation. The issues to be considered (of structure and structural change) will certainly be relevant for all stages, but these issues can most clearly be examined in the identity-formation stage, which serves much like a fulcrum for the life cycle: "The emerging ego identity, then, bridges the early childhood stages, when the body and the parent images were given their specific meanings, and the later stages, when a

variety of social roles becomes available and increasingly coercive" (1959, p.91). The stage of identity formation has the most detailed formulation, a unique theoretical importance, and has been given the most empirical investigation. It is this stage which will be focused upon in this study.

### The structure of identity

All of Erikson's stages, though primarily the fifth, involve changes in identity; but how does he construe the identity itself as a medium for these changes? What does "identity" look like?

Erikson has defined the "sense of identity" as "the accrued confidence that one's ability to maintain inner sameness and continuity (one's ego in the psychological sense) is matched by the sameness and continuity of one's meaning for others" (1959, p.89). This definition is deceptively simple in its apparent equation of the sense of identity with a conscious experience. On the contrary, Erikson is at pains to point out that awareness of identity is marked only when one is about to achieve it or when it is threatened by identity confusion. A "sense of identity" is normally not conscious as such, but is experienced as "psychosocial well-being." Erikson notes that "such 'senses' pervade surface and depth, consciousness and the unconscious. They are ways of conscious experience, accessible to introspection (where it develops); ways of behaving, observable by others; and unconscious inner states determinable

by test and analysis" (1959, p.56). Thus, the "sense of identity" is a stable attribute of the identity structure which has experiential and behavioural manifestations.

In another explanation of the identity construct, Erikson provides a similarly complex formulation: "At one time, then, it will refer to a conscious sense of individual identity; at another to an unconscious striving for a continuity of personal character; at a third, as a criterion for the silent doings of ego synthesis; and, finally, to the maintenance of an inner solidarity with a group's ideals and identity" (1959, p.102). Erikson himself suggests that this explanation leaves some ambiguity. It is scarcely helped by his having used the term "identity" twice within its own explanation.

Once again, in this explanation, Erikson stresses that conscious awareness of self is merely one manifestation of identity. However, he fails to provide much clarification of identity structure: what is unconscious "striving" and "synthesis"; how is group solidarity maintained?

The meaning of identity for Erikson is clearer in other explanations. He delineates ego-identity as a subsystem of the ego which serves to "test, select, and integrate the self-representations, derived from the psychosocial crises of childhood" (1959, p.149). He further refines the identity construct, distinguishing between the ego-identity proper, the function or mechanism which integrates self-representations, and self-identity, "that part which consists of role images" (1959,

p.211). The self-identity "emerges from experiences in which temporarily confused selves are successfully reintegrated in an ensemble of roles which also secure social recognition" (1968, p.211). Thus, the ego-identity is a mechanism of the ego which acts to modify and develop identity. The self-identity constitutes the medium or "record" of identity: it is the integrated assembly of self-images which results from operation of the ego-identity mechanism.

This distinction between "function" (ego-identity) and "product" (self-identity) renders the understanding of identity structure rather complex. Either of these constructs can be considered as structural. Psychoanalytic theory has generally referred to autonomous functions as structures (eg. defensive structures). On the other hand, self-identity, as a coherent product of the ego-identity function, comes closer to an intuitive notion of structure as a relatively stable organization of elements.

Simply on this intuitive basis, the term "identity-structure" will be used here to refer only to self-identity rather than to ego-identity, the mechanism which produces it.

An essential difference to keep in mind between these two aspects of identity is that ego-identity is a function which may be more or less effective and undergoes development, but has no content associated with it. It acts to synthesize identity but does not constitute a product of that synthesis. Self-identity,

however, contains the components which have been synthesized, including images, ideas, etc. It is the latter aspect to which Erikson refers when he describes identity as a "configuration" of "identity-elements".

This last phrase deserves scrutiny. Erikson's use of the term "configuration" is clearly intended to stress the holistic quality of identity. At one point, he describes identity as a "new, unique Gestalt which is more than the sum of its parts" (1968, p.158). The parts which go into this configuration are the "identity elements". Such elements include those images internalized through identification with others. Alternatively, there may be identification not with a person, but with some particular aspect of that person: "Children at different stages of their development identify with those part aspects of people by which they themselves are most immediately affected, whether in reality or fantasy" (1968, p.158). Several other sorts of identity element are given in this passage: "The child may come to develop, in the use of voice and word, a particular combination of whining and singing, judging or arguing as part of a new element of the future identity, namely the element 'one who speaks and is spoken to in such-and-such a way'. This element in turn will be related to other elements of the child's developing identity (he is clever and/or good-looking and/or tough) and will be compared with other people, alive or dead, judged as ideal or evil" (1968, p.162). Such personally-formulated self images are particularly important in

Erikson's scheme, as evident in his analysis of George Bernard Shaw, which focuses on precisely such elements (1968, p.197).

Thus, identity elements include internalized identifications, part aspects of others, self-representations and personal attributes. The complexity of identity is shown by Erikson's description of it as a "configuration gradually integrating constitutional givens, idiosyncratic libidinal needs, favored capacities, significant identifications, effective defenses, successful sublimations, and consistent roles." Which is not to say that all of these are potential identity elements; some are factors which influence the identity-forming process rather than elements per se.

One term used frequently by Erikson to characterize identity elements requires some clarification. He repeatedly refers to "images" as components of identity: self-images, role-images, identity-images, etc. In what sense does identity consist of images?

It might be argued that he is referring to the vision-like pictures available to introspective awareness. One's reflections might yield internal pictures of one's own appearance, of visual symbols, or of internalized others. The latter may present to introspection as complete visual representations of the other or as a fragmented version of a part aspect (eg. the well-muscled arm of an athlete may serve as a key identity-image).

However, this interpretation of the image construct is questionable in view of Erikson's stress on the non-conscious

basis of identity. He repeatedly points out that identity is not merely the conscious or preconscious idea of "who I am" but includes the unconscious mechanism which synthesizes the unique self and the configuration which constitutes self-identity (much of which is unconscious- 1968, p.165). This suggests that "image" here refers to something more abstract than simply a picture in the head.

An alternative view is that Erikson is using "image" to refer to an abstract component of the identity-structure, rather than to an act of reflective awareness. This structural component may give rise to internal experience, but that would be only one attribute of the image construct.

This distinction between an element of psychological structure and the experience to which it may give rise is lucidly expressed in recent cognitive theory. Notably, Pylyshyn (1973) has addressed the issue. He stresses the semantic and conceptual difficulty in distinguishing descriptions of experience from descriptions of the substrate which underlies experience. Thus he points out that the neural representation of a tree does not itself have leafy branches; entirely different predicates apply to the tree-representation as to the tree-image. Similarly, it would be absurd to investigate axon lengths in the phenomenal tree. While this may seem a trivial point, the vagaries of a language rooted in the phenomenal world have led many to confuse these levels of discourse.

I would suggest that Erikson has invited confusion of his "image" construct by failing to specifically define his usage. Without such definition, it is natural to refer this term to the experiential domain rather than to the structural substrate. This is related to a point raised by Erikson himself with regard to the "sense of identity." As he notes, this refers not only to an experienced "sense," but more broadly to a state of the ego structure with both conscious and unconscious manifestations (1959, p.56).

Bringing together the various aspects of identity in Erikson's theory gives us the following model of the identity structure:

An ego-identity mechanism, a subsystem of the ego, functions throughout the life cycle to synthesize and maintain a unique personal identity. Effective functioning of the ego-identity yields a sense of identity in the individual's experience of well-being and in the coherent integration of his behaviour and self-identity. The latter term refers to the synthesized identity structure. This is composed of identity images of various sorts: internalized representations of others or part aspects of others, self-representations, role representations, etc. These images are not separate but rather are integrated into a whole configuration which emerges as a unique gestalt.

### The nature of identity formation

Here we arrive at the central issue in this investigation: what is the intrapsychic process of structural transformation which underlies identity formation? Let us examine closely Erikson's discussion of this.



He describes identity formation as involving a "gradual integration of all identifications" which have been internalized to that point (1959, p.90). It is necessary to "resynthesize all childhood identifications in some unique way" (1959, p.112).

Erikson gives two definitions of identity formation:

Definition 1: "The process of identity formation emerges as an evolving configuration- a configuration which is gradually established by successive ego syntheses and resyntheses throughout childhood" (1968, p.163).

The term "configuration" has been discussed above as referring to a holistic model of identity-structure; however, the other key term in this definition, "synthesis", has yet to be examined. Some sort of active process is attributed to the ego-identity (the mechanism which mediates identity structure). "Synthesis" denotes a constructive process, rather than one of dissolution or breakdown. Thus, identity-formation involves a linking together of components into a configuration. Further clarification is provided by a second definition.

Definition 2: "Identity formation...arises from the selective repudiation and mutual assimilation of childhood identifications and their absorption in a new configuration... The final identity, then, as fixed at the end of adolescence... includes all significant identifications, but it also alters them in order to make a unique and reasonably coherent whole of them" (1968, p.159,161).

This definition places more stress on the destructive aspects of identity formation, the "repudiation" and "absorption" of identity elements. It is necessary to "alter" these identifications so as to construct a unique and coherent identity-structure. Erikson further describes this process as the "final assembly of all the converging identity elements at the end of childhood (and the abandonment of the divergent ones)" (1959, p.116). Synthesis of a final identity-structure requires the elimination of those elements which do not fit in the newly emergent structure. Erikson also makes it clear that new identity elements must be incorporated during adolescent identity formation.

Identity formation, then, involves the destruction of some previous elements, incorporation of new elements, and a general tailoring of all elements so that they become part of a coherent, unique, and original identity-structure. The extent of structural change demanded by this process is highlighted by Erikson: he cites William James, who "speaks of an abandonment of 'the old alternative ego', and even of 'the murdered self'" (1959, p.116).

There remains much ambiguity in this explanation. What is the process by which elements are incorporated and destroyed, synthesized and integrated? While such terms give a general sense of the necessary changes in identity structure, they say little about what is actually going on in the individual psyche. More detail can be derived from a close reading of Erikson's

text.

He delineates three mechanisms by which identity elements can be introduced into the ego. First, by introjection, the "primitive 'incorporation' of another's image" (1968, p.159). Second, by identification, a more sophisticated incorporation of the images of the significant others with whom there is a positive interaction. Third, by personification. This latter is introduced with regard to the socialization process, the inculcation by society of a shared perspective: "For a world view to be shared as both personally and communally relevant, its dimensions would have to permit the individual to associate the ego's means of creating inner orientation with the methods and images representative of a collective orientation- which is one strong reason for our personifying in language as well as in imagery as super-persons such entities as 'the nation', 'the church', or 'the revolution'" (1977, p.149). Thus, the distance between social character and individual identity may be bridged via personified images.

As for the process of identity formation itself (the assembly of such elements), the concept of "play" is central in Erikson's thought. The role of play in formation of identity, as manifest in development of the ego ideal, is articulated as follows:

"Childhood play, in experimenting with self-images and images of otherness, is most representative of what psychoanalysis calls the ego ideal...Thus, we experiment with, and, in a visionary sense, get ready for a hierarchy of ideal and evil roles" (1977, p.101).

Here play is cast as the trying-out of identity images. It is through such play-experimentation that the child begins to construct an identity. The emphasis is on the intrapsychic "visionary" aspects of play rather than the play-behaviour. (It must be stressed that Erikson construes ego-identity and ego-ideal as equivalent structures, one imaging who we are, the other imaging who we wish to become; thus, the formation of one must be closely related to formation of the other.)

In adolescence, experimentation through play remains crucial to identity formation. Erikson refers to the "playful imagination," noting that "such playfulness, throughout ontogeny, is placed in the service both of an inner ordering of experience and of the ritualizations of everyday life which introduce the growing individual into functioning institutions" (1977, p.158). Once again, there is a focus upon the intrapsychic aspect of play, the playful imagination, consisting of "experimentation with identity images" (1968, p.158).

Another passage gives further insight into the nature of playful imagination:

"The adolescent's ego development demands and permits playful, if daring, experimentation in fantasy and introspection. We are apt to be alarmed by the 'closeness to consciousness' in the adolescent's perception of dangerous id contents (such as the oedipus complex) and this primarily because of the obvious hazards created in psychotherapy, if and when we, in zealous pursuit of our task of 'making conscious', push somebody over the precipice of the unconscious who is already leaning out too far. The adolescent's leaning out over any number of precipices is normally an experimentation with experiences which are thus becoming more amenable to ego control" (1968, p.164).

The following picture of identity formation can be derived:

Elements can be introduced to the ego through mechanisms of introjection, identification, and personification. These elements are synthesized into an identity by the ego-identity mechanism: some destroyed, some altered, so as to form a unique and coherent structure. Identity images are experimented with by the ego through acceptance and living-out of that image on a trial basis. In other words, the identity is tested in play. Such play must involve both intrapsychic fantasy (imagining that one "is" that identity) and behaviour (acting in accord with the identity). The relative success of each such identity image, in social approval and instinctual gratification, would determine its presence and importance in the final identity. This testing-out of identities requires exercise of playful imagination.

The concept of playful imagination as crucial to identity formation is not delineated as such by Erikson; it has been inferred from his rather vague explanation. It is not a well articulated construct, and does not suffice to explain the process of identity formation. There remains a gap in the theory of identity formation. It is this theoretical gap which will be addressed with the adaptive regression concept.

#### The operationalization of identity

The concepts which have been discussed refer to the invisible domain of intrapsychic process. Identity elements, images, and the processes of transformation to which these are subject are not evident as such to the researcher's eye. There must be a mapping of constructs onto the domain of observable behavior.

Such a mapping of intrapsychic constructs onto behavior is in line with Erikson's own stress upon the behavioral manifestations of identity. He gives one meaning of identity as the consistent set of behaviors which define an individual's character to others. It is implicit that any component of identity must have its share in determining the individual's actions.

The approach used by identity researchers has been to rely on statements about self as behavioral indices of identity. This is not to say that the experimental subject is required to describe elements of his identity; such an approach would be fruitless, as these constructs have little meaning for the subject who is not an Eriksonian psychologist. Rather, the inquiry is focused on aspects of identity which have meaning for both experimenter and subject: beliefs, values, and goals. A well-synthesized identity must provide direction, aspirations, and ideology for the adolescent. Goals and beliefs serve as blueprints for action and mediate what one is and what one therefore does.

Marcia, who has developed the most sophisticated and widely-used measure of ego-identity (the Identity Status Interview), refers to the values and goals derived from identity structure as "commitments." According to Marcia:

"The achievements of identity ought to be manifested in commitments in those primary areas of which Erikson speaks: occupation and ideology. This level of identity, while the most superficial, is also, probably for that reason, the most observable. If one has achieved a sense of ego identity in late adolescence, then he may be

expected to express commitments in the above areas both verbally and behaviorally...commitments in occupation and ideology are the observable concomitants of identity achievement" (1976, pp.9-10).

The Identity Status Interview is the measure used in the present study and it will be considered in some detail.

### The Identity Status Interview

Marcia has delineated the areas in which the adolescent must synthesize personal commitments: sexual orientation, ideological stance, and vocational direction (1980, p.160).

"Ideology" refers to the political and religious beliefs which anchor the individual to a meaningful world view. "Vocation" includes not only career per se, but also alternate modes of productive expression such as motherhood.

In order to operationalize Erikson's model of identity, Marcia relies on this translation of identity structure into a set of commitments, along with a concrete elaboration of Erikson's "identity crisis." Identity crisis is taken to refer to a period of decision-making during which commitments in crucial areas are formulated; it is equivalent to the identity formation process itself. Again, it is not that this process occurs only in adolescence, but that the adolescent identity crisis is usually the most intense and important.

Having delineated these two parameters of identity, Marcia then defines four classification categories, the Identity Statuses:

"Four modes of dealing with the identity issue

characteristic of late adolescents: Identity Achievement; Foreclosure; Identity Diffusion; Moratorium. Those classified by these modes are defined in terms of the presence or absence of a decision-making period (crisis) and the extent of personal investment (commitment) in two areas: occupation and ideology.

Identity Achievements are individuals who have experienced a decision-making period and are pursuing self-chosen occupation and ideological goals.

Foreclosures are persons who are also committed to occupational and ideological positions, but these have been parentally rather than self-chosen. They show little or no evidence of 'crisis.' Identity Diffusions are young people who have no set occupational or ideological direction, regardless of whether or not they may have experienced a decision-making period.

Moratoriums are individuals who are currently struggling with occupational and/or ideological issues: they are in an identity crisis" (1980, p.161).

It is the style of an individual's response to the identity task of adolescence which places him in one or another Identity Status category. While these categories do not exhaust the possibilities for responding to the social and instinctual demands of adolescence, they do provide a practical scheme for evaluating identity formation.

The statuses may be seen as stages in the formation of identity. The developmental scheme implied is one in which the individual arrives at late adolescence in a state of Foreclosure, identity determined by parental introjects, followed by a period of Diffusion, parents' identity rejected but no alternative found and/or a period of Moratorium, a new identity in active development; and finally a state of Identity Achievement. The major period within which identity crisis occurs is the late adolescent phase between 18 and 21.

An alternative view is that the statuses constitute separate but equal routes to identity, such that there are "both



healthy and pathological aspects to each of the styles, save perhaps the Identity Achievement status" (1980, p.161). Yet the hierarchy implicit in the formulation is difficult to avoid. Marcia himself refers to "Individuals high in identity (Identity Achievements and Moratorium)" versus those "lower in identity (Foreclosures and Identity Diffusions)" (1980, p.163). Thus, the statuses do indeed seem to reflect a developmental progression.

Which is not to say that all individuals complete this progression. Many retain permanently an identity reached in a Foreclosure, Diffusion, or Moratorium style; furthermore, there can be movement from more to less advanced statuses. Generally speaking, it seems that most individuals tend to move from lower to higher statuses (1980, pp.168-170).

The method used by Marcia to assess identity status is the semi-structured interview. A predetermined set of questions (see Appendix A) serves to loosely guide an interview covering commitments in the areas of Occupation, Politics, Religion, Sex Role (perceived masculinity-femininity), and Sexual Behavior (personal rules of sexual conduct). In each of these areas a determination is made of the degree of commitment to a position, and of the existence of a period of decision-making. On this basis, a status is assigned to the type of commitment in that area. Overall Identity Status is decided by the pattern of commitment across the areas.

### III. Adaptive regression

#### The meanings of regression

The concept of adaptive regression is subject to a rather confused interpretation in the psychoanalytic literature. This confusion seems to follow from the assumption that "regression" itself has a fixed meaning which is well known and requires no elaboration. If this assumption were true, one could reasonably discuss the adaptive utilization of regression per se. However, the term has as many meanings as there are accepted dimensions of progressive psychological development. It is as meaningless to label a behaviour "regressive" as it would be to label it "developed," unless the relevant dimension is made clear.

Some meanings of regression in psychoanalytic theory are enumerated by Arlow and Brenner (19xx). These include: Ontogenetic (generally, a reversion to childish forms of function); Libidinal (a shift from a "bound-energy" process to one of mobility and immediate discharge); Phylogenetic (reversion to psychological function of earlier species development); and Systemic (transition of mental content from thought to perception, which reverses the usual progression from percept to idea). Similarly, Gill (1963) argues that "regression from secondary to primary process should be sharply distinguished from regression from thought to percept" (p.163):

the former sense is related to "Libidinal regression" above; the latter to "Systemic regression", which is perhaps the earliest sense of the term in psychoanalysis.

One should also note the regression of libidinal zone-investment (eg. a reversion to the oral phase), "therapeutic regression" (a reversal of gains made in therapy), and defensive regression (in which the ego falls back on primitive modes of defense such as somatization) as common meanings in the psychoanalytic literature.

Each of these construals will yield a different sort of "adaptive regression." It is necessary to closely examine adaptive regression as formulated by Hartmann in order to extract the core of this construct.

#### Hartmann's adaptive regression construct

According to Hartmann (1958), adaptive regression involves a "withdrawal from reality the better to master it": "There are avenues of reality-adaptation which, at first, certainly lead away from the real situation" (p.17). The prime example of such adaptation is fantasy: "the healthy adult's mental life is probably never quite free of the denial and replacement of some reality by fantasy formation...though fantasy always implies an initial turning away from a real situation, it can also be a preparation for reality and may lead to a better mastery of it" (1958,p.18). Another example is artistic activity, which allows a "freedom from regulation by the external world" (1958,p.78).

Adaptive regression also involves a focus on symbolism and imagery rather than verbal expression. He cites as "instances of successful adaptation achieved by way of regression" the "symbolic devices for facilitating thought which are found even in productive scientific thinking" (1958, p.13). These devices are "the symbolic images familiar in productive scientific thinking" (1958, pp.36-37): "I rather stress the fact that even in productive scientific thinking the detour over irrational elements, the use of visual imagery in general and of symbolic elements, far from being a handicap, may actually be helpful" (1964, p.59). This focus on the imagistic is mirrored in his presentation of fantasy: "It is general knowledge that fantasy- not just in the sense of a talent for making new combinations, but also in the sense of symbolic, pictorial thought- can be fruitful in the mastery of the external world" (1958, p.18).

Another aspect of adaptive regression is a reliance on nonrational thought processes. Hartmann notes the surprising role of "symbolic, pictorial thought" in science, which is "supposedly the undisputed domain of rational thought". (1958, p.17). He stresses that "the rational plan must include the irrational as a fact...irrational thought can be fruitful even in the realm of scientific thinking" (1958, p.72). Artistic expression, "another case of 'adaptive regression'", is related by Hartmann to "(nonrational) ego functions" (1958, p.78). He suggests that "evolution takes two courses: one leads to rational (and ultimately to scientific) representation, the

other to artistic representation" (1958, P.77).

Adaptive regression involves a temporary shift to a more primitive mode of function, a "detour through the archaic" (1958, p.78). According to Hartmann, "in his ego, especially as expressed in rational thought and action, in its synthetic and differentiating functions (Fuchs, 1936), man is equipped with a highly differentiated organ of adaptation, but this highly differentiated organ is evidently by itself incapable of guaranteeing an optimum of adaptation...a more primitive system is needed to supplement it" (1964, p.13).

Thus, in regressive functioning, the role of the rational ego is reduced; it yields somewhat to a more primitive system. Such an alteration in ego-activity is seen by Hartmann as a requisite of psychological health: "the normal ego must be able to suspend, temporarily, even its most essential functions" (1958, p.94).

How does this regression serve an adaptive purpose? Fantasy can be applied to "making new combinations" (1958, p.18) and it "may fulfill a synthetic function by provisionally connecting our needs and goals with possible ways of realizing them" (1958, p.18). Furthermore, "there are fantasies which, while they remove man from external reality, open up for him his internal reality" (1958, p.17) and permit new insights. The images found in artistic representation "retain their potency as orienting-points, even on a higher level of development" (1958, p.77).

Hartmann makes a point of distinguishing this from other forms of regression (adaptive or otherwise). He notes that "this withdrawal from reality the better to master it, which we will frequently encounter is not identical with the "adaptive regression (in a genetic sense)" (1958, p.58). This latter sense involves a "regression to earlier developmental stages...to a primary narcissistic state" (1958, p.53). He also distinguishes it from one sort of libidinal regression: "I am not thinking here...that pregenital sublimations may supplement or be substituted for sublimations on the genital level" (1964, p.59).

Hartmann's formulation of adaptive regression will serve as a framework for this study. It provides a relatively clear definition of the construct. At this point, it is worthwhile to consider the work of several other theorists who have provided their own formulations of adaptive regression.

#### Other versions of adaptive regression

Kris (1952) put forth the concept of "regression in the service of the ego" which is quite similar to Hartmann's adaptive regression. Kris developed his construct as a means to understand the creative process of the artist. He found that "ego regression (primitivization of ego functions)," involving a shift along the continuum which "extends between logical verbalization and fantastic imagery" (1952, p.312), is common in the inspirational phase of creation. This continuum, "reaching from logical cohesive verbal statements to dreamlike imagery"

(1952, p.311), is equated by Kris with the continuum between secondary and primary process. He concluded that the creative process is one in which "the ego controls the primary process and puts it in its service" (1952, p.60). During this, the ego undergoes a "loss of some of its functions", such as reality testing, and the mechanisms of primary process take over. These include condensation (the merging of separate ideas into one), displacement (the expression of one idea by a somewhat related one), and symbolization (the representation of an idea by a symbol). Also, a regressive phase "is characterized by the facility with which id impulses, or their closer derivatives, are received..." (1952, p.313).

Thus, for Kris, the shift from logical cohesive verbal statements" to "dreamlike imagery" during creative inspiration is a prime example of the ego's regulated regression. It involves a diminution in ego activity, a shift to primary process organization, and an increased openness to normally-repressed id content. Furthermore, it is not limited to the creative process: "The general assumption is that under certain conditions the ego regulates regression" (1952, p.312).

Gill and Brenman (1959) label the concept "adaptive regression" and define it more broadly than either Kris or Hartmann. They describe a regressed state as involving a "more primitive kind of mental functioning" (p.206) and a "reversion to earlier states" (p.211). It is characterized by "urgency of drive discharge, a relatively direct clash of discharge-bent

force and inhibiting force, and relative paucity and inflexibility of channeling forces"(p.206). There is a return to "earlier forms of relationship with the environment, forms both more magical and more dependent on the environment" (p.208). Ego functions such as repression and reality-testing are diminished.

This view is expanded by Gill (1972), who stresses a "change in thought functioning toward more primary process organization. Here belong the availability of visual memories and dream and fantasy production, the reduction in reality testing, and the reorganization of the defenses." He also cites the reduction of reflective awareness and volition, the role involvement and the dissociation found in hypnosis as characteristics of an adaptively regressed state.

We are left with a concept considerably more inclusive than that of Hartmann or Kris. It involves intense drive-pressure and -conflict, a return to childish forms of interpersonal relating, a reduction in reality testing, a greater availability of normally-repressed content, a "reorganization" of defenses, a reduction in self-awareness and volition, intense involvement, and greater tendency to dissociation. As argued above, such a broad construal of regression can be so extensive as to be meaningless. By simply defining regression as a primitivization of mental function and/or a return to an earlier developmental state, one possesses a construct of exceeding vagueness. Regression may include any behaviour which is similar to developmentally-prior behaviour or which shows a reduction in



adequacy or sophistication of function; in fact, any substantial deviation from typical function will tend to appear regressive. I am arguing that only by specifying the construct precisely can it be operationalized and tested. In this regard, Hartmann's formulation is far better than that of Gill and Brenman.

Finally, Fromm (1977) presents "adaptive regression" as involving a shift from "reality-oriented secondary process" to "drive-dominated primary process" which "denotes thinking in images, not in words and logical concepts" (p.374). It consists of "an ego-regulated modification and relaxation of defensive barriers so that earlier modes of perception and cognition are activated, and normally repressed affects, memories, and primitive components of experience can rise into awareness" (Grunewald, Fromm, and Oberlander, 1978, p.621).

Thus, Fromm defines adaptive regression by its unreal, imagistic, and nonlogical qualities, as does Hartmann, but adds to these the drive-domination and accessibility of repressed material which were stressed by Gill and Brenman. However, the diminished volition and dissociative tendency in hypnosis, attributed by Gill to regression, are treated by Fromm as separate from regression per se. Thus, her use of regression, while broader than that of Hartmann, is narrower than that of Gill. It is apparent that there is substantial variability in the meaning of adaptive regression.

## The "primitive system"

It was observed above that Hartmann considers adaptive regression to depend on a shift to an alternate system of psychological function: "this highly differentiated organ [the ego] is evidently by itself incapable of guaranteeing an optimum of adaptation...a more primitive system is needed to supplement it" (1964, p.13). Yet he fails to provide an explicit identification of this alternate mode. What is the "primitive system"?

We may first note that, for the other theorists surveyed here, the regressed mode is identified with the primary process. This is the mode of function considered to characterize the id. It is formulated on two levels, a cognitive and energetic (or motivational) level. Holt (1967) noted "the ambiguity of the term primary process, for it is used by psychoanalysts to refer to modes of acting and experiencing affect ('processes of discharge') as well as to a kind of cognition" (pp.364-365).

At the cognitive level, primary process is characterized by a group of structural mechanisms which include condensation, symbolization, displacement, and concretization (representation of an idea by an image). These mechanisms describe the operation of a nonlogical system of cognition. Ideas are altered and combined, not by rules of logical transformation, but by metaphor and analogy. Contradiction is permitted: opposites may interchange or coexist. Opposed to this mode is the secondary process which operates by rules of logic.

At the energetic level, primary process is characterized by "urgency of drive discharge" (Gill and Brenman, 1959, p.206) and a high mobility of cathexis. The former indicates that drive energies press for immediate discharge; the latter that any available path will be taken. Opposed to this energetic mode is the secondary process, which involves a delayed drive discharge along paths of detour.

The connection between these two levels is that the structural mechanisms provide a vehicle for the direct discharge of drive energies. An image (or "hallucinatory idea") is considered to permit a more direct discharge of energy (in its similarity to the drive object) than would a more abstract verbal representation. Similarly, drive energy will bypass logical restrictions in seeking a more direct path of discharge (condensation or displacement). According to Rapaport (1960), these primary process concepts "unify the traditional trichotomy of conation, cognition, and affection."

This conception of primary process is expanded by Gill (1967), who enumerates the meanings of primary process from different viewpoints of psychoanalysis: economic (primary process involves "large amounts and freedom of cathexis"); dynamic (it "deals with forces on the primitive end of the hierarchy"); structural ("mechanisms of displacement and condensation"); and adaptive ("the primary- to secondary-process range from a complete ignoring of the external world to a veridical evaluation and control of thought and behavior in

accord with the nature of the external world").

It is apparent that the primary process concept has considerable overlap with Hartmann's primitive system. The nonrational, imagistic, and reality-withdrawn attributes of that system are closely matched by the structural and adaptive senses of primary process. Yet Hartmann does not explicitly refer to primary process, nor does he introduce drive-discharge concepts, in his formulation of adaptive regression.

This is clarified by Hartmann's definition of rationality: "we designate as irrational behavior that is predominantly emotional or instinctual. There is also an attempt toward a more definite characterization of the laws governing at least a considerable part of irrational behavior: part of it certainly follows the laws of primary process..." (1964, p.49). He also makes it clear that he is using rationality as referring both to "logically correct thinking" and to consistency with consensual reality. Thus, while Hartmann does not explicitly identify primary process as the regressed mode of function, he does present irrational and reality-withdrawn thought as related to primary process.

Hartmann's formulation of the primitive system does indeed present as quite similar to the primary process. Yet it must be stressed that Hartmann's emphasis is very much on the adaptive/structural aspects of primary process, which may together be described as cognitive. The motivational aspects, dynamic and economic, play a relatively small part in his model

of adaptive regression, however important they may be in Hartmann's other work. It is interesting to consider this in the light of Holt's suggestion that attention be shifted to cognitive attributes of the primary process: "If, however, we turn from dynamic and economic to a structural emphasis in our theory, we can conceptualize the primary process as a special system of processing information in the service of a synthetic necessity" (1967, p.383) .

A second question concerns the relationship between the primitive system and the id. Given that the id functions according to the primary process, must one conclude that the primitive system is the id?

This does not follow. That the ego can also function in a primary process manner has been pointed out by Gill (1963). He observes that the ego may be seen as "a complex , hierarchically-ordered apparatus varying from primary to secondary processes...This version of the ego is the one which is already recognized in the psychoanalytic literature" (p.145). Fromm (1977) questions the linkage of id and primary process: "While most psychoanalysts conceive of the primary process as an id mode, French and the present author (1964) have described it as the cognitive process of the unconscious ego."

Hartmann himself indicates that the primitive system is associated with the ego. In the course of defining artistic expression as an example of adaptive regression, he states: "We have disregarded here the relation of art to the instinctual

drives and have considered only its role in the framework of (nonrational) ego functions" (1958, p.78). This is the sole reference made by Hartmann to the structural system involved in regressive thought. It should be reiterated that such thought is characterized precisely by its nonrational quality: it is evident that Hartmann is relating this style of thought to nonrational functions of the ego.

Hartmann does, in another context, describe the ego as "abandoning itself to the id." However, he cites as examples of this not fantasy, artistic expression, or scientific production, but sleep and sexual intercourse. The latter involve a surrender to biological or instinctual levels of function, and are clearly of a different class than the cited instances of adaptive regression.

It can reasonably be concluded that Hartmann's "primitive system" is a component or aspect of the ego which operates in a nonrational manner; opposed to it is the system of rational ego functions which is predominant in waking life.

#### Definition of the construct

It is worthwhile at this point to formulate a definition of Hartmann's construct.

The central idea of Hartmann's model of adaptive regression is that one can temporarily withdraw from contact with the external world in order to return to it with improved mastery. The dimension along which regression takes place can be labelled as "orientation to external reality." Two modes are contrasted on this dimension: an externally-oriented mode, the usual one, which functions so as to accurately perceive and

evaluate aspects of external reality; and an internally-oriented mode, the regressed one, which functions to express and elaborate aspects of internal subjective reality. This shift in reality orientation involves a transition between the normally-dominant system of ego functions and a more primitive system of nonrational ego functions.

Three important attributes of this primitive ego system, which derive from its internal orientation, are:

1. That it is imagistic: the elements of the system are images rather than words. The perceptual system, which otherwise acts as a receiver of information about the external environment, here acts as a screen for the projection of inner elaborations. Probably the first use of regression in psychoanalysis had this meaning: the transition from idea to percept (Freud).
2. That it is autistic. The constraints of objectively- or consensually-defined reality are ignored, permitting the acceptance of that which is usually considered impossible.
3. That it is nonlogical. The combination and transformation of elements do not follow logical rules. These are replaced by nonlogical processes which may be described in terms of primary process mechanisms such as condensation and displacement.

The adaptive value of this temporary alteration in psychological function is that it facilitates the novel combination of ideas, the planning and rehearsal of action, and the attainment of psychological insight.

It is clear that the shift to a regressed mode of thought is a temporary and regulated one, i.e. that the normally-dominant rational ego maintains ultimate control over psychological function. There is also a suggestion by Hartmann that a special ego-control system operates, which he refers to as "central goal structure" (1958, p.94), but he does not elaborate.

It is also clear that the purest form of regressive cognition in this sense would be found in the dream state: entirely inner-oriented, it is imagistic, autistic, and nonlogical to a degree not found in other psychological

states.

### Adaptive regression and the creative process

Kris formulated his controlled-regression concept with reference to the creative process. This is for him the exemplar of regression in the service of the ego. For Hartmann also, the creative process exemplifies adaptive regression and he approvingly cites Kris's analysis.

Kris (1952) divides the creative process into inspirational and elaborative phases. It is the inspirational phase which involves regression, as the ego utilizes primary process mechanisms and becomes open to normally-repressed id material. This phase provides the creator with the novel insight whose expression will be determined in the elaborational phase. Elaboration requires the normal ego to regain full control, to systematically and realistically develop the created work. The shifts between phases may be "rapid, oscillating, or distributed over long stretches of time."

Hartmann's model is similar, except that he focusses on the ego's utilization of primary process mechanisms to arrive at new combinations and symbolic devices, rather than on the accessibility of repressed id material. He also suggests that the form of artistic representation bears a special relationship to nonrational ego processes. Such representation contains images which derive their organizing capacity from their basis in the primitive level of ego function: "Over and above the



question of their suitability for need gratification, these magic images retain their potency as orienting-points, even on a higher level of development" (1964, p.77).

Several criticisms of such a model have been made. Rothenberg (1978) challenges the idea that accessibility of unconscious material can explain creation; it can explain only content, not the "transformation factor" which yields artistic form and is the unique core of the creative process. A second criticism is that the "formal operations" (primary process mechanisms) which are specified are "intrinsically incapable of dictating aesthetic form because their function is primarily to conceal unconscious content"; aesthetic form serves to reveal truth, not hide it.

Rothenberg's first criticism is germane to Kris's model, but not to Hartmann's. Accessibility of unconscious material plays no substantial role in Hartmann's theory. The second criticism indicates a misunderstanding of the dissimulation function of primary process. Primary process can be applied to the concealment of unconscious content according to psychoanalytic theory (in dreamwork), but this is not considered its central or intrinsic function. Gill and Brenman (1959) show that "primary-process mechanisms may be secondarily employed as defensive devices to elude the 'censor,' but the defensive purpose is not the cause of their appearance" (p.147).

Arieti (1976) provides some criticism as well. His first comment illustrates the confusion issuing from the generally

vague use of regression: "In my opinion the use of the primary process is not necessarily to be viewed as a manifestation of regression but as an emerging accessibility or availability, which is connected with regression only occasionally. However, this difference between my view and that of Kris may be secondary and semantic in nature, based on a difference in our use of the word regression" (p.24). Since Arieti does not actually explain his use of the word, the issue (if there is one) remains opaque. His second criticism is that "it is not enough to say that such mechanisms as displacement and condensation occur or are made congruous with ego function; we must first understand how this congruity is carried out." Indeed, it would be desirable to reach a better understanding of the shift between systems of ego function; but if Arieti means that failure to do so renders adaptive regression theory useless, I would disagree. There is enough substance to Kris's or Hartmann's theory to adequately support articulation and operationalization.

May (1975) criticizes the regression model for assuming that creative inspiration is a passive, receptive process; insight actually comes "only in those areas in which we are intensively committed and on which we concentrate in our waking, conscious experience" (p.91). This is incompatible neither with Kris's nor with Hartmann's theory.

May also challenges the regressive nature of creation: "Symbol and myth do bring into awareness infantile, archaic

dreads, unconscious longings, and similar primitive psychic content. This is their regressive aspect. But they also bring out new meanings, new forms...This is the progressive side of symbol and myth. This aspect points ahead. It is integrative" (p.91). Once again, the undefined use of regression leads to confusion. This statement does not conflict with adaptive regression theory, except in its use of regression (presumably as "crude" or "negative").

### Adaptive regression and hypnosis

The adaptive regression model has been applied to hypnosis, most notably by Gill and Brenman (1959; also, Gill, 1972) and Fromm (1977). Two key ideas are employed by these theorists to bridge their conception of adaptive regression and hypnosis. The first is that many hypnotic phenomena can be attributed to a regressed state of psychological function. Unusually vivid and frequent imagery, primary process thinking, accessibility of repressed material, overvaluation of the hypnotist, heightened suggestibility, sense of nonvolition, and reduction of self-awareness have been cited by these authors as evidence of a regressed state. The second idea is that the regressive process occurs not in the whole ego, but in a particular subsystem which forms within the larger structure. The ego maintains reality testing and developed function while the regressed subsystem engages in hypnotic response. Fromm refers to this as a split between an observing and experiencing ego. Rather confusingly,

Gill (1972) describes this split into a regressed and non-regressed ego system as itself a regressive process.

A somewhat different model follows from the adaptive regression construct formulated in this study. From this perspective, hypnotic induction serves to induce a shift to an internally-oriented mode. This is marked by predominance of imagery, indifference to the usual constraints of reality, and reliance on nonlogical processes. A high level of imagery and primary process thinking stand as clear signs of such a state; dissociation, intense relationship to the hypnotist, loss of volition or self-awareness, and heightened suggestibility do not. Only if these latter could be shown to depend on a shift in reality orientation would they be explicable in terms of this adaptive regression model. For example, it has been argued that heightened suggestibility depends on "goal-directed fantasy" (Spanos and Barber, 1974). Since the extent to which one becomes engrossed in such fantasy to the exclusion of external events depends on a shift in orientation, this would point to an adaptive regression explanation. Generally however it must be assumed that only a partial overlap exists between the domain of adaptive regression and that of hypnotic phenomena.

Shor (1979) presents a model of hypnosis which bears some resemblance to the adaptive regression model. He posits that a central dimension of hypnotic depth is that of "trance", which involves a diminution of the "generalized reality orientation" (GRO). The GRO is defined as the "network of cognitive

understandings about reality in general which serves as a context or frame of reference within which all ongoing experiences can be interpreted" (p.121). During hypnosis the GRO fades so that "the deeply entranced individual is not consciously aware of the distinction between imagination and reality." This construal is similar to that of a shift from an external to an internal reality orientation.

The models differ in that Shor defines trance in negative terms, by the system that fades rather than by that which takes its place. The adaptive regression model provides a description of the alternate system as well, with its elements, rules, and adaptive functions. In fact, Shor sees no necessity for there to be any system replacing the GRO: "Where the GRO is sufficiently faded it becomes easier for primary process ways of thinking to flow into the immediate background of awareness to orient experiencing in a more primitive manner. However, the fact that the GRO has considerably faded is no guarantee of its replacement. It might just more simply remain faded" (p.129-130). By contrast, the adaptive regression model posits that an internal orientation comes to replace the external one, not simply that the usual orientation fades.

An important point is that hypnosis involves influence brought to bear by one person upon another. The shift in orientation is induced, not spontaneous or self-initiated, although the capacity to be hypnotically influenced requires active participation of the subject. Thus, the degree of

regression in hypnosis depends not only on the individual's general willingness/capacity to regress, but his willingness/capacity to be influenced by the hypnotic situation: these tendencies may be independent, or even negatively related.

#### IV. Identity formation as adaptive regression

##### Erikson's concept of regression

It is worth examining the concept of regression as it is presented in Erikson's writing. Any attempt to integrate that concept with Erikson's theory must consider his own observations.

It has been noted above that attribution of meaning to the term "regression" may depend upon one's model of development per se, so that regression denotes a reversal of that development. For Erikson, development consists of a progression through stages of ego function, the mastering of successive crises of adaptation. Thus he refers to regression primarily as a return to earlier stages of ego development, an attempt to master the crises of a previous phase.

*considered above*

He recognizes the pathological possibilities of such a return to previous ego tasks, noting that "young people who in late adolescence face a breakdown on the borderline of psychosis, all prove to be partially regressed to the earliest task in life, namely, the acquisition of a sense of basic trust" (1964, p.69). The failure to adequately resolve the first stage of ego development leaves these individuals vulnerable to a suddenly-renewed grappling with the issues of that stage. He focuses not on the destructive aspects of such regression, but

rather on its constructive potential. In his view, even the psychotic process described above is notable not for the dissolution of psychological function, but for the attempt to complete a developmental task left unfinished. Even psychotic breakdown signals a synthetic function at work. A focus on the constructive aspect of stage-regression is evident throughout Erikson's work. He defines the "regressive trend" as a "going back to earlier failures in order to solve the past along with the present" (1964, p.78).

This is portrayed vividly in Erikson's explanation of the dream process: "the dreamer returns to his earliest dealings with (and subsequent reiterations of) one of life's major themes, and he thinks himself forward again...the dream life reaches down from actuality of the day to the earliest stages of life when disappointments and unfulfilled promises were experienced which have remained forever ready to be reactualized" (1964, p.184).

In this discussion of dreaming, we encounter Erikson's own multiple use of the regression concept. For in this same passage, he notes that "the dreamer's ego appears in no way 'regressed'- a term often thoughtlessly used when speaking of a dream's return to infantile wishes and frustrations." How are we to reconcile his portrayal of dream process in precisely the terms he ascribes to stage regression, with his insistence that the dreaming ego is in no way regressed?



Erikson's meaning is clarified by a second passage: "As long as the sleeper can thus relax, dream well, and wake ready for action, do we really have a right to say that his ego in the state of sleep was 'weak'? Has he not made such use of actuality as only an unregressed ego can make?" (1964, p.199). This points to a second meaning of the regression concept, as a weakness or failure of the ego. It is this version of regression in dreaming which Erikson wishes to refute. A similar meaning is found in Erikson's description of "deliberate regression" in adolescent patients as involving a "willingness to 'let the ego die'" (1968, p.213).

The complex meaning of regression is evident in Erikson, as in other theorists. Here we have a theory of dreaming in which the "unregressed" ego engages in a "regressive" attempt to solve the problems of earlier stages.

Two definitions of regression have emerged so far from Erikson's writing: stage-regression and ego weakness. Neither of these are equivalent to regression as construed in this study.

That Erikson used regression in a third sense which is similar to that of the present study is suggested by his linking regression to artistic and religious processes: "We all relive earlier and earliest stages of our existence in dreams, in artistic experience, and in religious devotion, only to emerge refreshed and invigorated" (1964, p.69). While this statement stresses the value of regression, it leaves some ambiguity as to the nature of this regression. Is Erikson explaining artistic

and religious processes by stage-regression, or has he implicitly introduced a new meaning?

It must first be noted that Erikson has failed to explain how artistic or religious processes would be specifically related to any particular stage of ego development. Must the artist return to a "trust" crisis? an "autonomy" crisis? No stage seems particularly related to artistic or religious processes per se. Which could mean that the artistic, religious, and dream processes are merely vehicles through which early crises can be resolved, i.e. that Erikson is referring to regressed content rather than to a regressive process, describing the issue rather than the means of its resolution. In this case, stage-regression, determining the content of artistic or religious experience, would be entirely adequate to Erikson's usage.

However, Erikson's further references to adaptively regressive phenomena make this explanation less plausible. The following passage describes the intense dream of a patient: "Under my protection and the hospital's he had hit bottom by chancing a repetition of the original breakdown. He had gone to the very border of unreality and had gleaned from it a highly condensed and seemingly anarchic image. Yet that image, while experienced as a symptom, was in fact a kind of creation" (1964, p.75). Erikson elsewhere describes this sort of "radical search for the rock-bottom" as a "quasideliberate surrender to the pull of regression...both the ultimate limit of regression and the

only firm foundation for a renewed progression. The assumption of such a deliberate search for the 'base line' seems to carry Ernst Kris's 'regression in the service of ego' to a dangerous extreme. But the fact that the recovery of our patients sometimes coincides with the discovery of previously hidden artistic gifts suggests further study of this very point" (1968, p.212).

The concept of stage-regression seems highly inadequate in these contexts. Rather than a renewal of a specific early crisis, Erikson describes a regression to some "ultimate limit", the "border of unreality" from which can be derived a "condensed and anarchic image". The meaning of regression here suggests the unreality and condensed imagery of cognitive regression.

Furthermore, Erikson links this regression with personality growth (whether a healing image or a therapeutic recovery) and with creative function ("a kind of creation"; new-found artistic ability). The relationship between regression, creativity, and personality growth is central to this study. Erikson's own recognition of such a relationship is heartening, however vaguely expressed.

Finally, it is notable that an intriguing parallel with the adaptive regression construct is found in the discussion of "playful imagination" quoted in a previous section. In this discussion, Erikson states that "the adolescent's ego development demands and permits playful, if daring, experimentation in fantasy and introspection" (1968, p.164). He

presents the adolescent as "leaning out over the precipice of the unconscious."

Once again, not enough detail is presented to enable a real comparison with the model of identity formation proposed here. Nonetheless, that ego development should demand experimentation in fantasy and introspective exploration is very much in line with the adaptive regression model of identity formation.

This argument can be buttressed by calling to mind Erikson's portrayal of identity formation as an experimentation with identity images (1968, p.158). As noted above, it becomes clear in Erikson's work that imagery provides the medium of identity. Images are the components of identity, and experimentation with images is the intrapsychic process of identity formation. Such a focus on imagery evokes the imaginal "language" of regressive cognition; in both, images and image-transformations are central. Neither speaks only of the image experience, but of the structure which underlies such experience.

#### Identity formation as adaptive regression

Direction is given to our synthesis of identity and regression theory by some comments of Hartmann:

"Though fantasy always implies an initial turning away from a real situation, it can also be a preparation for reality and can lead to a better mastery of it. Fantasy may fulfill a synthetic function by provisionally connecting our needs and goals with possible ways of realizing them. It is well known that there are fantasies which, while they remove man from external reality, open up for him his internal reality...The

primary function of these fantasies is autoplasmic rather than alloplastic; but we should be the last to deny the general importance of increased insight into intrapsychic life, and its particular importance in the mastery of the external world" (1958, p.18).

"...it is the increased mobility of the ego in artistic activity and artistic enjoyment, which may be related to the ego's mobility in play and in the comic. This 'mobility' is, to begin with, a freedom from the regulation by the external world; since, however, it also affords access to the inner world, it can have autoplasmic effects also" (1958, p.78).

"Though fantasy is always rooted in the past, it can, by connecting past and future, become the basis for realistic goals" (1958, p.36).

Two aspects of the adaptive regression concept which have direct relevance to identity formation emerge from these comments.

First, that adaptive regression can, "by connecting past and future, become the basis for realistic goals." Furthermore, it can connect "needs and goals with possible means of realizing them." That identity formation is crucially concerned with the formulation of goals and paths to their achievement was stressed in our earlier discussion of identity. Here we have a mechanism for that task.

Second, that adaptive regression is primarily "autoplasmic rather than alloplastic": it "affords access to the inner world", "opens up internal reality". To identify adaptive regression as autoplasmic means that the individual achieves adaptation through a process of self-change, not by modifying the environment (alloplastic). This does not necessarily mean that the change process is actively willed, but simply that the locus of adaptive change is the self. It is evident that

identity formation involves an autoplasmic adaptation, a modification of psychological self ("inner reality") in response to new environmental and biological contingencies. As an essentially autoplasmic mechanism, adaptive regression provides an ideal mode for the changes of identity formation.

Compare Hartmann's concept of adaptive regression with Erikson's idea of "playful imagination." The latter involves an experimentation with identity images, ways of being in the world, through fantasy and introspection. Adaptive regression provides precisely an imaginative mode of cognition geared to fantasy and introspection. In Erikson's scheme, identity images are tried out in social interaction, in order to discover which is most adaptive. This second stage of image-testing is similar to the elaboration phase of the creative process described by Kris: there is an alternation between autoplasmic inspiration and alloplasmic elaboration in the external world. Like the artist, the adolescent who overemphasizes the autoplasmic mode will find achievement lagging behind fantasy; while one who overemphasizes the alloplasmic mode will have few dreams to actualize.

The model of identity formation proposed here is as follows:

The process of identity formation in late adolescence requires: 1) an experimentation with identity images through fantasy and introspective thought; and 2) a testing-out of these identity images through behavior, with the final importance of an identity element determined by its success in mediating instinctual and social demands. Identity structure is achieved by combining these images into a coherent and unique whole,

a process of autoplasmic adaptation.

Experimentation with identity images and autoplasmic adaptation depend on adaptive regression. The adolescent utilizes (whether "deliberately" or not) the internally-oriented mode of thought to synthesize identity structure. While processes of adaptive regression are important at every stage of life, they are particularly important during the formation of identity in adolescence; this is the most complex and demanding work of self-transformation most of us will ever face.

It is proposed in this study that identity formation in adolescence is crucially connected with the adaptive use of regression. Specifically, it is hypothesized that adolescents who are engaged in identity formation will be characterized by regressive processes to a greater extent than adolescents who are not so engaged. Before detailing this hypothesis, research which relates identity formation to regressive process will be reviewed.

## V. Relevant research

It is proposed in this study that identity formation in adolescence will be associated with an increased reliance on regressive processes. While the available research does not bear directly on this, there has been study of variables related to regressive cognition. These include Rorschach indices, drug use, daydreaming, hypnotizability, artistic involvement, and cognitive styles. Two sorts of studies will be reviewed.

First, studies relating such variables to the period of late adolescence per se. As the crucial phase of identity formation, one would expect the age period of 18-21 to be highest for regressive processes.

Second, studies relating such variables to Identity Status. It will be recalled that the Identity Status measure was developed by Marcia (1980) as an operationalization of Erikson's identity formation process. In this measure, the identity-forming adolescent is categorized as being a Moratorium status; the adolescent who has gone through that process to reach personal commitments is an Achievement status; the adolescent who holds to previous commitments rather than engage in identity formation is in Foreclosure status; and the adolescent who neither maintains commitments nor engages in identity formation is in Diffusion status. We would expect from the model presented here that the Moratorium adolescent, one actively engaged in identity formation, would show the most disposition to



regressive processes. The Moratorium should have a greater disposition to such processes than either the Foreclosure or Achievement adolescent; the ranking of Diffusion adolescents is more ambiguous, for reasons to be discussed.

#### Rorschach indices

First, it has been found in normative studies that the "M" index, considered to reflect the degree of fantasy and inner orientation, increases throughout childhood to a peak in late adolescence (Hertzman and Margulies, 1943; Kallsted, 1952). Such an index would clearly have some relationship to regressive cognition, so that this finding provides general support to our hypothesis. However, other work indicates that M continues to increase into adulthood: Ames, Metraux, and Walker (1971) give 2.3 as the mean M for late adolescents, and 2-4 for adults.

The difficulty with interpretation of this research is that "late adolescence" is interpreted as 15 (Kallsted), 19 (Hertzman and Margulies), and 16 (Ames et. al.), while "adult" is undefined. Clearly, the period of peak identity work (18-21) falls into the adult phase for these researchers. It would be preferable to have a study which specifically investigates M level at various ages from early adolescence to mid-adulthood (eq. 15-25), to discover if there is a peak between 18 and 21.

In a more directly related study, Gombosi (1972) examined the relationship between Identity Status and Holt's Adaptive Regression index on the Rorschach (discussed in detail below).

Although Gombosi sought to relate the same two constructs as does this study, his rationale was quite different. He argues that adaptive regression is a capacity which develops with increasing integration and maturity of the ego: those at higher levels of identity development will have more capacity to utilize regression. Thus, Identity Achievements should have the highest level of adaptive regression. This differs from the model presented in this study, that adaptive regression underlies identity formation so that Moratoriums should be highest, significantly higher than Achievements. Gombosi found the Adaptive Regression index to show a significant positive correlation with Identity Status, with higher statuses (Moratorium and Achievement) showing more adaptive regression. It is not possible, from Gombosi's reported results, to determine whether Moratoriums were higher than Achievements. While this study is difficult to interpret (given the the unknown ranking of the Moratorium and Achievement statuses), it does suggest that regression is related to identity formation.

#### Drug use

The psychological states associated with intoxication by such drugs as marijuana and LSD involve a condition of intense inner orientation, with reverie, fantasy, and even hallucinatory experience (Tart, 1969). The Moratorium's greater tendency to regression should be accompanied by a greater willingness to utilize drugs and/or a greater disposition to experience drug

states as positive (rather than aversive or threatening, as would a Foreclosure).

Dufresne and Cross (1972) related Identity Status to use of marijuana and hallucinogens. They found that Foreclosures were significantly more likely to be "adamant non-users" than Moratoriums. Also, the Foreclosures placed less value on immediate personal experience than other statuses: "The Foreclosure subjects appeared to cling to the external at the expense of the internal" (Marcia, 1976). Pack, Brill, and Christie (1976) compared the marijuana use of the Identity Statuses: they found 60% of Foreclosures and 67% of Achievements to be current non-users, vs. 40% of Moratoriums. This difference did not reach statistical significance.

#### Daydreaming

The relevance of internal fantasy to regressive cognition is apparent. Singer (1975) defines daydreaming as "a shift of attention away from an ongoing physical or mental task or from a perceptual response to external stimulation towards a response to some internal stimulus." Clearly, this is directly related to the concept of regressive cognition (inner-oriented, fantasy laden). Singer notes that daydreaming serves an important function in adolescence: "The adolescent tries to find a new basis for independence... The first step, therefore, is a kind of searching out, through make-believe and trial action, for new ways of talking, life styles quite different from those of the

parent..."

A normative study by Giambra (1974) examines daydreaming across the adult lifespan. He finds that reported daydream frequency peaks in late adolescence (17-23) with a steady linear decline through adulthood. Such a peak is consistent with expectation, although a study directly examining daydreaming patterns across the Identity Statuses would be most helpful.

#### Hypnotizability

The distribution of hypnotic responsiveness across the lifespan has been extensively researched (eg. Morgan and Hilgard, 1973). It has been found, contrary to our expectation, that hypnotizability peaks at about 12-14, with a gradual decline afterwards.

As argued above, hypnotizability provides a measure which is ambiguous with regard to regression, since it involves interpersonal influence as a crucial component. Also, the measures surveyed in the normative studies are behavioural ones, whose questionable relevance to regression has been noted.

#### Artistic involvement

Such involvement provides the opportunity to foster and utilize adaptive regression: one would expect Moratoriums to most readily engage in artistic pursuits.

Waterman, Kohutis, and Pulone (1977) compared the Identity statuses as to whether they were currently writing poetry. They found Achievements to be significantly more likely to write while Foreclosures and Diffusions were less likely to do so; Moratoriums were not significantly different from either Achievement or Foreclosure statuses. Waterman and Goldman (1976) found significantly more cultural interests in those students who were Achievements or would become Achievements while in college.

These studies indicate that Achievement Statuses show more artistic involvement than Foreclosures or Diffusions; thus, while Foreclosures are appropriately low, Moratoriums do not come out as significantly higher than other statuses, contrary to our expectation.

### Cognitive style

Formal operations. One approach to the cognitive processes underlying identity formation has been to consider them as requiring formal operations in the Piagetian sense: the ability to develop abstract representations, to logically formulate propositions and theories about the world and systematically test them. This perspective treats the adolescent as a "scientist" whose identity emerges as a set of theories, or a unified theory, of world and self. Erikson does at one point suggest that identity formation may use formal operational

thought: "Such cognitive orientation forms not a contrast but a complement to the need of the young person to develop a sense of identity, for, from among all possible and imaginable relations, he must make a series of ever-narrowing selections..." (1968, p. 245).

Yet from the perspective of this study, such a logical and propositional cognitive process is opposite to that considered crucial to identity formation (i.e. a nonlogical process which seeks to create inner rather than discover outer reality). While development of formal operational thought may indeed accompany identity formation (and even contribute somewhat to its formation) it is by no means central to that process. The contrast between formal operational thought and regressive cognition is seen in Anthony (1978), who discerns a parallel between secondary process and formal operational thought, and between primary process and concrete operations. Formal operational thought and secondary process are "logical, systematic, abstract," while concrete operations and primary process are "fed by fantasy... autistic thinking, in which there is a primary confusion between the self and nonself, between internal and external." Regressive cognition is antithetical to formal operational thought; in Piagetian terms, one would have to consider it as some form of concrete-operational thought. The model of identity formation presented here would deny that formal operational thought is a requirement or substrate for identity formation.

A theoretical challenge to the formal operational thought/identity formation model is lucidly presented by Blasi and Hoeffel (1974). They argue that the reflective process of the adolescent, the emerging sense of possibility, is fundamentally different from that construed by Piaget. Piaget's "reflection" is concerned with delineating the structure of the external world, discovering what actions are possible in that world; while the reflection which leads to identity is concerned with discovering the self as a source of action and understanding. It is the introspective orientation which is ignored by Piaget's theory: "one of the main characteristics of adolescence, perhaps the central one, consists precisely in a new subjectivity, i.e. in moving away from the external world and in making the inner world the focus of one's experience" (p.359). That an inner-oriented mode should be essential to identity formation is entirely consistent with our viewpoint.

The relationship between formal operational thought and identity formation has been examined in a number of studies. Rowe and Marcia (1978) studied a small group of undergraduates and found that all Identity Achievements has reached formal operational thought, vs about 80% of Foreclosures and 75% of Moratoriums: however, the sample is too small for the significance of this finding to be determined. Bersonsky, Weiner and Raphael (1975) found no relationship between formal operational thought and presence of identity crisis in female undergraduates. Cauble (1976) compared formal operational

thought with identity formation in male and female undergraduates and again found no relationship. Leiper (1981) criticizes Bersonsky et. al. for unreliable measurement of formal operational thought and failure to classify subjects by Identity Status; he criticizes Cauble for failing to classify by Status and for unreliable interview procedures.

Wagner (1976) studied 120 subjects between ages 10-18 and found a significant correlation between Identity Status and formal operational thought. Rowe (1977) reanalyzed Wagner's data for the 17 year old group and found 72% of higher-Status subjects (Achievement and Moratorium) to have formal operational thought vs 14% of low-Status subjects. However, it has been pointed out by Leiper (1981) that the Identity Status Interview has not been validated for the younger age groups used in Wagner's study, so that results across these ages are of doubtful meaning. Most importantly, the crucial identity-forming period (18-21) is not even sampled in this study, rendering the results found by Wagner and Rowe quite ambiguous.

Leiper (1981) addressed the methodological weaknesses of these studies: small N, unreliable measures of formal operational thought or Identity Status, and inappropriate age range. His study of Identity Status in male undergraduates overcomes these faults (adequate N, reliable measures, appropriate age range). Leiper finds no significant relationship between the attainment of formal operational thought and identity formation, concluding that "structural development



seems to be in no way necessary for the development of higher identity statuses."

Another recent study found more positive results. Leadbeater and Dionne (1981), studying a sample of 92 males aged 17 to 20, find that Achievement and Moratorium status adolescents are significantly higher on a measure of formal operational thought than lower-status adolescents.

The disparity between this study and Leiper's is surprising: both studied approximately 90 males of an appropriate age range with adequate identity measures. However, while Leiper used a conventional measure of formal operational thought, Leadbeater and Dionne used a reasoning task whose content is exclusively concerned with "identity-related issues." A difficulty with such an approach is that it comes perilously near to measuring identity level again. One's ability to reason well about identity issues (rather than to reason well in general) is likely to reflect the extent to which one has given thought to these issues. Thus, this result may well show only that those who focus or have focused thought on identity issues (Moratorium and Achievement statuses) are thus able to reason well about these issues.

Overall, while the results are mixed, the hypothesis that formal operational thought is crucial to identity formation is not given much support by these results.

Other cognitive variables. While Leiper (1981) found no relationship between identity status and formal operational

thought, he did find identity status related to self-reported introspective tendency. Moratoriums were the most introspective status, significantly more so than Foreclosures, who were the least introspective. This finding accords well with the postulated association between identity formation and inner-oriented cognition.

A somewhat related study is that of Oshman and Manosevitz (1974), who compared the Identity Statuses on MMPI scales to determine their degree of psychological disturbance. Of relevance here is the Sc scale, reflecting among other things "fluid defenses and thought processes." This conception of schizoid-like thought is somewhat like regressive cognition. They found Moratorium subjects to be the highest on this scale, significantly above Diffusion and Achievement subjects; however, they were not significantly above Foreclosures, providing mixed results with regard to our model of identity formation.

## VI. Testing the model

### Operationalizing adaptive regression

In order to translate the adaptive regression model to a measurement procedure, it is well to begin by specifying the measureable components of the model.

The first measureable component is the regressive mental process itself, a reality-withdrawn mode with imagistic, autistic, and nonlogical properties. The second component is the retention by the rational and usually-dominant ego system of ultimate control, so that the regression is controlled and temporary. Without such ego control, the regression will be maladaptive, as in psychosis. The third component is the adaptive function served by the regression such as creative production or problem solving: there is a concrete outcome of the adaptive function (for example, a painting) and a demonstrable contribution to that outcome by the regressive process. Without an adaptive outcome, the regression will be merely "neutral," neither pathological nor adaptive. While all three of these components need not be included in a particular measure of adaptive regression, they must be accounted for in some way: eg. an obvious retention of ego-control in an experimental situation, or an independent measure of adaptive outcome.

The most prominent measure to be explicitly identified with the adaptive regression construct is the Adaptive Regression Rorschach index of Holt (Pine and Holt, 1960). This measure has unfortunately been accepted rather uncritically. A close examination reveals it to have certain basic flaws which reduce its adequacy as a measure of the adaptive regression construct.

Adaptive regression is considered by Holt to have two parts: the degree of expression of unconscious material or primary process mentation ("Expression of Primary Process") and the degree of ego-control over this expression ("Control of Expression"). Expression of Primary Process is evaluated by scoring on the Rorschach "all responses that have aggressive derivatives, libidinal derivatives, anxious content, or various nonlogical or bizarre formal qualities" (Pine and Holt, 1960). Thus, wishful content and primary process-like form are treated as reflecting regressive thought. Control of Expression, reflecting ego-control over this thought, is derived by combining two scores: "Defense Demand" and "Defense Effectiveness."

Defense Demand refers to the "acceptability of the [regressive] response in ordinary social communication": highly unacceptable responses require more control by ego defenses. Defense Effectiveness is the degree of success in transforming the response to a socially-acceptable form, scored by "such things as form level" and the "intellectual or esthetic context of the response":

"Thus, the composition 'this part looks like a horse but the rest makes me think its a man' is a less effectively controlled formal primary process than 'a centaur,' which refers successfully to the social reality of a myth, puts the response at a safe distance, and makes a condensation-like response sensible" (Pine and Holt, 1960).

Defense Demand and Effectiveness are additive in their contribution to the Control score. The latter is finally combined with the Expression score to yield the Adaptive Regression score.

Holt seeks to measure the first component of an adaptive regression model, the regressive process, with his Expression of Primary Process index. From the viewpoint of Hartmann's adaptive regression construct, as it has emerged in this investigation, Holt's index is a mediocre measure. While the use of formal qualities which indicate primary process cognition is appropriate, the use of content indicative of an influx of id material (libidinal, aggressive, or anxious derivatives) is not. An influx of such content is not a defining attribute for Hartmann's construct, though it is for that of Kris. Thus, Holt's index provides a rather ambiguous measure of the regressive process delineated in this study.

The second component, ego-control, seems targeted by Holt's "Control of Expression" index: this is especially problematic. Ego control in the adaptive regression model means that the rational ego allows a regressive process while retaining final authority. The rational ego temporarily assumes a quiescent role; a regressed style of psychological function characterizes the individual during the interval of that quiescence. Holt's

measure, however, clearly assumes that the rational ego exerts control over every expression of regressive process, acting to transform each such instance into a more usual or acceptable form. In effect, the rational ego system and the regressed system are operating in parallel, interacting so as to reach a compromise expression. For Holt, this compromise is the sine qua non of adaptive regression: any expression of regressive process not transformed by the rational ego ("uncontrolled") is not scored as Adaptive Regression.

There is little justification for this approach in the adaptive regression model as formulated by Hartmann, or by Kris. For these theorists, any expression of regressive process is a valid marker of adaptive regression, so long as the ego maintains final (not constantly active) control. One can reasonably assume that the rational ego of a normal subject in a Rorschach testing situation does retain ultimate control, and any observed regression exists by "permission" of the ego. Therefore why seek to demonstrate ego-control over particular responses?

One might inquire why it should be an adaptive necessity for the ego to transform regressively-organized material into a socially-acceptable form within the Rorschach situation (a highly permissive one). It may be that an ego-style which did require such "neutralization" would be overly controlled and thus less likely to utilize regressive processes constructively.

To complicate matters further, the ego control index is a rather ambiguous measure. Perusal of the scoring criteria ("intellectual or esthetic" factors are considered; the exemplar of good control is "a centaur") suggests that what is being evaluated is verbal creativity. This view is supported by the surprisingly strong correlation between the Control score and an independent creativity index (Pearson's  $r=.80$ ) reported by Pine and Holt (1960). If this is accurate, then Holt is really measuring Component 3, the creative product. However, this measure is so confounded with that of the regressive process (the same responses are being scored) that any connection between the two is impossible to demonstrate plausibly. Also, the adaptive regression model would not demand that every instance of regressive process result in a creative product; more reasonably, a general regressive shift (perhaps evident in a series of regressive responses) would be applied to a larger adaptive purpose such as creative inspiration. To evaluate the adaptive utilization of regressive processes by examining individual responses seems far too molecular in its level of analysis.

In sum, the Control score provides a measure of Component 2, ego control, which is inconsistent with the adaptive regression constructs of Hartmann and Kris and which resembles more a measure of Component 3, the creative product. It succeeds no better as a measure of that component, since it precludes a demonstrated connection between regressive process and creative

product, and since it assumes an unlikely transformation of each regressive instance into a creative product.

A final point with regard to Holt's measure: the Adaptive Regression score (combining Expression and Control indices) seems to reflect mostly the Control score variance. Pine and Holt (1960) report the adaptive regression score to correlate .80 (Pearson's r) with the Control score, and .11 with the Expression score. Thus the adaptive regression index gains little interpretive validity over the Control score: if one is invalid, both are.

A measure which was selected for this study is that of Taft (1969,1970). He has developed a self-report inventory designed to tap experiences involving relative quiescence of ego control ("ego permissiveness"). This is defined by him as

"a personality state in which the ego withdraws some of its authority without abdication, in order to encourage the actualization of preconscious and unconscious potentialities. This concept is similar to what has previously been termed 'regression in the service of the ego' (Kris,1952;Schafer,1958) or 'openness to experience' (Schachtel,1959; Fitzgerald,1966). Manifestations of such states are alterations of consciousness, distorted perceptions, lowered awareness, dissociation, ecstatic emotions, reverie and fantasy, deriving pleasure from childish behavior, tolerance for the unusual, and belief in the supernatural."

Taft also relates ego permissiveness to primary process and autistic thinking. There is considerable overlap between Taft's conception of ego permissiveness and that of adaptive regression, as construed by Hartmann. Distorted perceptions, reverie and fantasy, and tolerance for the unusual are experiential phenomena which provide good indicators of autistic



and imagistic ("dreamlike") regression. Lowered awareness of the external environment would reflect a shift to internal focus. Belief in the supernatural would reflect an acceptance of that which is "impossible" by consensual definition, ie. a tendency to autistic cognition. Alterations of consciousness and feelings of "dissociation" (which are not the same as demonstrated structural dissociation) are plausible accompaniments of the dreamlike, autistic, regressed state. The experience of ecstatic emotions, however, does not relate to adaptive regression as it has been defined. Thus, Taft defines a construct with substantial, though not complete, overlap with adaptive regression. The shared meaning is sufficient that Taft's measure can provide a useful operationalization of adaptive regression.

The measure itself, the Ego Permissiveness Inventory, consists of an 80-item questionnaire. These items are grouped into scales determined by factor analysis (to decide which items clustered together). Five scales are summed to yield an Ego Permissiveness score, while another three scales do not relate to the construct. The five scales (with sample items) are: I. Peak Experiences ("Have you ever had the experience of some everyday thought, word or object suddenly becoming alive with deep meaning?"); II. Dissociated experiences ("Have you ever had the impression that the walls or the ceiling were moving or changing size or state, even though you knew that this was impossible?"); III. Openness to inner experience ("I spend quite a bit of time in daydreaming"); IV. Belief in the supernatural

("Do you believe that by contemplation, a person can sometimes discover a world within himself that is more real than the world outside of himself?"); VI. Intrinsic arousal ("I have had some experiences that were both strange and wonderful").

Taft's inventory provides a reasonably good measure of Component 1, the regressive process. The experiences it taps are for the most part plausible indices of a regressed state. At the same time, they are such as to involve the retention of ego control (Component 2): these are positive, mostly enjoyable experiences, not pathological uncontrolled regressions. As for Component 3, the adaptive function, it is less clear that the Taft satisfies this requirement. One could argue that such experiences are stimulating and enjoyable, thus have an intrinsic adaptive function, but this is not a very strong argument. It is most reasonable to conclude that the Taft provides a satisfactory measure of the first two components, but requires some external evidence of adaptive function to justify its interpretation as a measure of adaptive regression.

Another approach to the measurement of adaptive regression is via hypnosis. Rather than seeking to evaluate spontaneous regressive process (as does the Taft) or the characteristic level of regression-tendency (as does Holt's measure), this approach would seek to measure an individual's degree of response to a procedure designed to elicit regression. In the terms of Hartmann's adaptive regression, to elicit a shift to an internally-oriented mode of cognition.

It was shown above that the hypnotic state has only a partial overlap with the regressive state defined here: many hypnotic phenomena cannot be explained well by a shift to an internal orientation. A measure of hypnotic response must be one which clearly taps the specified dimension of regression. This means that the behavioral measures traditionally applied to the measurement of hypnotic response are not particularly relevant. The only definite behavioral prediction generated by the model is that there won't be very much of it. A person who is engaged in an internally-oriented cognitive process is not concerned with evaluating or acting upon the external world. This is indeed evident in the hypnotic situation; left to himself, the hypnotic subject tends to do nothing. (No doubt one reason for hypnosis to have been related to sleep). One might actually append this as an a fifth attribute of the regressed state: a relative lack of behavior.

A more useful measure of regression within hypnosis would focus on phenomenological and cognitive aspects: imagery, autistic thought, or nonlogical association. The second measure used in this study was selected on this basis. The Creative Imagination Scale (C.I.S.) of Barber and Wilson (1978) involves ten imaginary experiences which are suggested to the hypnotic subject (eg. "You are drinking cool water"). Response to these is measured by having the subject retrospectively rate the intensity of each experience compared to the actual event (that is, how real did it seem?). This measure taps the imagistic and

autistic properties of regressive cognition: it elicits dreamlike experience. This provides a fairly good measure of Component 1, the regressive process; also, there is clear retention of ego control in the testing situation. However, the third component is once again problematic, as no adaptive function is demonstrated.

The third measure selected for this study is the Field Inventory of Hypnotic Depth (Field, 1965). This self-report inventory includes 40 items which reflect experiential phenomena associated with the hypnotic state ("The experimenter's voice seemed to come from far away"; "I felt relaxed"; etc.) While items such as "relaxation" are not clearly related to the adaptive regression construct, most of the items involve a shift of focus from the external situation: these are relevant. This measure taps the regressive process and clearly involves a retention of ego control. Again, the adaptive function component is not addressed.

### Hypotheses

From our model, we can predict that the adolescent engaged in identity formation will be characterized by processes of adaptive regression to a greater extent than one not so engaged. This may be manifested in a greater willingness or capacity to regress. He will have an increased disposition to such regressive phenomena as fantasy, reverie, daydreaming, altered states of consciousness, hallucinatory experience, autistic

thinking, etc.

Evaluation of this prediction requires a measure which taps the extent to which adolescents at different stages of identity formation undergo regressive processes (whether spontaneously or deliberately). Of the measures previously discussed, it is the Taft inventory of regressive experiences which is most relevant. The identity-forming adolescent should report the most regressive experiences in the course of his current life.

The hypnosis measures discussed above, while they seem to tap the regressive process, have two drawbacks: 1) they require the assumption that degree of regression in the hypnotic situation reflects the degree of (non-experimentally-induced) regression outside of hypnosis. An individual who accurately reports more regression in hypnosis may or may not have a more regressive style outside the hypnosis situation. By contrast, an individual who accurately reports more experiences of fantasy, reverie, etc., in his current life is undergoing more regressive process by definition; 2) the degree of regression in hypnosis is determined partly by willingness or capacity to be influenced in that way by the hypnotist. As noted above, the tendencies to regress and to be influenced may be unrelated, or negatively related. This may confuse the interpretation of hypnosis measures.

Therefore, it is the Taft inventory which provides us with the strongest test of the proposed association between identity formation and regression. It will serve to primarily

operationalize regression in this study. In addition, while hypnotic measures do not provide as adequate a test of the model as does the Taft Inventory (for reasons given above), they are relevant to our inquiry. If regressive tendency is an important contributor to hypnotic response, one would expect the identity-forming adolescent to show a greater response to the hypnosis procedure.

The issue of adaptive function must be addressed. It was stressed above that an independent measure of adaptive outcome is required, in order to speak of adaptive regression. In this study, identity achievement constitutes the adaptive outcome: measured Identity Status is the adaptive "product." The dependence of that product on regression is the hypothesis being tested. Thus, we have a model of adaptive regression in adolescence which takes account of the regressive process, the retention of ego-control, and the adaptive outcome (identity formation).

Identity formation will be considered in terms of Marcia's Identity Status categories: Moratorium, Foreclosure, Achievement, and Diffusion.

The Moratorium is actively engaged in identity formation: pressured to change by ongoing crisis, and open to modification of his current commitments. He should manifest the highest level of regressive process.

The Foreclosure is not engaged in identity formation: he is not pushed by crisis, and strongly defends his commitments. Nor

is the Achievement engaged in identity formation in the way that the Moratorium is: the crisis has been resolved and he has a set of new commitments to maintain. Neither of these identity-committed statuses should be particularly open to the change-inducing processes of adaptive regression. They should manifest significantly less regression than the Moratorium.

One might, however, predict the Achievement to be less defensive with regard to his commitments than the Foreclosure. He has considered alternative commitments and experienced crisis, thus should more comfortably accept the possibility of change. This leads to a prediction that the Achievement will manifest more regression than the Foreclosure.

The Diffusion is rather puzzling in this respect. While there is no crisis and he is not actively engaged in identity formation, neither does he have commitments to defend. Change is neither demanded nor resisted. No clear prediction can be made as to the level of regression in the Diffusion.

The primary hypothesis is that Moratorium status adolescents will report a higher level of regressive experience on the Taft than Foreclosure and Achievement adolescents. A secondary hypothesis is that Moratorium status adolescents will score more highly on the two hypnosis measures than Foreclosure and Achievement status adolescents. It is also hypothesized, more tentatively, that Achievement status adolescents will score more highly than Foreclosures on the three dependent measures.

## B. Method

### Subjects

Seventy-one undergraduate students, thirty-six male and thirty-five female, between the ages of seventeen and twenty-four, were tested. These subjects volunteered for a "study of imagination": they were informed that hypnosis would be used before they participated and none chose to withdraw at that point. Each subject was provided with a document briefly outlining the study and an informed consent form prior to the experiment (Appendix A).

### Instruments

Identity Status Interview: This semi-structured interview is designed to assess the degree of identity crisis and commitment in five areas: Occupation, Religion, Politics Sex Role, and Sexual Behaviour. In each of these areas, the extent to which a crisis (decision-making period) has been experienced and commitments have been reached are assessed. The interview loosely follows the format presented in Appendix A. For each area, a status is determined: based on the pattern of these area statuses, an overall Identity Status is decided. No specific scheme is used to combine the areas; rather, the configuration



is used to decide upon Identity Status.

The interview itself (20-40 minutes) is tape-recorded, then scored from the tape. In this study, reliability was assessed with a series of 20 randomly-chosen interviews. These were rated independently by two individuals, the Experimenter and a second rater who was blind to the hypotheses. For 17 of 20 interviews, the raters agreed upon the Identity Status. This rate of agreement (85%) is well within the range of acceptable reliability established by previous studies (Marcia, 1976). The remaining 51 interviews were rated by the Experimenter.

Taft Ego Permissiveness Inventory: This questionnaire is designed to assess the occurrence of spontaneous altered-state experiences (in which the normal ego controls are temporarily relaxed). The items of this inventory are statements which describe particular experiences or attitudes towards experiences (eg. "I like to imagine shapes in the clouds"; "I would like to be hypnotized"). The subject is instructed to consider each statement and decide the extent to which it is true for him/her; then to mark the appropriate answer from a five-point scale, ranging from "Strongly agree" to "Strongly disagree." The subject is also informed that the period in question is the last 6 months only.

The form of this inventory used in the present study is that presented in Taft (1970). Eighty experiential items are grouped into scales, each of which covers a particular experiential domain. Eight such scales are examined in the

present study. Five of these scales, described above, include regression-related items and can be summed to yield an "Ego Permissiveness" score: 1) Peak Experiences; 2) Dissociated Experiences; 3) Openness to Inner Experience; 4) Belief in the Supernatural; and 6) Intrinsic Arousal. The Ego Permissiveness score ranges from -108 to +108. The remaining three scales do not tap experiences related to regression. These scales, with sample items, are: 5) Emotional Extraversion ("Do you enjoy 'wild' parties?"); 7) Controlled Adaptability ("When I have had an unpleasant experience, I am able to forget about it fairly easily"); and 8) Intellectual Control ("I am able to concentrate on a task for long periods, even when there are other things going on around me").

Creative Imagination Scale: This self-report measure is designed to evaluate the vividness of subjective response to suggested experiences. Ten experiences are suggested and the subject is asked to retrospectively rate the extent to which the imagined experience was like the real event (on a five-point scale ranging from "Not at all like the real experience" to "Exactly like the real experience"). The C.I.S. yields a single imaginative-response score, the sum of the ten ratings; it ranges from 0 to 40.

In this study, the C.I.S. was presented on audiotape following a standard hypnotic induction (also on tape), which used suggestions of relaxation, heaviness, and deepening (Barber, 1965).

Field Inventory of Hypnotic Depth: This consists of 38 statements, each describing an experiential phenomenon characteristic of the hypnotic state. The subject is instructed to consider each statement (eg. "I felt drowsy") and to decide whether that described his/her experience while listening to the hypnosis tape. The subject responds to each item with "True" or "False." This test yields one score, an index of hypnotic depth.

### Procedure

Subjects were tested individually. A taped hypnotic induction of the form suggested by Barber (1965), including suggestions of relaxation, heaviness, and deepening, was presented. Following this induction, the items of the C.I.S. were presented on the tape. After this hypnotic procedure, the C.I.S. self-report form, the Field inventory, and the Taft inventory were administered successively.

## C. Results

### Description of the sample

Age distribution of the sample is presented in Figure 1. The mean age is 18.0: few subjects have passed the identity crisis period (18-21).

Distribution of Identity Status is given in Figure 2. Most subjects are in the Foreclosure or Moratorium Status, a result which is consistent with the age distribution skewed towards early stages of the identity formation period. One would expect relatively few Achievements in adolescents of this age. A higher proportion of males than females are in the Diffusion category, and a lower proportion in the Moratorium category (Figure 3). Chi-square analysis shows this to be a nonsignificant difference (Chi-square=6.89,  $df=3$ ,  $p=.08$ ).

The mean age for each status is shown in Figure 4. While the relative ages are generally consistent with expectation (highest for Achievement, lowest for Foreclosure), the age difference across status does not reach significance by analysis of variance ( $F=2.42$ ,  $df=3,67$ ,  $p=.07$ ). However, individual contrasts show the Achievement group to be significantly older than the Foreclosure or Moratorium groups, as would be expected.

## Identity Status and the dependent measures

Mean scores for each Identity Status on the dependent measures are presented in Figure 5.

One-way analysis of variance was carried out on the Ego Permissiveness score of the Taft Inventory (Table 1). It was found that the statuses differ significantly on this measure ( $F=2.67$ ,  $df=3,67$ ,  $p=.05$ ). Specific contrasts show the Moratorium group to be significantly higher than the Foreclosure or Achievement groups. The Moratorium group is also significantly higher than the Diffusion group.

This result is clarified by examining the scales which comprise the Ego Permissiveness index (Figure 6). Analysis of variance shows only the Supernatural Beliefs scale to differ significantly across the statuses ( $F=3.54$ ,  $df=3,67$ ,  $p=.02$ ). Contrasts show Moratoriums significantly higher than Foreclosures on the Peak Experiences and Supernatural Beliefs scales, and significantly higher than Achievements on the Peak Experiences, Openness to Inner Experience, and Supernatural Beliefs scales.

The analysis of variance presented in Table 2 does not show the Statuses to differ significantly on the C.I.S. ( $F=1.20$ ,  $df=3,66$ ,  $p=.32$ ), nor do contrasts reveal any significant differences between the statuses on this measure. There is, however, a significant difference between statuses on the Field Inventory, according to the analysis of variance presented in

Table 3 ( $F=3.12$ ,  $df=3,65$ ,  $p=.03$ ). It is the Foreclosure group who score highest on this measure. Specific contrasts show the Foreclosure group to be significantly higher than the Diffusion or Achievement groups.

### Sex differences

Table 4 presents the results for a Sex by Identity Status analysis of variance on each of the dependent measures. It can be seen that there is a significant main effect for sex on the Taft Ego Permissiveness index: females are higher on this measure than males ( $F=6.97$ ,  $df=3,64$ ,  $p=.01$ ). The interaction effect of sex with Identity Status does not reach significance ( $F=1.06$ ,  $df=3,64$ ,  $p=.37$ ). Sex differences are evident on none of the other measures: neither main nor interaction effects of sex reach significance for the C.I.S. or Field Inventory. Furthermore, the effect of Identity Status on these dependent measures is not substantially altered by including sex as a variable in the analysis.

T-test analysis, with two-tailed tests of significance, shows that females are significantly higher than males on several Ego Permissiveness scales of the Taft (Figure 7): Peak Experiences ( $t=3.59$ ,  $df=69$ ,  $p=.001$ ); Dissociated Experiences ( $t=2.18$ ,  $df=69$ ,  $p=.03$ ); Openness to Inner Experience ( $t=2.40$ ,  $df=69$ ,  $p=.019$ ); and Supernatural Beliefs ( $t=2.57$ ,  $df=69$ ,  $p=.012$ ). There is no significant sex difference on the Intrinsic Arousal scale ( $t=.83$ ,  $df=69$ ,  $p=.41$ ).

The effect of sex differences on Ego Permissiveness is strong enough that, when it is "removed" by the analysis, the remaining effect for Identity Status is no longer significant. Although the distributions of Status for males and females are not significantly different by chi-square analysis, they are sufficiently different to introduce a confounding effect with regard to Ego Permissiveness. The effects of sex and Identity Status are confounded. The main effect for Identity Status is reduced to a nonsignificant level with the inclusion of sex as a variable.

Separate analyses of variance were performed for the male and female groups on the Taft Ego Permissiveness score (Tables 5 and 6). For the female group, the Taft score varies significantly across Identity Status, with the Moratorium group significantly higher than the Foreclosure or Achievement groups. For males, Taft scores do not vary significantly across Status. While the Moratorium group is highest and the Achievement group lowest, as in the female sample, these differences do not reach significance.

The relationship between identity formation and regression was examined more closely for the male sample: Identity Status in the specific identity areas (Occupation, Politics, Religion, Sex-Role, and Sexual Behaviour) was compared to Ego Permissiveness. It was found that Sex-Role Status is significantly related to Ego Permissiveness by analysis of variance ( $F=2.76$ ,  $df=3,32$ ,  $p=.05$ ). The Moratorium group is

highest, significantly above Achievements, Diffusions, or the other statuses combined (Table 7).

### Testing the major hypotheses

The primary hypothesis of this study was that identity-forming (Moratorium) adolescents would report more regressive experience on the Taft Ego Permissiveness Inventory than identity-committed (Foreclosure and Achievement status) adolescents. This was tested by categorizing Identity Status as Identity-Forming (Moratorium) or Identity-Committed (Foreclosure and Achievement), and relating this by analysis of variance to Ego Permissiveness. Since sex differences have been shown to be confounded with Identity Status, Sex was included as a variable in the analysis (Table 8).

This analysis shows main effects for Status ( $F=4.22$ ,  $df=1,53$ ,  $p=.045$ ) and for Sex ( $F=4.87$ ,  $df=1,53$ ,  $p=.03$ ), with a nonsignificant interaction between these variables ( $F=1.65$ ,  $df=1,53$ ,  $p=.21$ ). Thus, Identity Status shows a significant relationship to Ego Permissiveness above and beyond the influence of sex differences: identity-forming Moratorium adolescents are significantly higher in Ego Permissiveness than the identity-committed Foreclosures and Achievements.

The secondary hypothesis of this study was that identity-forming adolescents would be higher than identity-committed adolescents on measures of regressive experience in hypnosis (the C.I.S. and the Field Inventory).



This was tested in a similar fashion: Identity Status was categorized as Identity-Forming (Moratorium) or Identity-Committed (Foreclosure and Achievement), and related to the C.I.S. and the Field Inventory by analysis of variance (Table 8). Sex was again included in the analysis.

Analysis of the C.I.S. shows no significant effect for either Status ( $F=.07$ ,  $df=1,51$ ,  $p=.79$ ), Sex ( $F=1.65$ ,  $df=1,51$ ,  $p=.21$ ), or the interaction between these two ( $F=.78$ ,  $df=1,51$ ,  $p=.38$ ). Analysis of the Field Inventory shows no significant effect for Status ( $F=1.53$ ,  $df=1,51$ ,  $p=.22$ ), Sex ( $F=.01$ ,  $df=1,51$ ,  $p=.94$ ), or the interaction ( $F=3.47$ ,  $df=1,51$ ,  $p=.07$ ). Thus, the identity-forming Moratorium adolescents are no higher on these two measures of regression in hypnosis than the identity-committed Foreclosure and Achievement adolescents.

#### Relationships between the dependent measures

The primary hypothesis (that identity-forming adolescents would be highest in Ego Permissiveness) is supported by these results, while the secondary one (that they would also be highest on the C.I.S. and Field) is not. To understand this result, it is helpful to consider the relationships between the three measures of regression. Correlations between the measures (Pearson's  $r$ , with two-tailed tests of significance) are shown in Table 9. The two hypnosis measures, the C.I.S. and Field Inventory, have a relatively strong correlation ( $r=.48$ ,  $p=.001$ ). The C.I.S. is also significantly correlated with the Taft

Inventory ( $r=.24, p=.05$ ). However, the Field and Taft inventories show no significant correlation ( $r=.04, N.S.$ ). This pattern of results is consistent across sex, with slightly (nonsignificantly) higher correlations for females.

In order to better describe this pattern of results, a principal components factor analysis was carried out. The variables entered into this analysis were the Taft Ego Permissiveness scales, the C.I.S., and the Field Inventory. In addition, since the shared variance of self-report measures may be attributable simply to response set, an index of acquiescent responding was derived as follows: items from the three Taft subscales which do not tap regressive experience were scored in a positive direction and summed into an index of Acquiescence. Any factor which is attributable to acquiescent responding would be expected to load significantly on this regression-irrelevant index as well as on the regression measures themselves.

Results of the factor analysis (based on the correlation matrix of Table 10) are presented in Tables 11 (unrotated factors) and 12 (Varimax- and visually-rotated factors). Three factors with eigenvalue greater than one are produced. The first is contributed to significantly by the Taft scales and the C.I.S., cutting across the hypnotic and nonhypnotic domains. The second factor is essentially determined by the two hypnosis measures. The third factor is determined primarily by the Acquiescence index, with smaller loadings for several other variables: it may be identified with response set, although it

may also constitute a "method factor" of the Taft.

### The Achievement and Diffusion statuses

It had been predicted that the Achievement group would score more highly on the regression measures than the Foreclosure group. This prediction was clearly not confirmed by the data. The Achievements are lower than Foreclosures on all three measures, significantly so on the Field Inventory.

The Diffusion group emerges at neither extreme of the measures. They are significantly lower than the Moratoriums on the Taft Inventory, and significantly lower than the Foreclosures on the Field. Otherwise, no contrasts involving the Diffusion group reach significance.

### Regression-seeking

A further analysis of the Taft Inventory was carried out to help determine whether increased regression of the Moratorium group is associated with a deliberate seeking and valuing of regressive experience. Five items which seem to reflect a positive orientation towards regressive experience were selected from the Taft and summed into a Regression-Seeking index. The items were as follows:

Item fifteen: I would like to be hypnotized.

Item nineteen: Suppose that you were asked to take part in an experiment on a new drug that makes you have visions but is not habit-forming. Would you agree to take the drug?

Item twenty-three: I spend quite a bit of time in daydreaming.

Item twenty-four: The trouble with modern society is its lack of interest in mystical experiences.

Item thirty-five: Do you believe that by contemplation, a person can sometimes discover a world within himself that is more real than the world outside of himself?

Analysis of variance (including sex as a variable) is presented in Table 13. It shows that Identity-Forming (Moratorium) adolescents are significantly more regression-seeking than Identity-committed (Foreclosure and Achievement) adolescents ( $F=7.05$ ,  $df=1,51$ ,  $p=.01$ ). Neither Sex nor the Sex by Status interaction effect reach a statistically significant level.

#### Other scales of the Taft

Finally, the three Taft scales which do not tap regression and are not summed into the Ego Permissiveness score were related to Identity Status (Figure 8).

It was found that Scales 5 (Emotional Extraversion) and 8 (Intellectual Control) do not differ significantly across the Statuses, by analysis of variance or by specific contrasts. However, Scale 7 (Controlled Adaptability) does have a significant relationship to Identity Status. Analysis of variance shows Scale 7 to differ across Status ( $F=4.14$ ,  $df=3,67$ ,  $p=.001$ ): the Achievement group is highest, contrasting significantly with each of the other three Statuses. In order to

ensure that sex differences were not confounding these results, each of the scales was also examined in a Sex by Status analysis. For none of the scales was Sex or the Sex by Status interaction effect significant; Status remained significantly related to Scale 7 ( $F=3.71$ ,  $df=3,63$ ,  $p=.02$ ).

TABLE 1: TAFT EGO PERMISSIVENESS

Status means:

	MEAN	S.E.	S.D.
MORATORIUM	45.0	5.9	27.3
ACHIEVEMENT	20.0	12.7	31.0
FORECLOSURE	31.8	3.4	18.5
DIFFUSION	27.4	6.5	24.4

Analysis of variance:

	D.F.	S.S.	M.S.	F	F-PROB.
BETWEEN GROUPS	3	4,459	1487	2.67	0.05*
WITHIN GROUPS	67	37,363	558		
TOTAL	70	41,823			

Contrasts:

	VALUE	S.E.	T-VALUE	D.F.	T-PROB.
MOR-FOR	13.2	6.7	1.96	67	0.05*
MOR-ACH	25.0	10.9	2.28	67	0.03*
MOR-DIF	17.6	8.1	2.16	67	0.03*
FOR-ACH	11.8	10.6	1.11	67	0.27

TABLE 2: CREATIVE IMAGINATION SCALE

Status means:

	MEAN	S.E.	S.D.
MORATORIUM	21.8	1.6	7.2
ACHIEVEMENT	15.4	3.1	7.0
FORECLOSURE	21.8	1.2	6.6
DIFFUSION	19.6	2.8	10.6

Analysis of variance:

	D.F.	S.S.	M.S.	F	F-PROB.
BETWEEN GROUPS	3	217	73	1.20	0.32
WITHIN GROUPS	66	3,997	61		
TOTAL	69	4,214			

Contrasts:

	VALUE	S.E.	T-VALUE	D.F.	T-PROB.
MOR-FOR	0.01	2.2	0.00	66	0.99
MOR-ACH	6.40	3.9	1.66	66	0.10
MOR-DIF	2.24	2.7	0.83	66	0.41
FOR-ACH	6.40	3.8	1.70	66	0.09

TABLE 3: FIELD INVENTORY

Status means:

	MEAN	S.E.	S.D.
MORATORIUM	19.4	1.7	7.7
ACHIEVEMENT	14.4	3.1	7.0
FORECLOSURE	23.0	1.1	6.1
DIFFUSION	18.1	2.3	8.5

Analysis of variance:

	D.F.	S.S.	M.S.	F	F-PROB.
BETWEEN GROUPS	3	481	160	3.12	0.03*
WITHIN GROUPS	65	3,338	51		
TOTAL	68	3,819			

Contrasts:

	VALUE	S.E.	T-VALUE	D.F.	T-PROB.
MOR-FOR	3.68	2.1	1.80	65	0.08
MOR-ACH	4.95	3.6	1.38	65	0.17
MOR-DIF	1.21	2.5	0.48	65	0.63
FOR-ACH	8.63	3.5	2.59	65	0.02*
FOR-DIF	4.89	2.3	2.11	65	0.04*



TABLE 4: SEX DIFFERENCES (ANALYSIS OF VARIANCE)

Taft Inventory:

	S.S.	D.F.	M.S.	F	F-PROB.
STATUS	1,996	3	665	1.31	0.28
SEX	3,551	1	3,551	6.97	0.01*
STATUS X SEX	1,620	3	540	1.06	0.37

C.I.S.:

	S.S.	D.F.	M.S.	F	F-PROB.
STATUS	199	3	66	1.08	0.37
SEX	120	1	120	1.95	0.11
STATUS X SEX	113	3	38	0.61	0.61

Field Inventory:

	S.S.	D.F.	M.S.	F	F-PROB.
STATUS	484	3	161	3.19	0.03*
SEX	5	1	5	0.10	0.76
STATUS X SEX	243	3	81	1.60	0.20

TABLE 5: TAFT EGO PERMISSIVENESS (FEMALES)

Status means:

	MEAN	S.E.	S.D.
MORATORIUM	53.1	7.2	27.0
ACHIEVEMENT	21.0	15.1	26.3
FORECLOSURE	36.3	4.0	15.3
DIFFUSION	51.0	6.2	10.8

Analysis of variance:

	D.F.	S.S.	M.S.	F	F-PROB.
BETWEEN GROUPS	3	3,744	1248	2.69	0.05*
WITHIN GROUPS	31	14,394	464		
TOTAL	34	18,138			

Contrasts:

	VALUE	S.E.	T-VALUE	D.F.	T-PROB.
MOR-FOR	16.8	8.0	2.10	31	0.04*
MOR-ACH	32.0	13.7	2.34	31	0.03*
MOR-DIF	2.1	13.7	0.15	31	0.88
FOR-ACH	15.2	13.6	1.12	31	0.27

TABLE 6: TAFT EGO PERMISSIVENESS (MALES)

Status means:

	MEAN	S.E.	S.D.
MORATORIUM	28.7	7.9	20.9
ACHIEVEMENT	19.0	23.8	41.4
FORECLOSURE	27.3	5.4	20.8
DIFFUSION	20.1	6.9	23.1

Analysis of variance:

	D.F.	S.S.	M.S.	F	F-PROB.
BETWEEN GROUPS	3	465	155	0.28	0.83
WITHIN GROUPS	32	17,453	545		
TOTAL	35	17,918			

Contrasts:

	VALUE	S.E.	T-VALUE	D.F.	T-PROB.
MOR-FOR	1.5	10.7	0.14	32	0.89
MOR-ACH	9.7	16.1	0.60	32	0.55
MOR-DIF	7.8	11.3	0.70	32	0.49
FOR-ACH	8.2	14.7	0.56	32	0.58

TABLE 7: SEX-ROLE STATUS AND EGO PERMISSIVENESS (MALES)

Status means:

	MEAN	S.E.	S.D.
MORATORIUM	37.5	6.2	17.6
ACHIEVEMENT	8.7	10.8	26.4
FORECLOSURE	31.5	7.1	22.3
DIFFUSION	19.1	5.6	19.3

Analysis of variance:

	D.F.	S.S.	M.S.	F	F-PROB.
BETWEEN GROUPS	3	3681	1227	2.76	0.05*
WITHIN GROUPS	32	14,237	445		
TOTAL	35	17,918			

Contrasts:

	VALUE	S.E.	T-VALUE	D.F.	T-PROB.
MOR-FOR	6.0	10.0	0.60	32	0.55
MOR-ACH	28.8	11.3	2.53	32	0.02*
MOR-DIF	18.3	9.7	1.90	32	0.06*

TABLE 8: IDENTITY-FORMING VS. -COMMITTED STATUS AND  
DEPENDENT VARIABLES

Taft Ego Permissiveness:

	S.S.	D.F.	M.S.	F	F-PROB.
STATUS	2,149	1	2,149	4.22	0.045*
SEX	2,481	1	2,481	4.87	0.03*
STATUS X SEX	839	1	839	1.65	0.21

C.I.S.:

	S.S.	D.F.	M.S.	F	F-PROB.
STATUS	3	2	3	0.07	0.79
SEX	83	1	83	1.65	0.21
STATUS X SEX	39	1	39	0.78	0.38

Field Inventory

	S.S.	D.F.	M.S.	F	F-PROB.
STATUS	76	1	76	1.53	0.22
SEX	.3	1	.3	0.01	0.94
STATUS X SEX	173	1	173	3.47	0.07

TABLE 9: CORRELATION OF THE MEASURES

	<u>C.I.S.</u>	<u>FIELD</u>	
TAFT	.25*	.04	
C.I.S.		.48**	(All subjects)
TAFT	.28*	.06	
C.I.S.		.52**	(Females)
TAFT	.15	.04	
C.I.S.		.49**	(Males)

\*  
significant at the .05 level, two-tailed.

\*\*  
significant at the .01 level, two-tailed.

TABLE 10: CORRELATION MATRIX OF VARIABLES ENTERED IN FACTOR ANALYSIS

	FIELD	ACQ	TAFT1	TAFT2	TAFT3	TAFT4	TAFT6
CIS	0.48*	-0.01	0.17	0.19	0.27*	0.16	0.14
FIELD		0.16	-0.08	0.15	0.09	0.05	-0.09
ACQ			0.09	0.38*	0.11	0.18	0.00
TAFT1				0.56*	0.51*	0.52*	0.57*
TAFT2					0.45*	0.58*	0.36*
TAFT3						0.45*	0.21
TAFT4							0.18

\* significant at the .05 or .01 level, two-tailed.

TABLE 11: UNROTATED FACTORS

	FACTOR I	FACTOR II	FACTOR III
FIELD	.18	.87 -.08	
TAFT-1	.81	-.33	-.17
TAFT-2	.83	.01	-.26
TAFT-3	.71	.04	-.04
TAFT-4	.73	-.05	-.19
TAFT-6	.53	-.38	-.44
ACQUIESCENCE	.32	.21	.76
C.I.S.	.38	.65	-.48



TABLE 12: FACTORS PRODUCED BY VARIMAX  
AND VISUAL ROTATION

	FACTOR I	FACTOR II	FACTOR III
FIELD	.00	.86	.22
TAFT-1	.88	-.13	-.05
TAFT-2	.74	.04	.45
TAFT-3	.68	.16	.15
TAFT-4	.67	.01	.35
TAFT-6	.68	-.13	-.38
ACQUIESCENCE	.12	.00	.85
C.I.S.	.34	.82	-.17

TABLE 13: REGRESSION-SEEKING

Status means:

	MEAN
MORATORIUM	2.71
ACHIEVEMENT	-0.67
FORECLOSURE	0.47
DIFFUSION	-0.07

Analysis of variance (Identity-forming vs. -committed Status by Sex):

	S.S.	D.F.	M.S.	F	F-PROB.
STATUS	99	1	99	7.05	0.01*
SEX	11	1	11	0.77	0.39
STATUS X SEX	32	1	32	2.26	0.14

Figure 1: Age distribution

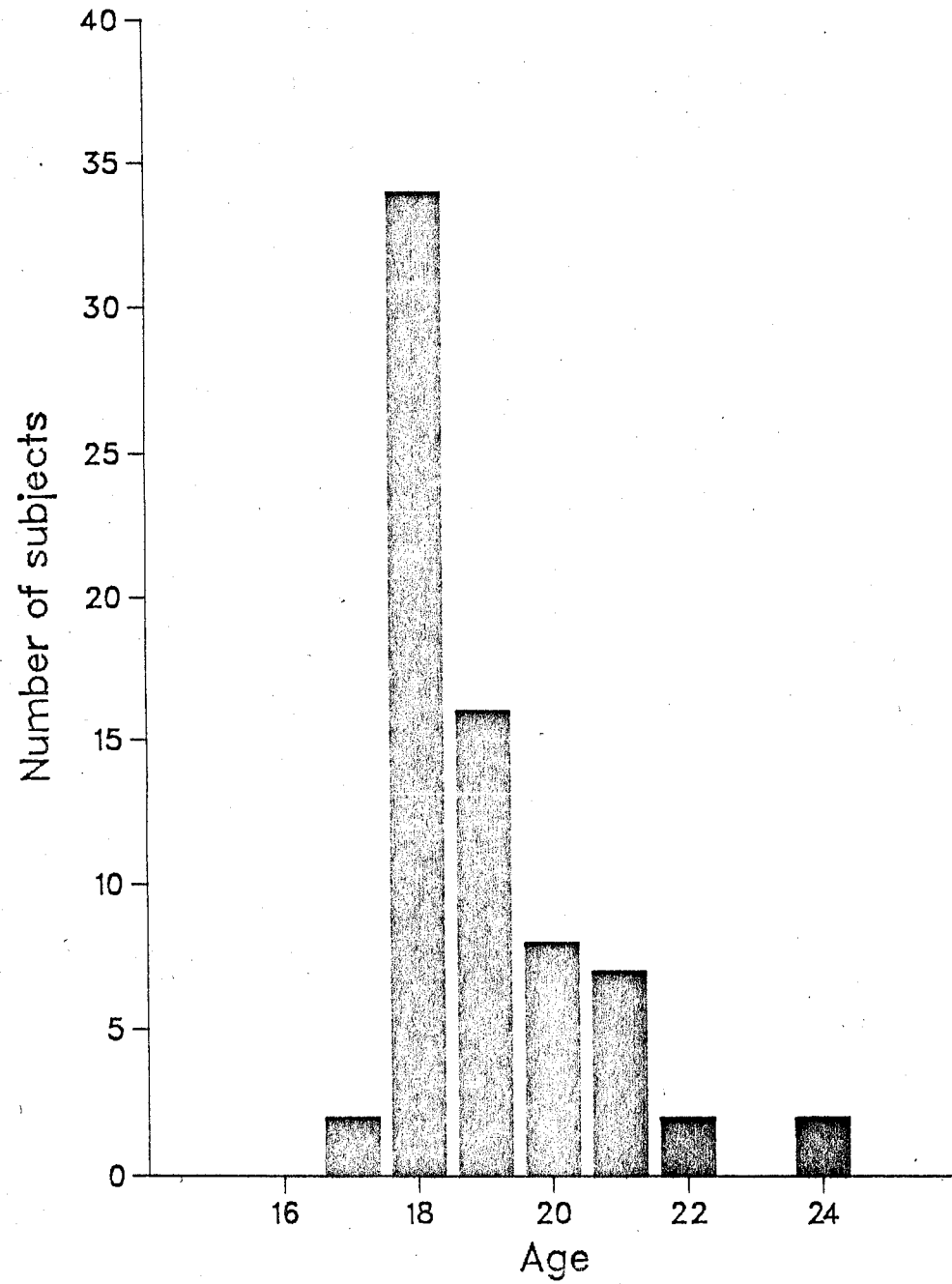
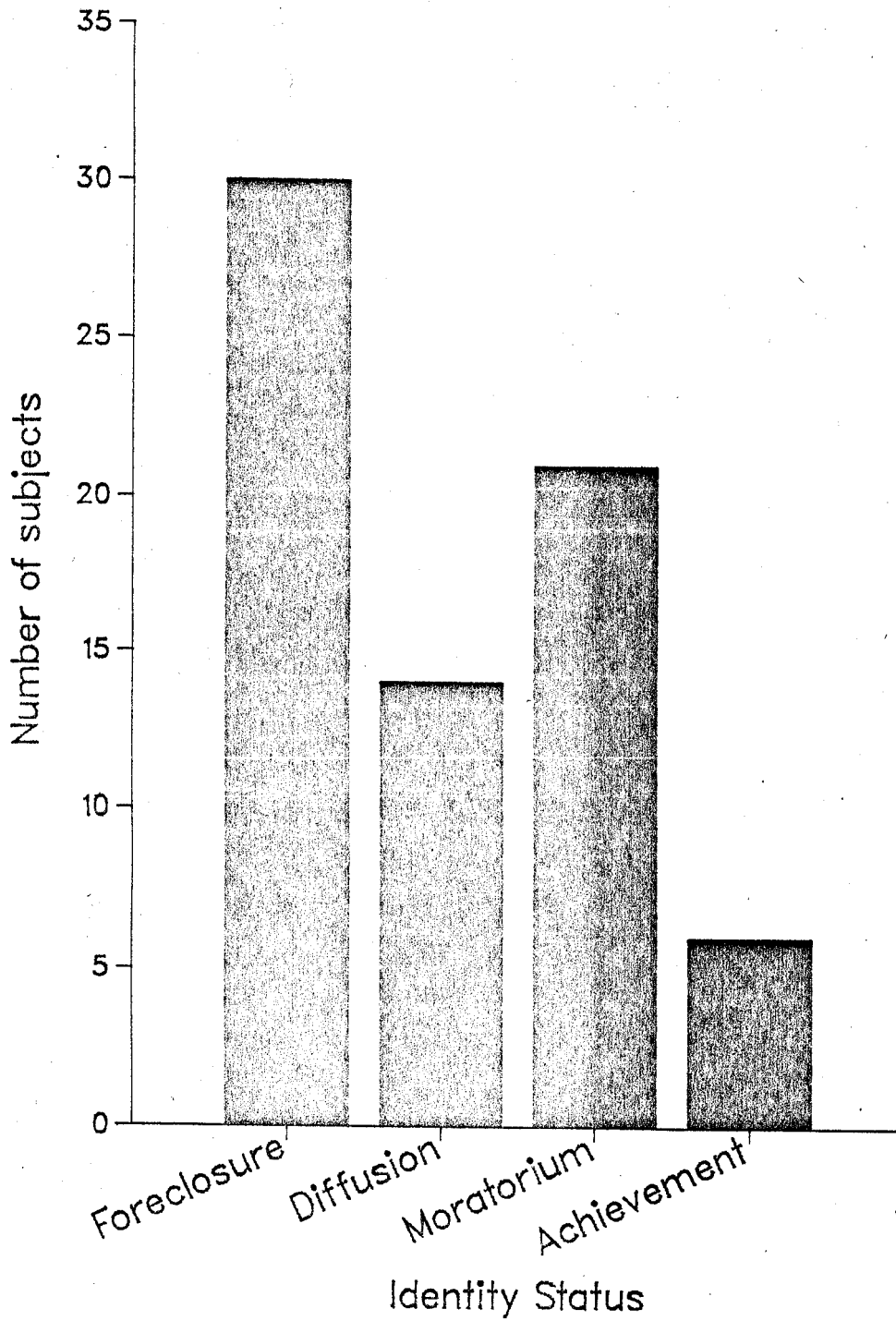


Figure 2: Identity Status distribution



# Figure 3: Sex by Status

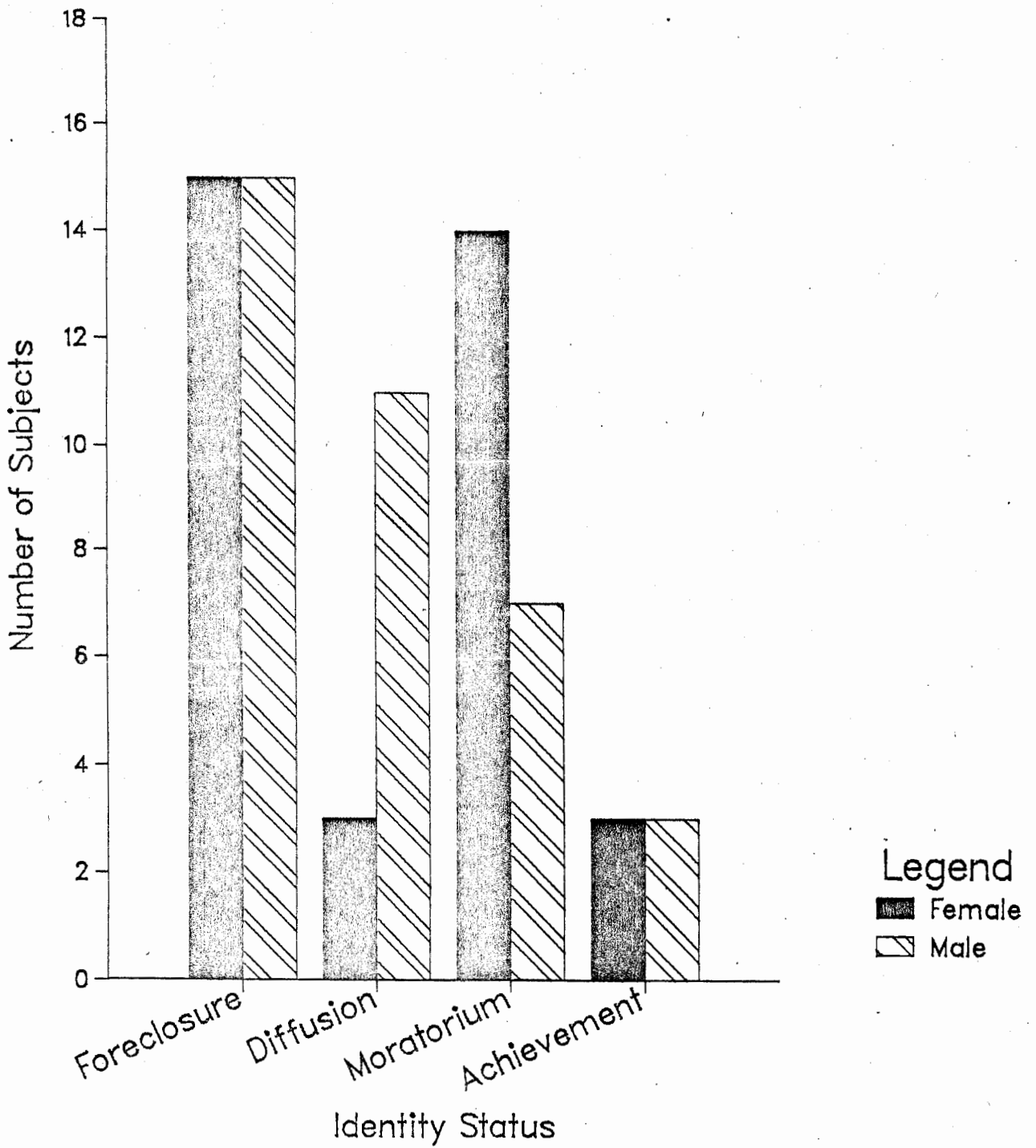


Figure 4: Age by Status

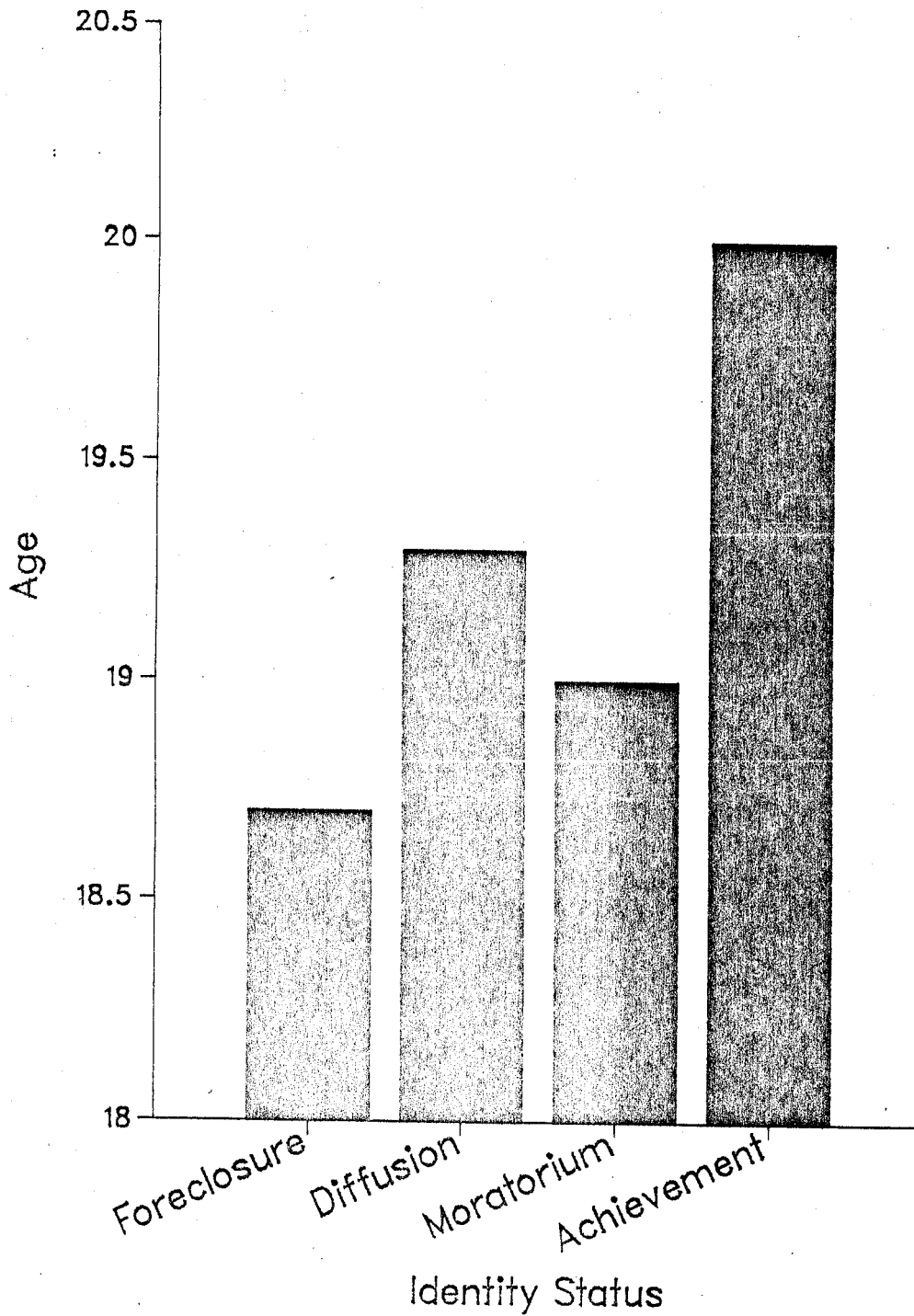


Figure 5: Dependent variable scores for Identity Statuses

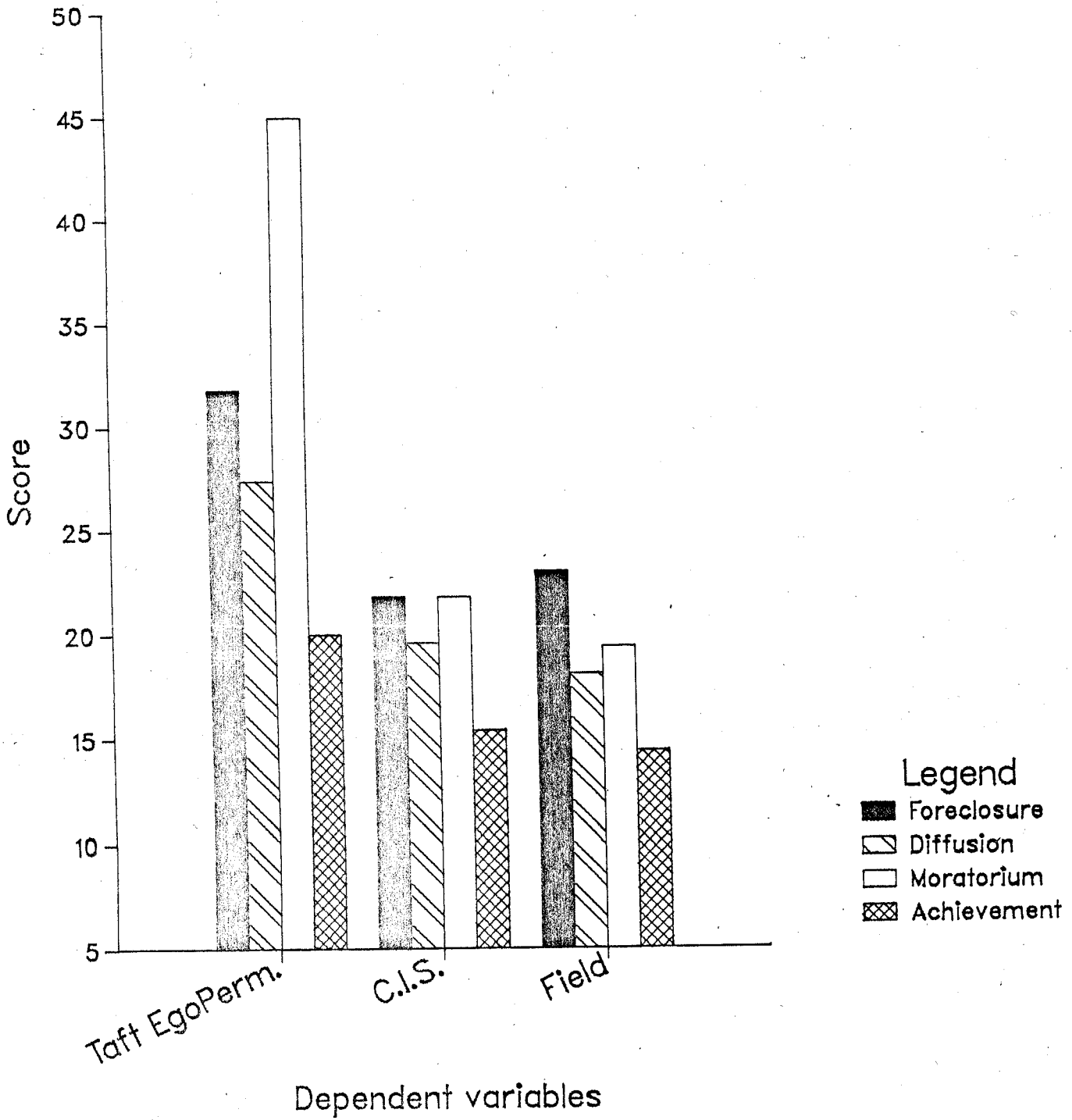


Figure 6: Taft Ego Permissiveness scale scores for Statuses

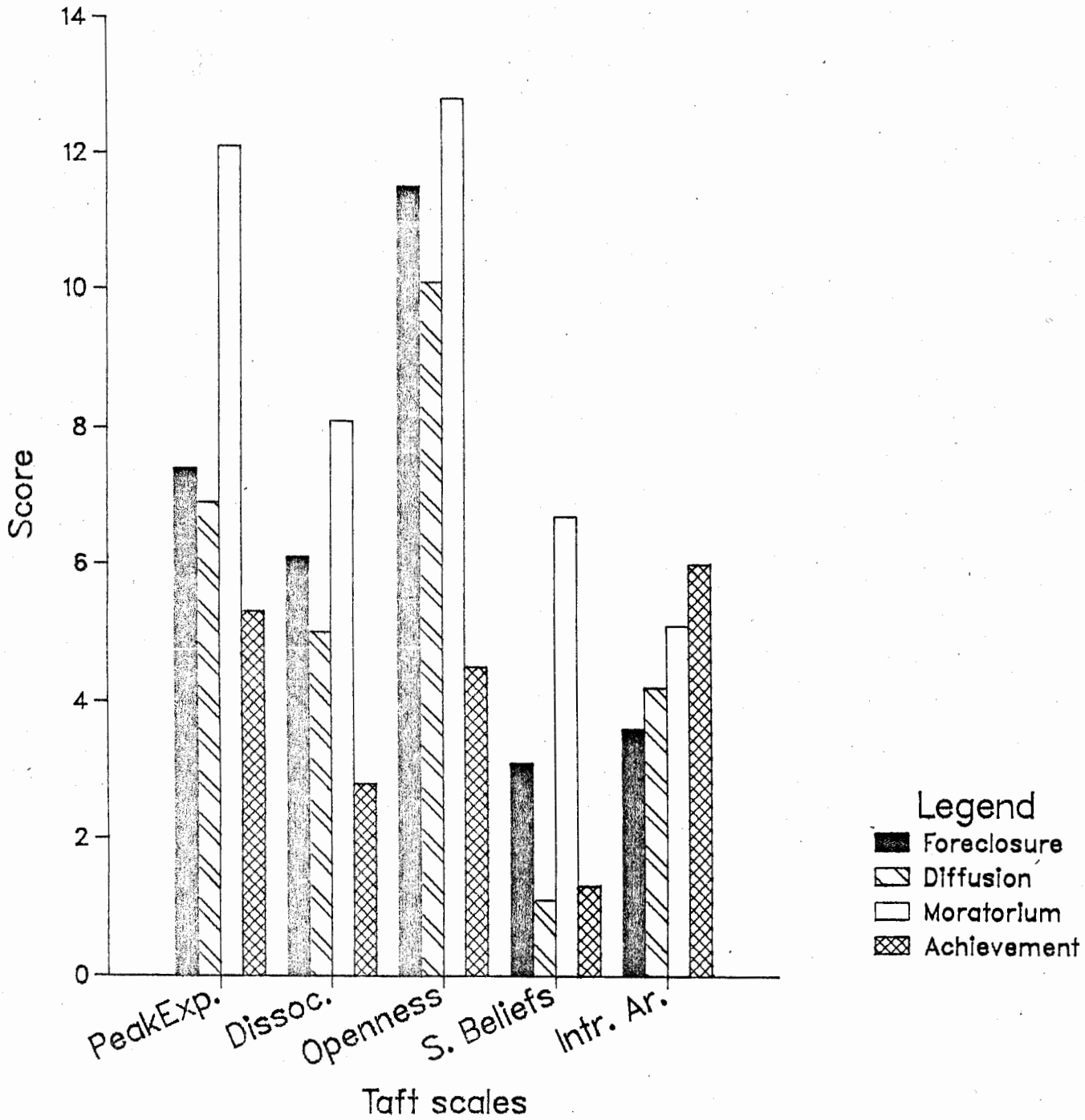




Figure 7: Sex differences on dependent variables

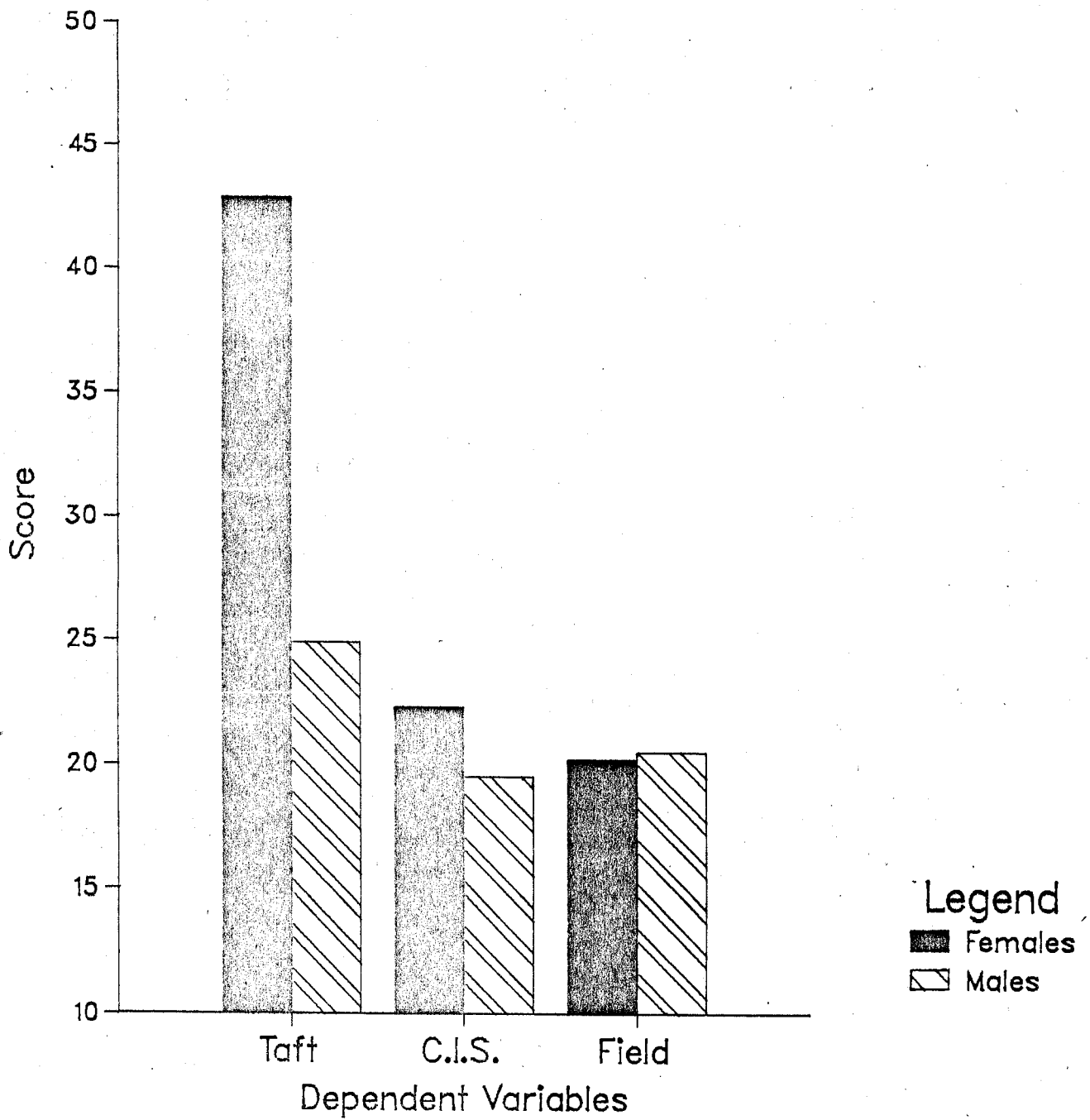
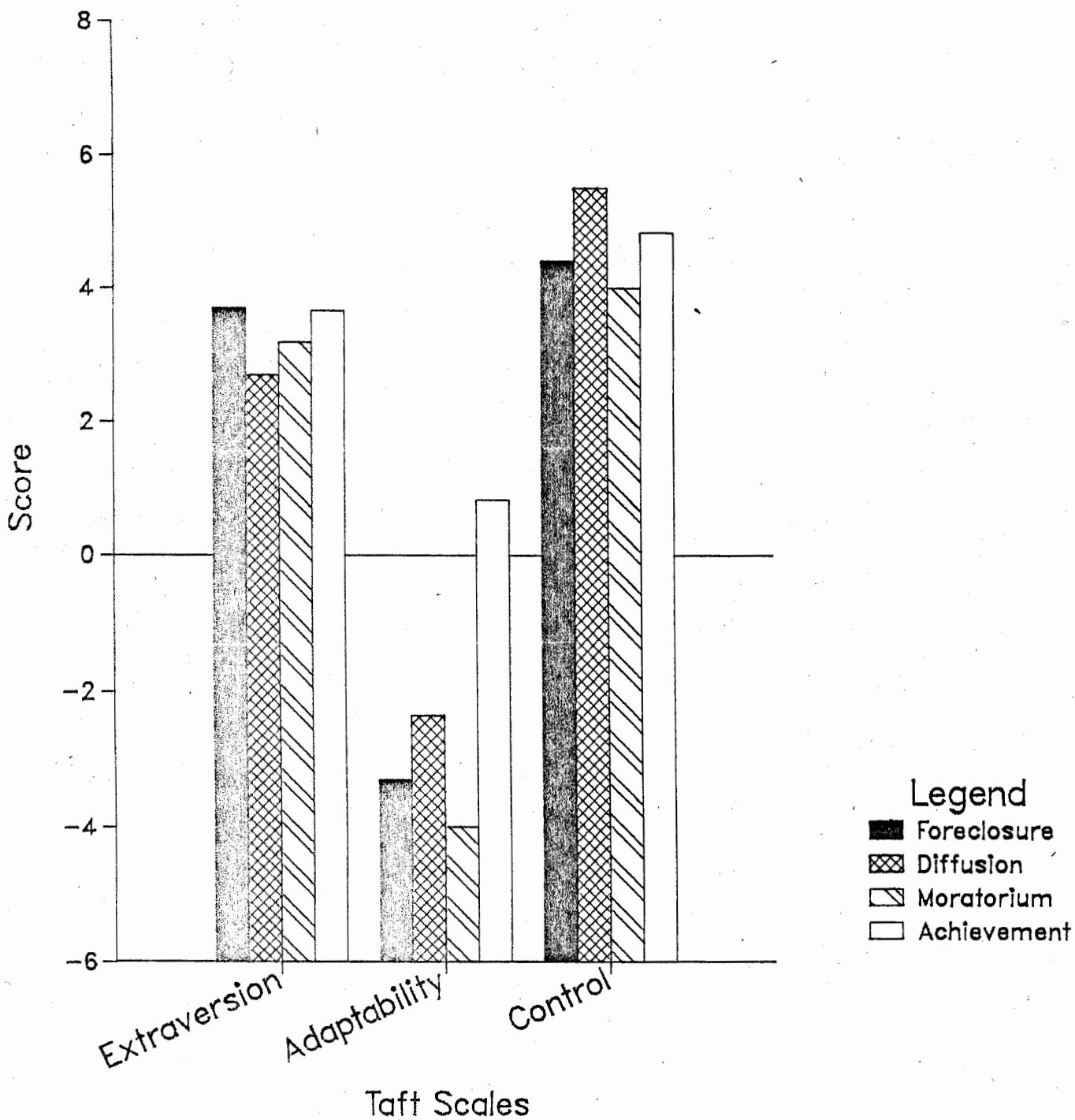


Figure 8: Other scales of the Taft Inventory



## D. Discussion

### Sex differences

Some striking sex differences emerge from these results. The female sample differs from the male sample in level of regressive experience, distribution of subjects across the Identity Statuses, and the relationship between these two variables. These sex differences bear on the interpretation of all other results: they must be considered in some detail before our findings can be meaningfully related to the hypotheses of this study.

It was found that female adolescents score significantly higher on the Taft Ego Permissiveness index than males. This is true for most of the Ego Permissiveness scales: Peak Experiences, Dissociated Experiences, Openness to Inner Experience, and Supernatural Beliefs. Such a difference is consistent with the findings of Taft (1969), who reports females to be significantly higher on the Peak Experiences, Openness to Inner Experience, and Supernatural Beliefs scales.

Taft apparently does not attribute much significance to this finding, making no attempt to explain it. Yet it accords with a finding by White, Ashton, and Brown (1977), who conducted a standardization study of the mental imagery questionnaire developed by Betts and Sheehan: they found that females report

imagery significantly more vivid than that of males. This finding, and that with the Taft Inventory, indicates that females are more disposed to regressive cognition and experience than are males.

There is surprisingly little in the imagery or "altered-state" literature which would explain such a difference. Singer (1975) has suggested that "mothers in our society tend to represent inhibition of impulses and also to foster aesthetic or spiritual interests, while fathers are more likely to represent action tendencies within the family structure and also to be the agents of the external environment. Closer identification with the mother figure would therefore appear particularly likely to be related to fantasy or daydreaming tendencies" (p.57). This view that the female role is more compatible with regressive experience is supported by the finding of Rosenkrantz, Vogel, Bee, Broverman, and Broverman (1968) that stereotypic traits associated with men (by male and female undergraduates) include "logical" and "objective", while women are seen as "religious" and "appreciative of art and literature": generally, men are perceived as rational and outer-directed, while women are irrational and inner-directed. These traits are evocative of the nonrational, inner-directed character of the regressive mode.

It is also useful to consider Erikson's conception of woman as embodying "inner space," receptive and nurturant, while man embodies the projection of ego into the outer environment. The

inner-oriented mode of regressive cognition would thus be more appropriate to the female psyche. An Eriksonian explanation would go beyond socialization patterns and posit that differences in regressive tendency are inherent in the innate psychological structure of men and women. It is not possible to choose between these explanations with the limited data of the present study: it is a finding worth exploring.

More relevant to the hypotheses of this study is the finding that, when the main effect of sex is accounted for, the effect of Identity Status on Taft Ego Permissiveness is rendered nonsignificant. This indicates that sex and Identity Status are confounded in the data: examining the distribution of Status across sex (Figure 3), it is evident that relatively more females fall into the Moratorium, and relatively more males into the Diffusion, categories. Thus, the relationship between Identity Status and Ego Permissiveness cannot be examined without also taking sex differences into account.

When this relationship is considered separately for males and females, it reaches a statistically significant level only in the female sample. One must judge whether the relationship between Identity Status and Ego Permissiveness is essentially different across sex, or whether females show a more pronounced version of a pattern which is also evident in males. The latter interpretation is suggested by the similar ranking of Statuses on Ego Permissiveness for both males and females: Moratorium highest, Achievement lowest, with Foreclosure and Diffusion

between. However, either of these interpretations would be consistent with the data.

Some support for the latter interpretation is found in a closer analysis of male identity formation. Examining males' status in the specific identity areas, it was found that Sex-Role Status is significantly related to Ego Permissiveness. This relationship follows the same order as does the Identity Status/ Ego Permissiveness relationship for females: Moratoriums highest, then Foreclosures, Diffusions, and Achievements. This finding relates intriguingly to other sex differences. The male engaged in identity formation in the area of sex-role is attempting to define himself in terms of "masculine" and "feminine" characteristics. He would be the most experimental in this area, and so would be most open to feminine modes of thought and behaviour. If regressive thought is a feminine mode, then it is consistent that males engaged in sex-role identity formation would be most prone to utilize this mode.

Three main findings emerge from the analysis of sex differences, which are explicable by the posited feminine nature of regressive thought and experience. First, that females are more prone to regression, reporting higher levels of regressive experience. Second, that females show a more pronounced tendency to utilize regression in the service of identity formation, yielding a much stronger relationship between Identity Status and regressive experience than do males. Third, that males show the strongest relationship between Identity Formation and

regression in the area of sex-role identity, suggesting that openness to feminine modes of thought is a crucial variable.

While these results indicate that the relationship between Identity Status and Ego Permissiveness is quantitatively or qualitatively different for males and females, sex differences do not emerge with regard to the specific hypotheses of this study. Identity-Forming (Moratorium) adolescents were compared to Identity-Committed (Foreclosure and Achievement) adolescents on Ego Permissiveness. It was found that engagement in identity formation is associated with increased Ego Permissiveness, independently of those effects attributable to sex differences.

#### Identity formation and regressive experience

The primary hypothesis of this study was that adolescents engaged in identity formation would report more regressive experiences than adolescents not so engaged, i.e. that Moratorium status adolescents would score higher on the Taft Inventory than Foreclosure and Achievement status adolescents.

The results provide support for this hypothesis. Moratorium adolescents are significantly higher on the Ego Permissiveness score than Foreclosure and Achievement adolescents. Moratorium adolescents emerge as more prone to peak experiences, more accepting of "supernatural" events which violate consensual reality, more open to alterations of inner experience, etc.. According to the model developed in this study, such manifestations of archaic modes of thought are indices of

identity synthesis. The adolescent is no "rational scientist," formulating a representation of the outer world through systematic hypothesis-testing, but a "creative artist", utilizing fluid and nonrational modes of thought in the service of identity synthesis. This model of identity formation has received some validation. One can tentatively conclude that identity formation is associated with increased regression, suggesting that regression is utilized in the service of ego identity.

It must be recognized that this result is correlational, thus cannot demonstrate regression to be a mechanism of identity formation: it may be that some third variable influences both regression and identity formation and causes them to be positively correlated. Bearing in mind the inherent limits on correlational findings, the present result provides support to the proposed model of identity formation.

#### Identity formation and hypnosis

The second hypothesis was that identity-forming adolescents would show more regression in a hypnosis situation, i.e. that Moratoriums would score higher on the C.I.S. and the Field Inventory than Foreclosure and Achievement status adolescents.

This hypothesis is not borne out by the data. On neither the C.I.S. nor the Field Inventory do Moratorium adolescents score higher than Foreclosure and Achievement status



adolescents. Analysis of variance does reveal a significant relationship between Identity Status and performance on the Field Inventory. However, it is the Foreclosure group which is highest on this measure, significantly above the other statuses combined, the Achievements, or the Diffusions.

How are we to explain the discrepant results with the two hypotheses? Moratoriums are evidently more disposed to spontaneous regressive experience than other statuses, yet they are not more disposed to regressive experience elicited in hypnosis.

In order to answer this, relationships between the measures were examined. The pattern of covariance indicated that two factors could primarily account for the variance. One links the two hypnosis measures, the C.I.S. and Field Inventory; a second links the C.I.S. and Taft Inventory, cutting across the hypnotic and nonhypnotic domains. This first factor appears to represent response to the hypnotic situation, thus can be labelled as "Hypnotic Response." The second factor fulfills our expectations of the regressive disposition variable, in that it taps level of regressive experience whether in hypnosis (the C.I.S.) or outside hypnosis (the Taft).

A similar pattern of results is reported by Hilgard, Sheehan, Monteiro, and MacDonald (1979). They factor-analyzed scores on standard hypnosis scales, the C.I.S., and an experiential inventory very much like the Taft. They found that two factors account for hypnotic response: the first, "Hypnotic

Responsiveness", links the hypnosis measures, and the second, "Absorption/Imagery", links the hypnosis and experiential measures. Their first seemingly corresponds to the hypnosis-response factor of the present study and their second to the regressive-tendency factor. As in the present study, the C.I.S. loaded significantly on both factors. Comparable solutions have emerged in studies of the relationship between hypnotic and experiential measures carried out by Aas and Lauer (1963) and Lee-Teng (1962). Aas and Lauer found two factors to primarily account for the variance: "psychological changeableness," explained by them as involving the use of primary process thought and which linked hypnosis with experiential items; and "hypnotizability", which linked hypnosis measures. Lee-Teng found the factors of "trance susceptibility", which linked hypnosis with experiential measures and "induction susceptibility", which linked hypnosis measures. A similarity between these studies is apparent. Two factors emerge : one which relates hypnotic and experiential measures, and one associated with hypnosis measures only.

This result is consistent with the suggestion advanced above, that hypnosis constitutes a rather complex and ambiguous operationalization of regression, in that it involves both the general tendency towards regression and the tendency to be influenced by the hypnotic situation. The latter tendency is a consistently observable characteristic of individuals, who vary reliably in the extent to which their responses can be elicited

by hypnosis, whether these responses involve cognitive/experiential regression, amnesia, behavioural obedience, or sleep (Hilgard, 1965). The disposition to be influenced by the hypnotic situation is separate from the disposition to undergo regression.

Within this interpretation, the Taft Ego Permissiveness index would reflect primarily a regressive-tendency variable, the disposition to experience regressive shifts. The Field Inventory would reflect primarily the disposition to be influenced by the hypnotic situation, whether towards regression or other types of response. The C.I.S. would reflect both of these variables.

The elevation of Foreclosures becomes sensible in the light of this interpretation. It has been shown in several studies that Foreclosures are the most authoritarian of the statuses (Matteson, 1974; Schenkel and Marcia, 1972; Marcia and Friedman, 1970; Marcia, 1966, 1967). Thus, it is predictable that they would be extremely acquiescent to a hypnotist. Furthermore, Foreclosures have been shown to be highly responsive to experimental demands. On the Milgram task, they were the most obedient to requests to repeat an electric shock procedure: "only Foreclosure subjects showed a significant willingness to again deliver maximum shock... In fact, all of the Foreclosure subjects who administered maximum voltage said that they were willing to repeat, identically, their performance" (Marcia, 1976, p.65). Thus, it can be argued that Foreclosures score

relatively highly on the Field Inventory because it taps their disposition to respond in an acquiescent manner to the explicit or implicit demands of the hypnotic situation.

In summary, the following picture of Identity Status performance on the dependent measures has been developed. The Taft Inventory taps the general disposition to regressive experience, thus yields higher Ego Permissiveness scores for the Moratorium group who utilize regression in the service of ego-identity formation. The Field Inventory taps the disposition to be influenced by the hypnotic situation, and thus yields higher scores for the Foreclosure group, who are most influenced by the demands of experimental situations. The C.I.S. taps both of these variables, thus yields no significant differences between the groups, as these variables tend to cancel each other out in their effect on the Identity Status groups.

#### The Achievement and Diffusion statuses

A third hypothesis was that the Achievement group would be more open to regressive experiences than the Foreclosure group. This hypothesis is not supported by the data. The Achievement group is lowest on all three measures, and significantly below the Foreclosures on the Field Inventory. While the small absolute number of Achievements in this sample (six) renders any conclusions about them rather tenuous, this finding does suggest that identity-achieved adolescents are no more flexible or open

to change than foreclosed adolescents. This accords with the finding of Slugoski (1982) that Achievements are less cognitively flexible than Moratoriums, and no more flexible than Foreclosures. He proposed that Achievements may lose the flexibility gained during identity formation as they work to maintain and strengthen their new commitments. Like the Foreclosure, the Achievement has commitments to defend and therefore will be as resistant to change. The difference between these statuses appears on the Field Inventory, where the Achievement group shows less disposition to be influenced by the hypnotic situation. This is consistent with the newfound autonomy and independence which should accompany the achievement of identity.

The Achievement group scores most highly on the Controlled Adaptability scale of the Taft, which is not one of the regression scales of prime interest in this study. No hypothesis had been made for the relative performance of Statuses on this scale. The elevation of Achievements on this scale seems appropriate, given Taft's characterization of this scale: "it measures qualities associated with maturity, competence, humanism, and stability." One would certainly expect a measure which taps maturity and competence to yield higher scores for the Identity Achievements, the most mature and "integrated" of the statuses.

The Diffusion group fall below the Moratoriums and Foreclosures, and above the Achievements on all measures. They

are significantly less disposed to regression than the Moratorium group (arguing against the extreme openness to regression suggested earlier). They are also less disposed to hypnotic influence than the Foreclosures; otherwise, the Diffusion group shows no significant difference from the other statuses.

### Active versus passive regression

It was asked whether the Moratorium adolescent is more "seeking" of regressive experiences than other statuses. The higher level of regression could be due to an active and deliberate pursuit of regressive experience through drug use, self-hypnosis, meditation, etc. Some evidence presented earlier suggested that Moratoriums were more disposed toward drug use (Dufresne and Cross, 1972). Alternately, increased regression in the Moratorium may be "passive," mediated by psychological mechanisms outside of conscious awareness. Erikson has repeatedly stressed that the strivings and goals of each stage are operative at an unconscious level. Thus, utilization of regression in the service of ego identity could be effected at an unconscious level in accordance with the adaptive requirements of the stage.

It was found that identity-forming Moratorium adolescents are significantly higher on a Regression-Seeking index than the identity-committed Foreclosure and Achievement adolescents. This suggests that increased regression in the identity-forming

adolescent is at least partly conscious and deliberate. Rather than a passive vehicle for regressive process, the identity-forming adolescent seeks and values regressive experience.

### Implications of the study

The role of regressive mental processes in the formation of ego-identity deserves further investigation. One might inquire whether identity-forming adolescents report more vivid or frequent imagery than others, which one would predict from the imagistic nature of the regressive mode. There may also be an increase in creative ability during identity formation, assuming that increased regression could be placed in the service of creative expression as well as identity synthesis.

The use of psychoactive drugs takes on a new significance: such drug use may facilitate the identity formation by fostering regression, rather than merely provide an escape from "real" issues. In fact, one might focus attention on those adolescents who "escape" into the external world, using social or recreational activities to avoid internal conflict.

One might also inquire into the role of religious practices in the identity formation process. Such practices as meditation or group prayer seem to foster a regressive shift from the rational mode to one with nonrational and symbolic qualities. Do these practices facilitate identity formation? It is a question worth exploring.

The study of identity formation in adolescence might shed light on the nature of change in psychological structure, e.g. in psychotherapy. If regressive mental processes do play a role in the formation of identity structure, as the present results suggest, then they may play an equal role in further transformations of that structure. It may be that psychotherapy is effective insofar as it provides a safe and permissive environment for regression. Within the secure confines of the therapeutic situation, a temporary reduction in reality-testing becomes possible. Significant changes in identity brought about by psychotherapy would then depend on the elicitation of regression. One would wish to know whether therapeutic changes are accompanied, or preceded, by increases in regressive phenomena. Also, to what extent do therapeutic procedures involve the facilitation of regression as a crucial component (eg. relaxation training in behavioural methods; free-association in psychodynamic methods; etc.).

A model of therapeutic regression is provided by Carl Jung. This model has been articulated by Ellenberger (1970) as follows:

Whenever individuation comes to a halt, regression followed by progression will give it a new impulse. This is exactly the principle of therapeutic individuation. Through dream analysis, active imagination, or painting or drawing of unconscious fantasies, the patient will be able to regress and start his journey through the unconscious (p. 712).

Changes in identity during later phases of the life span could be analyzed in terms similar to those applied to



adolescent changes. Dramatic changes in lifestyle (such as divorce) can threaten the achieved identity to such an extent that a renewed identity crisis can emerge. Assuming that the same mechanisms of identity synthesis come into play as during adolescence, one would expect an increase in regression during these later phases as well.

Finally, there are implications with regard to the manner in which adolescent regression is perceived. The regressive interludes examined in this study are not distressing instances of pathological regression, but positive experiences in which the ego maintains its essential contact with reality. Withdrawal from external reality is effected in a controlled, partial, and temporary manner, versus the uncontrolled and extreme withdrawal of a psychotic interlude. This point is crucial, because to confuse adaptive with maladaptive regression would be a rather easy and potentially disastrous error: the adolescent with a relatively intense process of identity formation would be liable to diagnosis as one suffering from psychotic-like interludes. Perusal of the Taft items shows how this could happen; many of the experiential phenomena depart considerably from the range of usual experience.

## Conclusion

Adaptive regression is a concept which marks a radical re-evaluation of traditional psychoanalytic views: a style of thought which had been relegated to a minor role in the cognitive apparatus, one construed as childish and primitive, is raised by Hartmann, Kris, and other ego-analytic theorists to a new importance. In their analyses, the capacity for controlled regression becomes a valuable ability of the psychologically-healthy individual. The present study has applied this concept to a new domain, that of identity formation. It has been argued, and supportive evidence advanced, that the regressive mode of function is important not just to the creative artist or the hypnotic subject, but to the maturing adolescent.

It is my view that the adaptive regression concept constitutes a significant advance over the traditional Freudian approach, which overvalued rational (secondary process) thought. To restore the nonrational mode of thought to a central importance in psychological function is to assert the distinction between a necessarily rational and an unnecessarily rationalistic psychology.

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