

THE OKLAHOMA PERSONAL STYLE INVENTORY: A  
MEASURE OF CONSTRUCT VALIDATION

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## CHAPTER I

### INTRODUCTION

As the study of human adaptation has evolved within psychology, there has become a growing concern and focus on the exact nature of individual-environmental interaction processes. In the recent past there can be seen a shifting from static, classificatory explanations of human behavior and psychopathology to more dynamic, non-linear explanations. Perhaps one of the more recent attempts at this non-static approach toward viewing human adaptation comes from the area of General Systems Theory (Freeman, 1974; Miller, 1960; Von Bertalanffy, 1966; Fromme, unpublished manuscript). The purpose of the present study is to continue in this effort, and more specifically, to introduce a classification system of human adaptation that relies heavily upon General Systems Theory.

Within the field of psychology, many attempts have been made at describing, classifying, and understanding the process of human adjustment and maladjustment. In the past, many such attempts have tended to ignore the interactional processes between person and environment. Menninger (1963), in speaking to this apparent deficiency in theory, suggested that healthy adjustment is a result of a continuous internal and external adaptation to continuously changing internal and external conditions. By effectively adapting to these internal and external conditions, Menninger feels that a "balance" or equilibrium



state can be maintained. According to numerous other systems theorists, each individual is in constant interchange with both the internal and external environments.

As opposed to these interaction theories, so called "trait theories", offer more static explanations of behavior, oftentimes ignoring environmental changes and demands. The present classification system assumes that adjustive demands from the environment, as well as internal demands, must be dealt with in some fashion. In viewing human coping processes within a systems theory framework, it becomes possible to then explain the variability of responses to adjustive demands. This added dimension of flexibility of conceptualization should allow for a much greater understanding into the nature of human adaptation and coping.

To briefly examine the term General Systems Theory is of importance here. Miller (1978) has suggested that all living organisms (systems) are in fact a result of interactions between the various component sub-systems which comprise the entire system. He further suggests that there is a constant exchange of various forms of matter, energy, and information which combine to allow for a homeostatic balance within the system. An individual's well-being would be dependent upon how effective s/he is in the process of information, matter, and energy exchange.

This process is certainly a function of how much exchange occurs between the individual and the environment. Critical to this exchange process, and consequently the present study, is that of "boundary" processes. Miller has described this process as a separate sub-system at the perimeter of a system that holds together the various components of that system. Additionally, the boundary serves to protect the

system from environmental stresses and demands, and excludes or permits entry to various sorts of matter-energy and information. In general, it appears that the boundary process is a key factor in the overall adaptability of the system.

Three basic "systemic" strategies have been postulated by Fromme (unpublished manuscript), which are available to the individual at any one time. These strategies include Assimilation, Accommodation and Conservatism. These adaptation strategies are based on the notion that there exists some type of "boundary" process, separating the individual from the environment. These boundary processes allow for a certain degree of regulation over external "inputs", as well as for regulation of "outputs". Through the successful utilization of these strategies, the individual gains the ability to control and predict outcomes across a wide range of situations.

"Assimilation" strategies involve the modification of impending inputs prior to their incorporation into a system. The reader may recall where it became necessary to alter the environment so as to make a certain event or situation more tolerable. The diligent student invariably prepares for each new semester. The student may buy books, enroll in classes, and become familiar with each new classroom well before the beginning of the semester. Through actively manipulating his environment the student makes each new semester a relatively more manageable and stress free situation. Assimilation may then be characterized as a strategy whereby external demands are altered prior to their acceptance or incorporation.

"Accommodation" strategies involve the constant modifications of internal systemic structure (e.g. values, beliefs, attitudes, and

behavior) to meet the adjustive demand. In this case, systemic boundaries are rather porous, allowing a good deal of the environmental demand to impact upon this system. Rather than attempt to alter adjustive demands, the accommodative individual will alter himself to the demand. One might consider entering a new job, whereby it becomes necessary to adopt the rules and regulations of the new job. The new employee who attempts to change or alter the new set of rules (assimilation) may run into considerable difficulty given that he has just been hired. On the other hand, one who relies upon accommodative strategies only might find that there are simply too many external demands, and at some point a strengthening of boundaries is desirable. There does seem to be some optimal level of accommodation that allows for effective adaptation, just as is seen with the other two systemic strategies.

Keeping the notion of system boundaries in mind, we come to the final strategy, that of "Conservation". Conservation strategies involve the strengthening or "sealing" of systemic boundaries in an effort to conserve the existing structure of the system. We see many examples today where individuals prefer to cling to tradition or beliefs that have been passed down through the years as opposed to adopting new ideas. The preservation of stereotypes and prejudices may be accounted for by these conservative strategies. At the same time however, a certain degree of conservation seems desirable and allows us to retain those positive aspects of the past that otherwise might be forgotten or lost. The value of retaining our cultural heritage, for example, seems essential, and in this sense conservation seems highly desirable.

Similar boundary processes have been used to describe cultural interactions (Reisman, 1950). Reisman describes various social systems as using three strategies, depending on the stage of maturity of that social system. Societies experiencing a high birth rate and high death rate (Limited Growth, but High Growth Potential) may appear to be unchanging in social practices. During periods of limited growth, social systems appear involved in conservative strategies since the opportunity for growth is limited. These "tradition-directed" societies are stable in social practices whereby conformity to tradition is emphasized. In an effort to reduce disturbing influences, the tradition-directed society is involved in the constant scanning of internal systemic elements that may present a threat to the organization of the whole system. External threat or disturbance is dealt with through a sealing of systemic boundaries. A variety of political decisions can be made in efforts to avoid threat to the social system, either internal or external. Vigilant policing often occurs whereby individuals who hold non-traditional beliefs are labeled as dissident. Additionally, public relations with other outside countries may be avoided in an effort to fend off various outside influences. Withdrawal then serves to limit the potential for inputs, which decreases the need for social change or adaptation. In this sense, tradition-directed societies are hampered by their inability to accommodate or assimilate to a changing environment. Similar to an over-reliance on any single systemic strategy, an over-reliance on tradition-directed strategies often result in a disorganization of the system itself.

According to Reisman, as the birth rate begins to exceed the death rate, a given culture enters a period of "Transitional Growth".

Associated with this Transitional Growth is the "inner-directed" strategy. As more resources are required, the social system must begin to interact with other social systems, which may be in a position to trade or sell their resources. An active effort is employed to open relations with other systems, which generally involves socio-political activity. The inner-directed society then spends a good deal of time and energy in an attempt to arrange and coordinate the environment so as to meet internal demands of growth. The inner-directed society is often described as being self-determined and autonomous, a description which is similar to that of the assimilative individual.

Reisman further proposes that as assimilation of growth elements is no longer necessary, the emphasis of a social system changes from that of production to that of consumption. In these periods of surplus, the interaction between society and environment is characterized as being autoplasic in nature. Since assimilative practices are no longer necessary, this social system begins to assume a more flexible approach in dealing with the outside. Accommodation of new ideas, values, and beliefs becomes the general rule. There is no longer a need to conserve tradition nor is there a need for continued growth. This "other-directed" society begins concentrating on scientific and/or artistic endeavors, taking advantage of advances made by other outside systems. Additionally, the other-directed society may find itself accommodating to the needs of other countries. Political activity may be focused in the areas of economic aid to the needy, both domestically and internationally.

While Reisman's classification system closely parallels the classification system being offered here, other researchers have

provided similar ideas about the nature of interactional processes. Jean Piaget has provided similar notions in his research in the area of child development. Piaget (1967), states that the individual is constantly regulating his life so as to maintain physical and mental states within certain limits. He describes homeostatis as a balance that the organism maintains within itself during the process of living and as environmental influences affect its internal conditions. Since this balance is continually upset, he terms it a "dynamic equilibrium". In order to maintain this dynamic equilibrium, interactional processes involve the utilization of two cognitive process, "assimilation" and "accommodation". Parallel to the present notion of assimilation, Piaget states that assimilation involves the taking in from the environment that which the organism can deal with, while accommodation involves an actual change in the organism to fit external circumstances. In terms of the individual Piaget states that assimilation involves the incorporation of new experiences into existing "schemas". Here, a schema is thought of as a pattern of action or thought. The child who has a furry toy kitten refers to it as "kitty". When given a furry puppy, the child calls it kitty too, assimilating the puppy to an existing schema. A new "Hot Wheels" toy requires accommodation since it is too different to be assimilated into already existing schemas. Hence, the child accommodates by changing and organizing existing schemas to form a schema for dealing with the Hot Wheels. Piaget's system of looking at adaptation closely parallels the present classification notions of assimilation and accommodation and was influential in the terminology used in this study.

The present postulate suggests that the individual will employ conservative, assimilative, and accommodative strategies in an attempt to effectively deal with his/her environment. According to Fromme (unpublished manuscript), these systemic strategies represent the three primary modes of coping and adapting that are available to the individual. When faced with a changing internal or external environment (adjustive demand, threat, novelty, imposition, etc.), an individual may either attempt to ignore or deny the change, (conservative strategy), attempt to alter the change (assimilative strategy), or accommodate to the change (accommodative strategy). It is further postulated that the Oklahoma Personal Style Inventory will provide a good measure of these three adaptive strategies. This instrument relies heavily upon General Systems Theory and the notion that all systems are self-regulating and strive for some type of balance or equilibrium. Through effective utilization of each of the three adaptive strategies it is suggested that an individual can enjoy a relatively stress free, well adjusted, and happy way of being. The Oklahoma Personal Style Inventory then is intended to differentiate and measure the various systemic processes which are available to an individual, and which are responsible for effective coping and adaptation.

The present dissertation serves as a third and final phase in the development of the Oklahoma Personal Style Inventory. Phases One and Two constituted item generation/selection and instrument reliability processes respectively. Phase Three is a continuation of the instrument development, and more specifically constitutes the validation portion of this project.

## CHAPTER II

### LITERATURE REVIEW

A comprehensive understanding of the interactional processes involved between man and his environment has long been sought in the area of psychology, as well as in other related fields. Miller (1955), in his General Behavioral Systems Theory, proposed that the most significant fact about living systems is that they are "open" systems. As such, all human activity may be conceived as an exchange of energy within a living system, or from one system to another. According to Miller, each system except the largest of all, the universe, has an environment with which it must interact in order to meet its requirements or needs.

Angyal (1941) pictured the living system as being open to the environment, constantly taking in material from the environment and transforming it into a functioning part of itself. He used the systems concept to emphasize the fact that humans are constantly striving to acquire more skills and knowledge about their environment so as to be able to function more effectively. Here, the terms mastery, coping, and adjustment can be viewed synonymously, as each reflects some process of stress reduction. It is thought that the more effective one is at acquiring information and skills required in dealing with their environment, the less stress they will experience.



Many researchers have suggested that man is common to other living systems or organisms in that man is constantly striving for stress or tension reduction. That is, there is a continual effort to achieve a "steady state" or homeostasis. Von Bertalanffy (1966) has described this steady state as being non-static. He views the various sub-components of a living system as parts which are in constant flux or change. He further suggests that a state of complete rest is never reached by any living system, but that this steady state or equilibrium is constantly being strived for. This seems to explain the concept of growth or actualization which is so often used in contemporary psychology.

Menninger (1963) has addressed this issue by suggesting that there is a "vital balance" which an individual strives to maintain. This is a balance between those growth activities which tend to increase tension or stress and those growth activities which strive toward homeostasis. Self-integration in this context is seen as involving methods of "self-regulation and the proper maintenance of the vital balance". Menninger has suggested that one of the ego's functions is that of regulation. It follows then that if there exist deficiencies or weaknesses in the self-regulating properties of the ego, a vital balance will be difficult to maintain. Menninger has attempted to describe mental illness within this context.

Other theorists have also attempted to gain a better understanding of psychopathology by incorporating systems theory in their thinking.

Marmon and Mindlin (1950) presented one of the earliest propositions reflecting an open-system approach to the problems of neurosis and psychosis. These researchers conceived of these disorders as different points on a continuous spectrum of interaction between the individual and his "field". They describe the cause of mental illness in non-linear, non-causal terms, but rather as an expression of a dynamic relationship between the individual and his environment at a particular point in time and space. These authors further suggest that mental health and the various deviations thereof are but expressions of varying quantitative aspects of this relationship which at certain crucial levels result in qualitative changes. Marmon and Mindlin argued against the notion of "endogenous" mental illness in that they viewed all behavior to be the result of an interaction between the nature of the individual and the nature of his environment.

These researchers argued that traditional psychology and psychiatry perpetuate the faulty understanding of the psychoanalytic formulation that mental illness arises out of conflict between the ego and id, or between the ego and superego.

This is due to the mistaken conception that these designated aspects of personality are intrinsic within the individual, and bear no relationship to the environment. Actually, of course, only the id represents the reservoir of biological impulses, and even the strength of id impulses can be affected by such environmental influences as stimulation, fatigue, disease, and physical castration. But the ego and superego are always resultants of interaction with environmental influences. Thus, no conflict which includes one or the other of them (as every conflict must) can be said to be independent of environmental influences (p. 304).

Various theorists of psychodynamic persuasion have incorporated systems theory in their thinking. Norma Haan (1977) in a rather elaborate model has attempted to reconcile the Freudian and Piagetian views of

personality. While Haan does not specifically refer to systems theory, many of her postulates do reflect a view of man as being non-static and "self-regulating". Indeed, Haan suggests that Freud's concept of ego is restrictive in the sense that ego defenses are reactive and static. Here, the ego is seen as never being completely free from the drives of the id and the "tyranny" of the superego. Haan feels this view is restrictive in that it does not describe or allow for an understanding of non-defensive ego functioning. On the other hand, Haan sees Piaget as being more concerned with constuctivistic organization, including intellective and rational processes. Haan suggests that the Freudian system is oversold on the importance and omnipresence of defenses and pathological functioning. She further argues that the Piagetian system is oversold on the omnipresence of rationality and undersold on the conscious or unconscious willingness of people to twist, bend, and forego rationality in an effort to preserve a sense of self-integration (Haan, 1977).

In reconciling these differences, Haan has postulated a model whereby the ego is said to be both a vehicle for development in assimilative and accommodative functions and a reactive, defensive, and self-preserving entity. Haan suggests that under "normative" circumstances an individual's assimilative and accommodative functions are activated, leading to organized planning and growth. Under "non-normative" circumstances, or situations which threaten the integrity of the individual, defensive functioning is activated which then serves to preserve a sense of self-integrity. Often this defensive functioning serves in the prevention of subjective chaos that might debilitate the

individual. Psychopathology is then viewed by Haan as the individual's attempt to maintain self-integrity through chronic defensive functioning.

Empirically, we find that numerous attempts have been made at identifying and classifying the interactional processes involved between the individual and his/her environment. One such attempt is that of Rotter (1966) in his research on Locus of Control of Reinforcement. Rotter suggests that various behavioral correlates are associated with the degree to which an individual perceives the reinforcement of his/her behavior as being contingent on the behavior itself, or under the control of powerful others, fate, luck or chance. Those individuals who believe that reinforcements are contingent upon their own behavior are described as having an "internal locus of control". Those individuals who feel that reinforcements are not under their personal control, but instead are under the control of powerful others, luck, fate or chance, have been described as having an "external locus of control". It can be seen how one with an internal locus of control might be more self-directed and autonomous as s/he feels that powerful others, chance, luck or fate have little to do with outcomes. This individual might very well utilize assimilative strategies in his/her interaction with the environment. On the other hand, one with an external locus of control could be more "open" or accommodating to environmental change and demand, and would likely use accommodative strategies in dealing with the environment. The external mode of control might also be in the form of tradition or dogmatism whereby the individual utilizes a conservative strategy.

Rotter (1966) speaks of Reisman's attempt to describe an apparently similar distinction.

Reisman's conception is based on the degree to which people are controlled by internal goals, desires, etc., versus the degree to which they are controlled by external forces, in particular, social forces or conformity forces. Although this variable may bear some relationship to the one under investigation, it should be made clear that the apparent relationship is not as logical as it appears. Reisman has been concerned with whether the individual is controlled from within or without. We are concerned, however, not with this variable at all, but only with the question of whether or not an individual believes that his own behavior, skills or internal dispositions determine what reinforcement he receives (p. 4).

Despite Rotter's position on internality and externality, it should be noted that various behavioral correlates can be found in his internal and external individuals and Reisman's "inner-directed" and "other-directed" individuals. As mentioned earlier, these correlates may also be found in examining the I/E dimension and the present assimilative and accommodative systemic strategies.

In examining research in the area of conformity and resistance to social influence, we see that locus of control expectancies might be predictive of responses to other forms of social influence. In a verbal conditioning experiment, Strickland (1970), by head nod and subtle verbal cues, attempted to influence subjects by reinforcing a desired verbal response, namely verbs. During the acquisition trials, internal subjects, as measured by Rotter's I/E scale, denied being influenced, and during extinction, when the experimenter was no longer reinforcing verbs, were more likely to give verb responses in an almost oppositional manner. Externals, on the other hand, were more influenced by these subtle cues during the acquisition phase as well as being more susceptible to the extinction period.

Gore (1962) showed TAT cards to subjects and tried to influence the length of the stories through subtle and covert cues. He found

that those individuals scoring low on Rotter's I/E scale (Internal Locus of Control) actually shortened stories to the subtly reinforced cards in an apparent reluctance to allow themselves to be manipulated or controlled by the experimenter.

Generally, with regard to social influence, the bulk of the I/E research does support the idea that internals appear to be less influenced by social demands when they perceive themselves as being subtly manipulated (Strickland, 1978).

Research in the area of task performance again suggests that certain behavioral correlates exist between Rotter's I/E dimension and the postulated systemic strategies. It was found that in contrast to externals, internals take more time to deliberate about decisions in difficult, skill-demanding, or intellectual tasks (Gozali, Cleary, Walster, & Gozali, 1973; Julian & Katz, 1968; Lefcourt, Lewis, & Silverman, 1968; Rotter & Mulray, 1965), and appear to value success more in difficult tasks as well as being more dissatisfied after failure in easy tasks (Karabenick, 1972). Pines and Julian (1972) found internals in problem-solving situations to be particularly oriented toward gathering and processing information while externals seemed more concerned with the social requirements and doing what was expected of them in the experimental situation. The tendency for internals to rely primarily on their own abilities and interpretations of the task demand suggests a more inner-directed or assimilative approach to problem solving. The tendency for externals to become distracted by social influences suggests a more other-directedness whereby these individuals appear to accommodate more readily to outside stimuli.

Research in the area of belief systems points to individual differences in the degree to which one's belief system is "open" or "closed" (Rokeach, 1960). Rokeach's work in the area of dogmatism suggests that those individuals identified as "High Dogmatics" (HD) tend to hold beliefs that the world is a threatening place. HD individuals view authority as absolute. Hence, others are accepted or rejected according to their agreement or disagreement with authority. In dealing with their environment, HDs tend to cling to a closed belief system. The need to ward off threatening aspects of reality, particularly opposing beliefs is evident. Parallels between the HD and conservative systemic strategies are apparent here. The inability to accommodate new ideas or beliefs as well as an overall clinging to tradition is characteristic of the conservative individual. Vacchiano, Strauss, and Schiffman (1968), utilizing several diverse personality tests (Edwards Personal Preference Schedule, Tennessee Self-Concept Scale, and the 16PF), identified personality traits which "logically" related to the dogmatic person. Much like Reisman's tradition-directed style and the postulated conservative strategy, the HD is described as becoming frustrated by changeable conditions. Avoidance of change in the immediate environment characterizes the HD's interactional style. HDs were also described as submissive and conforming toward authority in addition to being respectful of established ideas.

In contrast to the accommodative individual, the person utilizing a conservative approach is less likely to be swayed or influenced by the majority of social-situational factors. It must be pointed out here that both the conservative and accommodative strategies are reliant upon external influences. The conservative individual is externally controlled

in the sense that s/he relies upon and accepts the "tried and true", regardless of the inconsistencies that may be involved. Ironically, s/he may be cautious about accepting new attitudes or ideas, while at the same time accepting attitudes and beliefs that have been passed down through the generations, regardless of their present efficacy.

Rotter's construct of Locus of Control provides useful information in regard to individual-environmental interaction processes. While the I/E construct continues to be used in its original form, several investigators (Gurin, Gurin, Lao, & Beattie, 1969) have presented empirical evidence indicating that the I/E scale is not unidimensional, but rather that it can be broken down into more than two factors. Gurin et al. (1969), through a factor analytic technique, proposed categories for these factors: 1) felt mastery over one's own personal life; 2) expectancies of control over political institutions; and 3) one's belief about the role of internal and external forces in society in general. Much of the I/E research has assumed that a belief in external control in general, as presented in many of Rotter's original items, implies that the respondent interacts with his/her environment in an externally controlled manner. In the original I/E scale the distinction between items which refer explicitly to the respondents own life situation and those tapping beliefs about what causes success or failure in general has not been made clear. Many researchers have arrived at conflicting results with the use of the original scale. For example, Gore and Rotter (1963) found that Negro youths who engaged in social protest action held more internal control expectancies than their less active peers. Results from the Gurin et al. (1969) study, however, have indicated that the Negroes who were willing to participate in the protest behavior scored lowest in



internal control. This kind of inconsistency has resulted in more attempts at obtaining a clearer conceptualization of the I/E scale.

Levenson (1974) has hypothesized that externals may be classified as to whether they perceive fate, chance, or powerful others to be in control of events. Levenson constructed three new scales in an attempt to measure these varying expectancies. Results of her study support the notion that people who believe that the world is unordered (chance) behave and think differently from people who believe the world is ordered but that powerful others are in control. In the latter case a potential for control exists. It appears that these two orientations are tapping quite different beliefs and therefore should not be grouped together under the heading of external control (Levenson, 1974).

Rotter's construct of Locus of Control, although having the inherent problems mentioned above, does provide useful information in regard to individual-environmental interaction processes. This inner-outer dichotomy has been described by other researchers as well.

Witkins's notion of psychological differentiation (Witkin, 1962), similar to Rotter's construct, is a means for conceptualizing psychological functioning and its relationship to behavioral patterns. The concept of psychological differentiation proposes that individuals differ in their ability to perceive themselves and their environment in either a global or an analytical fashion. Psychological differentiation, as measured by the Rod and Frame Test or the Embedded Figures Test, identifies a person's ability to attend to a focal stimuli in the presence of irrelevant but distracting stimuli. A person who can accomplish these tasks with relative ease is called field-independent (FI). One who is easily distracted by the surrounding field and

therefore has considerable difficulty in attending to the focal stimuli is said to be field-dependent (FD). FD persons respond to their environment in a global, relatively undifferentiated manner, and thus tend to be unaware of subtle variations in their environment. FI individuals respond analytically to their environment and thus tend to both be aware of and to organize subtle environmental variations (Grunfeld & Abuthnot, 1969).

Many researchers in this area of study tend to support Witkin's findings that FD persons are affectionate, considerate, and tend to agree with the opinion of others. FDs favor occupations which involve contact with other people and which are popular with their peers (Witkin, 1962). Much like the hypothesized accommodator, the FD person tends to be more concerned over securing the good opinion of others. In contrast, the FI person tends to be more ambitious, persevering, demanding, manipulative of people, self-reliant, and inner-directed (Grunfeld & Abuthnot, 1969). As formulated by Reisman (1950), inner-directedness is characterized by a need for work oriented values such as efficiency, competence, excellence, and social independence. Bell (1955) developed an attitude scale to measure inner-directedness/other directedness; her hypothesis that FD subjects would tend to be higher in other-directedness was confirmed ( $r=.49$ ). These studies help solidify the apparent similarity between the field-dependence/independence notion and the concept of Reisman's inner-other directedness. It seems that both inner-directed individuals and FI persons are less concerned with social cues, norms, and expectations. These individuals seem to be looking at ways in which they might influence their environment rather than how the environment is influencing them. On the other

hand, FD persons and other-directed individuals seem to show a hypersensitivity to what's on the outside, and how they might better "mesh" with the environment. The present postulate suggests that these differences can be explained by looking at boundary processes. Hypersensitivity to external cues would suggest more open or porous boundary processes, whereas the ability to ignore insignificant external cues would suggest more control over boundary processes. This is one distinction being made between accommodative and assimilative systemic strategies.

As mentioned previously, the FD person is seen as being considerably more open to outside stimuli and more sensitive to the opinion of others than is his counterpart, the FI individual. This sensitivity or accommodation to outside stimuli, particularly in interpersonal relationships has long been the focus of many research endeavors (Snyder, 1974; Lippa, 1978; Davitz, 1964).

Snyder (1974) proposed that individuals differ in the extent to which they "monitor" (observe and control) their expressive behavior and self-presentation. Out of a concern for social appropriateness, the high "self-monitor" is quite sensitive to the expression and self-presentation of others, and uses this as feedback for monitoring and managing his own self-presentation and expressive behavior. Such self-management requires a repertoire of face-saving devices, an awareness of the interpretations which others place on one's acts, and a desire to use this repertoire of impression management tactics or strategies (Snyder, 1974). We can see that an acute sensitivity to various cues in a given situation which indicate what kind of self-presentation is appropriate and what is not, is a corollary ability of self-monitoring.

In contrast to the high self-monitor, as measured by Snyder's Self-Monitoring Scale, the low self-monitor may not be so concerned with the impressions he makes on others. Rather, their self-presentation and expressive behavior seems to be controlled from within, from internal states, rather than by situational and interpersonal specifications of appropriateness.

Similar to the construct of field dependence/independence, the construct of self-monitoring seems to parallel the postulated notions of accommodation and assimilation. It is assumed that the high self-monitor would be required to be more accommodative to external social cues, whereas these social cues may not be as important to the low self-monitor. Low self-monitors may show a higher degree of inner-directedness as opposed to the high self-monitor. While Snyder's construct may focus on impression management, the processes involved in these forms of impression management closely resemble the proposed systemic strategies of assimilation and accommodation.

While the above discussion has focused primarily upon personality factors, it seems important to include some mention of factors relating to cognitive and intellectual functioning. The contemporary view among psychologists researching in this area is the notion that general intelligence is composed of a relatively broad or multiple group of factors (Anastasi, 1978).

Perhaps one of the more well accepted of the multiple trait theorists is J.P. Guilford. Based upon more than two decades of factor analytic research, Guilford has proposed his Structure-of-Intellect (SI) model in which intellectual traits are classified along three dimensions (Guilford, 1967). Operations refer to what an individual (respondent)

does. This includes cognitions, memory, divergent productions (prominent in creative activity), convergent production, and evaluation. The second dimension, contents, refers to the nature of the materials or information on which operations are performed. These would include figural, symbolic (letters and numbers), semantic (words), and behavioral (information about other persons' behavior, attitudes, needs, etc.). The final dimension suggested by Guilford is that of products. This refers to the form in which information is processed by a particular respondent. Products, according to Guilford are classified into units, classes, relations, systems, transformations, and implications.

There are 120 cells in the SI model where each cell represents at least one factor or ability. Each factor is described in terms of all three dimensions. For example, the factor verbal comprehension would correspond to cognition of semantic units, and is best measured by vocabulary tests. A memory span (digit span) test would require accessing memory for symbolic units. It can be seen that most intellectual functions (traits) can be accounted for in the SI model, and classified along the dimensions operations, contents, and products.

For the purposes of the current validity study it seems important to gain a clearer understanding into the cognitive/intellectual differences represented by each of the three postulated systemic strategies. Of particular interest here is the distinction between convergent and divergent thinking. Guilford proposes that convergent thinking leads to a single correct solution determined by given facts. Divergent thinking, on the other hand, is the kind of thinking that goes off in different directions. Hence, divergent thinking is less

restrictive, permitting changes of direction in problem-solving and leads to a diversity of solutions. The ability to utilize divergent thinking across a variety of coping situations seems important in one's overall adaptation. It is suggested that there are differences in this type of thinking among the proposed systemic strategies. While convergent thinking requires the ability to make an inference from a set of facts, divergent thinking is more flexible and creative in nature. An individual who is more flexible and creative in problem solving or ambiguous situations is likely to reach a more satisfactory result than the individual who solely relies upon concrete, factual data. Oftentimes coping situations require flexibility and a compromise or meshing of various possible coping strategies or alternatives. Divergent thinking seems to allow for greater breadth in coping and adaptational processes.

Again, for purposes of the present study, differences in divergent and convergent thinking, as proposed by Guilford's Structure of Intellect model, should lend to more accuracy in describing the nature of cognitive/intellectual processes among the three proposed systemic strategies.

#### Statement of the Problem

It was postulated that individuals may be viewed as living systems, and as such, possess characteristics which are common to other living systems. It follows that it should be possible to identify and measure these adaptive characteristics as they pertain to the individual. Therefore, it was decided to develop and study a personality measure which would tap into these very basic systemic strategies which

are proposed to underly the interactional processes required by the individual to assure some desired level of adaptation. This interactional process should best be measured by an instrument which is specifically designed to discriminate between individual differences in Conservatism, Assimilation, and Accommodation. The Oklahoma Personal Style Inventory (OPSI) was designed specifically for this purpose. Further, by comparing the systemic coping patterns of healthy, effective "copers" with the coping patterns of maladjusted "non-copers" it is hoped that a clearer understanding of the proposed constructs can be obtained.

## CHAPTER III

### METHOD

#### Questionnaire Development

The Oklahoma Personal Style Inventory (OPSI) was designed to identify individual adaptation strategies based upon a General Systems Theory framework. In undertaking such a project it became necessary to take a step by step approach in selecting items as well as determining estimates of their reliability and validity. In the following discussion, Form 1 of the OPSI refers to the initial item pool. Form 2 refers to the retained items used in the second phase of the project where estimates of reliability were sought. The final form of the OPSI (Form 3) refers to the final set of items to be used in the current and final phase of the project (Appendices A).

#### Phase One

In the initial phase of the project, the original item pool consisted of two hundred and forty-six short statements which were rationally derived through conceptualization of systemic strategies and boundary processes. These items were derived in an effort to cover a range of attitudinal topics involving adaptation and/or coping processes. Items covered political, economic, religious, social, and interpersonal issues. A 5-point Likert type scale was utilized in



an effort to avoid the problem of forced choice or ipsative measurement. Special care was taken to avoid using items that were of an intrusive or embarrassing nature. Seventy three items per experimental scale (Assimilation, Accommodation, Conservatism) were generated.

Using a Likert format, items were worded such that a subject responding to an item by marking "A" was in strong agreement with that item. Subjects marking "B" were somewhat in agreement with the item, while subjects marking "C" were neither in agreement or disagreement with the item. Those marking "D" disagreed somewhat, whereas those marking "E" disagreed strongly. For statistical analysis the responses were given weighted values (A=4; B=3; C=2; D=1; E=0). The following examples were taken from Form 1.

1. I am probably a little too rigid in dealing with other people.
2. I am probably a little too controlling in dealing with other people.
3. I am probably a little too changeable in dealing with other people.

Due to the problem of "response bias" (Cronbach, 1949), special attention in the initial phase of the development of the OPSI was taken to measure this tendency. Since response bias or response sets may influence the interpretation of the three experimental scales for any one individual, three "validity" scales were included in the initial inventory. In an attempt to measure the tendency to respond in a socially desirable fashion, items were chosen from the Edwards Social Desirability Scale (SD) (Edwards, 1957). The SD scale is one of the more widely used social desirability measures in psychological research.

The scale consists of 39 items from the MMPI which indicate the degree to which a subject attempts to "put up a good front" (e.g., I do not tire quickly). In an effort to keep the total number of items on Form 1 within reason, only nine of the original 39 SD items were used.

In addition to SD, another measure of response bias was taken from the MMPI. ALie (L) score was added to the initial inventory in an effort to again measure the degree to which a respondent attempts to put oneself in a favorable light. Again, for reasons of brevity, nine items were selected from the original L scale. These items are such that they are unlikely to be truthfully answered in a favorable direction (e.g., I do not like everyone I know). A high score would then indicate that the respondent is going out of his/her way to "look good".

The final measure of validity which was used in the initial inventory was the Repression (R) scale. This response set is a tendency to favor affirmative responses over negative responses. Again, nine items were chosen from the MMPI R scale in an effort to measure "acquiescence" sets in respondents. As with the above response set measures, all items on the R scale were chosen on the basis of their similarity in wording to the original OPSI items.

In general, while response sets may be regarded as a source of irrelevant or error variance to be eliminated from test scores, they too may be considered as indicators of "broad and durable" personality characteristics which may be worth measuring in their own right (Anastasi, 1978). The response set items which were used in Form 1 were grouped in sets of three in order to be consistent with the format of the items making up the experimental scales. Following this

procedure all item sets of three, both experimental OPSI scale and validity items, were randomized and the initial pool of 246 items was established.

For the initial adult sample ( $n=84$ ) a Pearson Product Moment correlation coefficient was utilized in correlating each experimental item with scale sums. Items that yielded significant item by scale correlations at the .05 level or better were retained. Items having high correlations with more than one experimental scale were discarded. Due to the structural similarity between scales R and L ( $r=.46$ ), and for the sake of brevity, only the R scale was retained. Along with SD, these two scales were retained as measures of response sets in Form 2 of OPSI.

As a preliminary estimate of the factor structure of the OPSI, a principal component factor analysis was conducted on retained experimental items. Through specifying the number of components at three and using a Varimax rotation method, the factor analysis for the retained items resulted in three factors, Conservatism, Accommodation, and Assimilation. Those items which had high loadings ( $>.20$ ) on their respective scales, while having low or negative loadings on both of the other experimental factors, were retained for further use. In this stage of refining items to be retained in the OPSI, it became apparent that a sufficient number of Conservative (20) and Accommodative (20) items had been generated, although only twelve of the original Assimilation items could be retained. For this reason, an additional ( $n=19$ ) Assimilation items were generated and included in Form 2 of the OPSI. The final set of experimental items along with R and SD items were randomized and constituted Form 2 of the OPSI.

## Phase Two

Following the initial phase of this project, a second phase was initiated in an effort to gain a better understanding into the factor structure of the instrument, as well as gaining estimates of reliability. Form 2 of the OPSI was subject to factor analytic procedures. This analysis was conducted on data collected from (n=320) adult respondents. Using a Varimax rotation method, those experimental items loading high ( $>.20$ ) on their respective factor, while having low or negative loadings on both of the other experimental factors, were again retained. Ten items per experimental scale were retained, comprising the third and final OPSI form. Retained items were then targeted in an Orthogonal Procrustean Factor solution in an effort to maximize loadings on their respective factors. This final Orthogonal Procrustean solution is presented in Table I.

A test-retest method was utilized in obtaining reliability coefficients for each of the three OPSI scales. A sample of (n=49) adults were administered Form 3 of the OPSI on two separate occasions. A period of three weeks between initial testing and retesting was considered adequate for obtaining independent scores. Test-retest reliability coefficients are presented in Table II. These estimates for the three experimental scales are significant at the  $p < .01$  level.

As a final method of estimating reliability, the Kuder-Richardson Formula 21 was used to obtain the internal consistency reliability coefficient for each of the three scales. These data are presented in Table III.

TABLE I  
FACTOR STRUCTURE OF OPSI (FORM 3)\*

ITEM	FACTOR		
	I (ASSIM)	II (CON)	III (ACC)
20. I take pride in being highly productive.	.68	.12	.06
32. I expect a lot of myself.	.67	.17	.10
3. I tend to enjoy those activities which allow me to develop my skills.	.66	.02	.25
38. I have long range goals which I hope to achieve.	.65	.10	.14
16. I can be depended upon to carry my share of the load.	.64	.18	.05
22. I work harder than most people.	.59	.05	.01
42. The more challenging the assignment, the more I like it.	.57	.11	.07
45. I sometimes work with people I don't like when it's necessary to achieve my goals.	.51	-.01	.14
13. I am more self-reliant than most people.	.48	-.03	.13
28. I am good at organizing things.	.43	.07	.04
21. Society is in trouble today because people do not respect the traditional values which have withstood the test of time.	.11	.63	.08
25. I am rather traditional.	.19	.60	-.10
8. Schools should emphasize moral and religious training.	.08	.57	.06
24. For me, the good life is one of stability and continuity.	.08	.56	.19
29. It's important to me to feel I have roots in the community where I live.	.14	.54	.08
19. I value spiritual growth most highly.	.21	.52	-.02
36. I enjoy doing things which are routine and familiar.	-.15	.52	.15
*Orthogonal Procrustean Solution			

TABLE I (Continued)

ITEM	FACTOR		
	I (ASSIM)	II (CON)	III (ACC)
44. Life is most satisfying for me when it consists of familiar activities with few surprises.	-.26	.50	.03
7. When I have difficulties, I tend to look to my family for help.	.21	.48	-.03
10. I try to avoid situations where I might be in conflict with other people, even if it means not doing something I want to do.	-.08	.38	-.01
15. I enjoy parties.	.17	-.13	.68
18. It is easy for people to get to know me.	.02	.31	.57
1. I tend to enjoy those activities which allow me to be with other people.	.39	.15	.55
43. I enjoy doing things with other people.	.41	.15	.53
2. I am a carefree person.	-.11	-.10	.51
26. I usually handle uncomfortable situations by trying to change what is happening.	-.03	.09	.51
31. I feel comfortable around most people, even if they have backgrounds different from my own.	.13	.15	.44
5. I am often inclined to go out of my way to win a point with someone who opposes me.	.08	.00	.37
27. I like to spend most of my money on things I want, even if I have to borrow to meet unexpected expenses.	-.19	-.24	.31
34. One might as well learn to accept the fact that there will always be conflict among people who want the same things.	.13	.08	.23

TABLE II  
TEST-RETEST (OPSI - FORM 3)

TEST - RETEST (OPSI - Form 3)			
O.S.U. undergraduates (N=49)			
Scale		$\bar{X}$	SD
ASSIM	.83708	31.4042	4.6609
CON	.82433	22.8297	5.4346
ACC	.86677	26.0212	6.005

TABLE III  
INTERNAL CONSISTENCY (OPSI - FORM 3)

INTERNAL CONSISTENCY (OPSI - Form 3)			
O.S.U. undergraduates, Senior Citizens (N=320)			
Scale		$\bar{X}$	SD
ASSIM	.8146	30.3322	5.3136
CON	.6788	23.7648	5.9445
ACC	.60777	24.6708	4.9482

Data obtained during this second phase of instrument development suggest that the OPSI (Form 3) is comprised of three independent scales, which reflect differences in individual adaptation styles. Further, these scales display good estimates of reliability, suggesting that the proposed adaptation styles are reflective of ongoing psychological operations that are deeply ingrained and pervasive. Items comprising each of the scales are homogeneous and appear to be measuring a relatively homogeneous range of adaptive behaviors. Following is a description of the three factors which were extracted in the final factor analysis during phase two of instrument development.

#### Factor I: ASSIMILATION

High scorers on a scale composed of items in this factor would be described as inner-directed, achievement oriented and rather independent from others. These individuals utilize coping and adaptation strategies which emphasize a modification of the environment in an effort to meet internal demands and needs. High scorers tend to value organization highly. They are goal-oriented, having a need to establish long-range plans for themselves. These individuals are generally self-motivated, setting high expectations for themselves. Self development across a variety of skills is valued by the Assimilator.

Additionally, these individuals view themselves as being productive, and they take a good deal of pride in their productivity. In general, high needs for productivity and goal attainment are met. Although other people are generally a means of fulfilling the needs of the Assimilator, oftentimes interpersonal relationships give way to the values of the Assimilator.



### Factor II: CONSERVATISM

High scorers on a scale composed of items from this factor would be described as traditional, moralistic, and family-oriented. These individuals place a high value on religious and moralistic endeavors. As a systemic strategy the Conservative individual utilizes a "closed" stance toward the world around. An attempt is made by these persons to conserve the ideas, beliefs and socio-cultural values which have been passed down through the generations. Activities which are stable and routine are preferred over the more novel and exciting ones. Internal changes in beliefs, thoughts, or actions are viewed as threats to the Conservative individual. As such, high scorers on this scale tend to avoid situations where they might be in ideological conflict, even at the expense of making moderate concessions in interpersonal relations. They tend to prefer socializing with persons from similar socio-cultural backgrounds. In general, these persons attempt to maintain stability in their lives. Changes or alterations in the environment or in themselves are viewed as threats to the integrity and homeostasis of the "system". As such, the conservative individual utilizes processes which emphasize a rigidification or "thickening" of their systemic boundaries so as not to be influenced or changed by these potential inputs.

### Factor III: ACCOMMODATION

Persons obtaining a high score on a scale composed of Accommodation items can generally be described as accepting of changes in their environment. These individuals are rather people-oriented, even where differences in socio-cultural values and attitudes prevail. High

Accommodators see themselves as easy-going, carefree, and liked by others. Oftentimes, these persons forego long-range planning and goal-setting in favor of the more "here and now" rewards of life. These individuals are highly suggestible and seem to be quite perceptive and sensitive to outside stimuli. For this reason, high Accommodators are easily influenced and "pulled in" by highly charged emotional situations. Accommodative persons have a need for excitement and novelty in their daily lives. Overall, individuals scoring high on this scale utilize systemic strategies which emphasize change and fluctuation of their system. As such, Accommodators tend to utilize flexible and sometimes porous boundary processes. As opposed to Assimilators who activate changes in their environment, the Accommodator is often changed by his environment.

While the above description is a brief outline of the OPSI development, the reader is referred to Cervantes (1982, unpublished Masters Thesis) for a more in-depth description of Phases One and Two of this project.

### Phase Three

While Phase One and Phase Two of the OPSI development aimed at the refinement of the inventory and gathering estimates of reliability, the current Phase involves the estimation of the instrument's validity. Specifically, an attempt was made to determine how well the final form of the OPSI measured the proposed systemic strategies of Assimilation, Accommodation, and Conservatism. In addition to this it was thought that the OPSI should differentiate between a group of effective "copers" and a group of maladjusted "non-copers" across the three coping strategies.

Finally, for the purpose of gaining construct validity for the instrument it was decided to identify how the OPSI might relate to other existing personality as well as cognitive/intellectual measures.

### Subjects

For the current phase of the study a total of 119 adult subjects were utilized. These subjects consisted of undergraduate male ( $n=35$ ) and female ( $n=46$ ) students attending Oklahoma State University. The mean age for this group was ( $\bar{x}=18.9$ ) years. Adult male ( $n=24$ ) and female ( $n=14$ ) psychiatric inpatients from Eastern State Hospital in Vinita, Oklahoma, and Central State Hospital in Norman, Oklahoma were also utilized. The mean age for the psychiatric sample was ( $\bar{x}=35.5$ ) years. All psychiatric patients were receiving either anti-psychotic or anti-depressant medication at the time of test administration. A completion rate of the test battery for the university group was .90, while the completion rate for the psychiatric group was .71. Informed consent procedures were used for the university sample. Signed consent forms were developed and used for the respective inpatient groups, as required by the human subjects committee at each of the two state hospitals.

### Procedure

The selection of university undergraduate students involved the establishment of sign-up sheets which were distributed among several introductory psychology classrooms. Students signed-up for one and one half hour time blocks and were told they could receive extra credit for their participation. The hospitalized psychiatric groups were solicited for participation on their respective wards, under the supervision of the chief psychologist for that particular ward. Hospitalized subjects who chose to participate were asked to sign the

special consent form and then were asked to put their initials on a sign-up sheet. Initials were then associated with a subject number so that names could be omitted. During the sign-up procedure, all potential subjects were given a brief description of the questionnaire research and informed that they were under no obligation to participate, but that their participation would be greatly appreciated.

Following the sign-up procedure, university students met with the experimenter in small groups of ten to fifteen in designated classrooms. Upon entering the classroom each subject was given the test packet which included a brief demographic information checklist, the Group Embedded Figures Test (Witkin, Oltman, & Raskin, 1971), the Spatial-Visualization (S-V) and Verbal-Reasoning (V-R) subtests of the Employee Aptitude Survey (Fuch & Fuch, 1963), the Expressional Fluency (E-F) and Making Objects (M-O) subtests of Guilford's Structure of Intellect Battery (Guilford, 1967) Snyder's Self-Monitoring Scale (Snyder, 1974), the Eysenk Personality Questionnaire (Eysenk & Eysenk, 1975), the Short-Form Dogmatism Scale (Trodahl & Powell, 1965), Levenson's Internal-External Locus of Control Scales (Levenson, 1974) and the OPSI.

The hospitalized groups consisted of five to eight subjects per testing session. Test batteries were administered in both the recreational areas and in staff lounges. The inpatient subjects were asked to initial the demographic checklist upon receiving the test packet in an effort to match the subject with his respective diagnostic classification and medication regiment.

Subsequent to receiving the test packet, all subjects were again informed as to the nature of the research and told that they were free to withdraw from the research at any time, without penalty. Subjects were

then asked to complete the demographic checklist and wait for further instructions.

Subjects were informed that the test battery was ordered such that all timed tasks were administered initially, allowing each subject to complete the remaining self-administered questionnaires at their own pace. All tasks which had various time requirements (GEFT, S-V, V-R, E-F, M-O) were carefully administered using specific instructions set forth by the authors of the respective tests. A hand held stop watch was used to maintain accuracy in the timing of each of these tasks. Total time of administration was approximately 90 minutes. Approximate times of administration for the various components of the test packet were as follows:

Group Embedded Figures Test	-	15 minutes
Spatial-Visualization	-	5 minutes
Verbal-Reasoning	-	5 minutes
Expressional Fluency	-	5 minutes
Making Objects	-	5 minutes
Oklahoma Personal Style Inventory	-	15 minutes
Eysenck Personality Inventory	-	15 minutes
Self-Monitoring Scale	-	10 minutes
Internal-External Locus of Control	-	10 minutes
Dogmatism Scale	-	<u>5 minutes</u>
Total		90 minutes

### Statistical Analysis

Anastasi (1978) has pointed out that the "construct" validity of an instrument or test is the extent to which the test may be said to measure a theoretical construct or trait. As a technique of estimating construct validity, Anastasi suggests that correlations between a new test and similar earlier tests can be cited as evidence that the new instrument is measuring approximately the same general area of functioning as do the other existing measures. Unlike the correlations

found in criterion related validity, Anastasi suggests that these correlations should be moderately high, but not too high. If the new instrument correlates too highly with an already existing measure, without such advantages as brevity or ease in administration, then the new instrument is obviously repetitive.

Along with the correlational procedure described above, Anastasi and others have cited factor analysis as being of particular importance to construct validity. In the process of factor analysis, the number of variables or categories in which an individual's performance can be described is reduced from the number of original test variables to a relatively small number of factors or common constructs. For example, three or four factors might account for the intercorrelations among twenty or more separate test scores. An individual might then be described in terms of the homogeneous factor clusters as opposed to his scores on each of the twenty separate instruments. With regard to instrument validation it becomes very useful to understand the extent to which a new instrument loads or is weighted on a given factor. For the purposes of the present study it seemed important to analyze the factorial relationship that the constructs assimilation, accommodation, and conservatism had with the selected criterion measures.

It was thought that a Pearson-Product Moment method of gaining intercorrelations should be utilized for the initial approach toward estimating construct validity of the OPSI. Each subject's set of scores for the battery were coded and entered into the computer. Intercorrelations were then obtained.

Following the intercorrelation procedure, two factor analyses were conducted. Initially, a Varimax rotation of the axes

was conducted for the obtained scores. This rotation was carried out in an effort to eliminate as many negative loadings as possible. Additionally, this rotation attempted to yield loadings for each test on as few factors as possible. Both these criteria are designed to yield factors that can be most readily and unambiguously interpreted (Guilford, 1954).

In addition to the Varimax rotation method, scores for the construct, assimilation (AS), accommodation (AC), and conservatism (CO) were targeted in an Orthogonal Procrustean factor solution. This was done in an effort to "force" the various other test scores into one of three factors (AS), (AC), or (CO).

## CHAPTER IV

### RESULTS

#### Test for Mean Differences

Initial T-Tests were performed in an attempt to delineate sample differences. Two-tailed T-Tests for unequal n's were performed and are presented in Table IV. The degrees of freedom and t-statistic were both a function of sample variance, whereby a separate df and t were utilized, depending on whether sample variances were equal or unequal. Additionally, whereas the total sample size is represented as N=119, n for each group varies by variable due to the fact that some subjects failed to complete one or more of the validation instruments or left blank one or more of the demographic items.

For the demographic variables, the inpatient-psychiatric group revealed a higher percentage of male respondents ( $p < .05$ ) than did the college group. The inpatient group tended to be older ( $p < .01$ ), and exhibited a greater percentage of married, divorced, and widowed respondents ( $p < .01$ ) than did the college group. The inpatient group revealed a greater percentage of non-Caucasian respondents ( $p < .01$ ) as compared to the college group. While the inpatient group tends to have a greater range of occupational experience ( $p < .01$ ) when compared to the college group, the college group reports being more educated ( $p < .01$ ).



TABLE IV  
DEMOGRAPHIC, INTELLECTUAL AND PERSONALITY DIFFERENCES (N=119)

Variable	College Undergraduates			Psychiatric Inpatients				t
	(n)	$\bar{x}$	SD	(n)	$\bar{x}$	SD	df	
Sex	81	.43	.49	37	.65	.48	116	-2.21*
Age	81	18.9	2.57	38	35.50	11.12	39	-9.08**
Marital Status	80	1.11	.80	37	2.14	.98	115	-6.00**
Ethnic Background	80	1.26	.95	38	2.03	1.50	52	-2.94**
Church Affiliation	77	2.66	1.32	37	2.95	1.33	112	.29
Occupation	81	7.44	1.60	38	4.71	1.86	117	8.26**
Education	80	3.26	.69	38	3.84	1.15	50	-2.87**
Income	78	4.79	.73	34	4.71	.52	86	.73
Embedded Figures Test	81	11.19	4.80	38	3.68	4.25	117	8.23**
Space Visualization	81	23.17	9.90	38	8.74	8.63	117	7.71**
Verbal Reasoning	81	15.65	4.59	38	6.61	5.82	117	9.18**
Expressional Fluency	81	10.58	4.66	38	5.66	4.37	117	5.48**
Making Objects	81	11.47	3.61	38	8.95	6.92	47	2.11*

\* p < .05

\*\* p < .01

(two tailed t-test)

— t for unequal variances

TABLE IV (Continued)

Variable	College Undergraduates			(n)	Psychiatric Inpatients			t
	(n)	$\bar{x}$	SD		$\bar{x}$	SD	df	
OPSI								
Assimilation	81	28.35	7.10	32	29.20	6.34	111	- .55
Conservation	81	22.10	7.11	32	27.91	5.39	111	-4.19**
Accommodation	81	26.16	6.44	32	26.77	5.11	111	- .48
Repression	81	1.67	1.16	32	1.84	1.16	111	- .89
Social Desirability	81	4.43	1.77	32	3.18	1.79	111	3.87**
Eysenk Personality Questionnaire								
Psychoticism	81	3.35	4.00	29	6.345	3.09	108	-2.44**
Extraversion	81	15.83	3.90	29	12.55	4.48	108	3.73**
Neuroticism	81	11.74	4.93	29	12.86	5.59	108	-1.01
Lie	81	7.12	10.51	29	9.03	3.84	108	-1.40
Self-Monitoring	81	14.17	9.65	29	12.07	4.12	105	1.60
Dogmatism	79	66.30	12.14	28	76.68	10.87	105	-3.99**
Locus of Control								
Internal	78	34.60	6.62	27	38.15	6.65	103	-2.39*
Powerful Others	78	22.48	6.50	27	28.55	6.77	103	-4.13**
Chance	78	23.93	6.36	27	23.44	9.10	36	<u>.26</u>

Along the intellectual variables, the college subjects tend to be more field-independent, the inpatient subjects more field-dependent ( $p < .01$ ). The college subjects tend to perform better on tasks involving space-visualization abilities ( $p < .01$ ), verbal reasoning ( $p < .01$ ), expressional fluency ( $p < .01$ ) and creativity ( $p < .05$ ) as measured by the Making Objects test. Interestingly, while psychiatric subjects reveal deficits in their verbal divergent operations, spacial-figure divergent operations appear more intact.

Along the personality variables, a significant mean difference ( $p < .01$ ) was noted for the experimental OPSI variable conservatism. Here, the inpatient subjects tended to score higher on this scale than did college respondents. This sole difference along the OPSI scales is likely due to the fact that the psychiatric subjects tend to be older, hence adhering to more traditional attitudes and beliefs. In addition to the significant difference noted along conservatism, the college subjects tended to score higher ( $p < .01$ ) on the social desirability scale than did inpatient respondents.

Further examination of Table IV reveals that the inpatient group scores higher ( $p < .01$ ) on Eysenk's Psychoticism Scale when compared to the college respondents. The college group on the other hand scored higher on the Eysenck scale extraversion ( $p < .01$ ) than did the inpatient group. While no mean difference was noted for the variable self-monitoring, the inpatient group scored significantly higher ( $p < .01$ ) on the dogmatism scale as compared to college respondents. Finally, the inpatient group tended to score higher on the variables internal locus of control ( $p < .05$ ) and powerful others ( $p < .01$ ) when compared to the college group. Results of the t-tests support the assumption that the college sample is a higher functioning, more "normal" group of subjects.

### Factor Analysis

As evidenced by the above tests for significant mean differences, the two samples exhibit marked demographic, intellectual, and personality differences. For this reason it was decided to conduct separate factor analyses for each of the two samples. These data are presented in Tables V - VII. Correlation matrices used as a basis for these separate analyses are presented in Appendices C and D.

Preliminary principle component analyses were conducted for each sample in an effort to extract and retain a reasonable number of meaningful factors. Perhaps one of the more popular methods for addressing the question of retention of meaningful factors is that of utilizing eigenvalue specifications (Kim & Mueller, 1978). Factor analytic researchers often select and retain all factors with eigenvalues of greater than one. While this method of eigenvalue specification is common, oftentimes it results in retaining factors which are unexplainable and do not fit the model under examination. Five factors were retained for each group as it was concluded that the sixth factor was uninterpretable in each case.

Cattell (1965) advocates the use of a "Scree-Test", where a graph of the eigenvalues is used as a method of criteria for selecting interpretable factors. Cattell suggests to stop factoring at the point where eigenvalues begin to level off forming a straight line with an almost horizontal slope. Beyond this point, Cattell describes the smooth slope as "factorial litter or scree". Based upon this method, figures 1 and 2 were generated for each of the two samples respectively, supporting the decisions to retain five factors for both groups. Other researchers (Tucker, Koopman & Linn, 1969) suggest that this method is often superior to other methods, particularly when the researcher is "interested in identifying major common factors."

TABLE V  
 FACTOR LOADINGS AND EIGENVALUES-VARIMAX ROTATION  
 METHOD (PSYCHIATRIC INPATIENT  
 SAMPLE, n=38)

Variables	I	II	III	IV	V
Embedded Figures Test	.79	.00	.17	.30	-.11
Space Visualization	.60	.27	-.09	.12	.03
Verbal Reasoning	.82	-.12	.32	.02	-.03
Expressional Fluency	.78	-.10	-.16	-.31	.04
Making Objects	.76	.00	-.25	.21	.23
Assimilation	.08	.19	.22	.73	.27
Conservatism	.04	-.09	-.13	.20	.75
Accommodation	-.11	.71	-.17	.13	.11
Repression	-.43	-.52	-.08	.46	-.08
Social Desirability	.17	-.05	-.12	.83	-.09
Psychoticism	.03	.39	.53	.15	.16
Extraversion	.28	.62	-.42	.19	.16
Neuroticism	-.15	.05	.77	-.16	.29
Lie	-.13	.19	-.77	-.11	.30
Self-Monitoring	.14	.69	.14	-.16	.06
Dogmatism	-.43	.65	.10	-.08	.07
Internal	.06	.81	.05	.07	-.13
Powerful Others	.10	.22	.24	-.13	.72
Chance	-.18	.52	.11	-.44	.44
EIGENVALUES	3.69	3.56	2.12	1.88	1.42
Cumulative Proportion of Variance (%)	19.44	38.20	49.30	59.20	66.70

TABLE VI  
 FACTOR LOADINGS AND EIGENVALUES-VARIMAX ROTATION  
 METHOD (COLLEGE SAMPLE, n=81)

Variables	I	II	III	IV	V
Embedded Figures Test	.83	-.10	.15	.05	-.01
Space Visualization	.83	.07	.10	.03	-.04
Verbal Reasoning	.74	-.27	-.06	.08	-.15
Expressional Fluency	.39	-.06	-.53	.08	.30
Making Objects	.53	-.45	-.27	.24	-.03
Assimilation	.14	-.10	-.10	.76	-.07
Conservatism	.10	.42	.22	.57	-.16
Accommodation	.23	-.03	-.06	.65	.32
Repression	.32	-.07	.48	-.51	.10
Social Desirability	-.04	-.26	.76	.08	.15
Psychoticism	-.27	-.18	-.58	.06	.06
Extraversion	-.01	-.16	.22	.20	.80
Neuroticism	-.02	.12	-.58	.11	.50
Lie	.01	-.10	.26	.08	-.47
Self-Monitoring	-.12	-.01	-.01	-.03	.73
Dogmatism	-.13	.41	-.07	.47	.23
Internal	.00	-.10	.33	.37	.02
Powerful Others	-.16	.84	-.08	.04	-.09
Chance	-.08	.84	-.13	-.03	.04
EIGENVALUES	3.24	2.66	2.00	1.80	1.39
Cumulative Proportion of Variance (%)	17.10	31.04	41.60	51.10	58.40

TABLE VII  
 FACTOR LOADINGS-ORTHOGONAL PROCRUSTEAN  
 SOLUTION (COLLEGE SAMPLE, n=81)

Variables	I	II	III	IV	V
Embedded Figures Test	.85	.06	.00	.01	-.09
Space Visualization	.83	-.01	.06	.01	.06
Verbal Reasoning	.72	.25	-.15	-.06	-.17
Expressional Fluency	.33	-.16	-.42	.42	.26
Making Objects	.55	.16	-.37	.17	-.17
AS1	.20	.76	.19	.13	-.09
AS2	.03	.74	-.05	.25	.14
AS3	.08	.77	-.06	.19	-.04
C01	-.09	.07	.66	.13	.01
C02	-.02	-.01	.76	.14	.18
C03	.01	.01	.54	.10	.34
AC1	-.16	.32	.23	.39	-.13
AC2	-.06	.19	.26	.61	-.11
AC3	.17	.06	-.12	.58	.26
Repression	.37	-.31	.19	-.12	-.41
Social Desirability	.02	-.07	.42	.04	-.63
Psychoticism	-.29	.14	-.53	.13	.19
Extraversion	-.02	-.07	.10	.77	-.33
Neuroticism	-.24	-.21	-.39	.50	.31
Lie	.12	.22	.05	-.43	-.07
Self-monitoring	-.04	-.01	-.20	.54	-.08
Dogmatism	-.25	.03	.16	.28	.41
Internal	.20	.29	.20	.12	-.09
Powerful Others	-.09	.07	.29	-.03	.74
Chance	-.12	-.07	.24	.05	.70

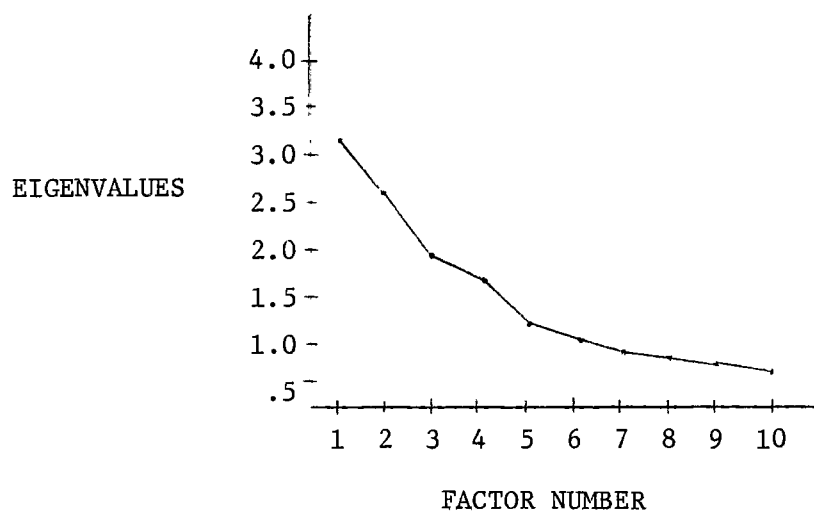


Figure 1. Illustration of Scree-Test  
(College Sample)



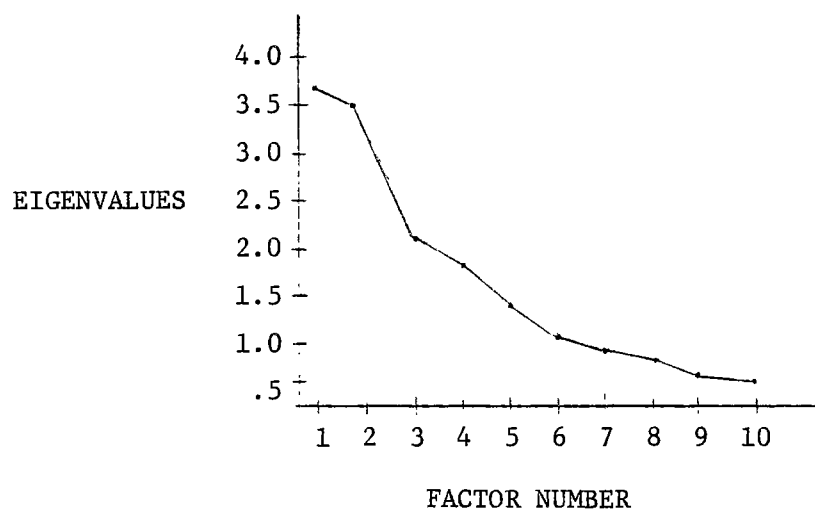


Figure 2. Illustration of Scree-Test  
(Psychiatric Inpatient Sample)

### Psychiatric Inpatient Sample

Following the above rationale, a Varimax rotation method was applied to the separate data, specifying a five factor solution for each sample. The factor analysis derived from the inpatient data is presented in Table V.

For the inpatient sample, factor I is composed of strong positive loadings for the variables verbal reasoning (.82), embedded figures test (.79), expressional fluency (.78), making objects (.76), and space-visualization (.60). The structural composition of factor I is that of the intellectual variables, both verbal and non-verbal. For the inpatient sample, this factor can best be labeled as an "intellectual" factor. Interestingly, strong negative factor loadings are revealed for the variables repression (-.43), and dogmatism (-.43). For the psychiatric inpatient sample, subjects who perform well on both verbal and non-verbal intellectual tasks seem to be less prone to utilize the response set repression when responding to questionnaire material. They also tend to exhibit a certain flexibility in attitudes and beliefs.

Examination of factor II reveals a factor which is composed of strong positive loadings for the variables accommodation (.71), internal locus of control (.81), self-monitoring (.69), dogmatism (.65), chance (.52), and extraversion (.62). This factor can best be labeled as "hysteric-accommodation". This label reflects the strong loading on accommodation while taking into account extraversion and self-monitoring. Psychiatric respondents obtaining high scores on each of these scales seem to exhibit high needs for acceptance and approval. These individuals seem to be constantly monitoring and altering their self-presentations as a way of meeting the need for approval from others. Of particular

interest to factor II are the seemingly contradictory positive loadings on the locus of control scales, internal locus of control and chance. It may be that some psychiatric inpatients experience a sense of internal locus of control while at the same time being subject to chance-like situations inherent in a psychiatric hospital environment. This seems to clarify what at first appears as a contradictory set of findings.

Turning to factor III, it can be seen that this factor is clearly reflective of psychopathology. As expected, this sample exhibits a range of psychopathology as measured by the Eysenk Personality Questionnaire. Strong positive factor loadings are evidenced for the Eysenk variables psychoticism (.53) and neuroticism (.77). A strong negative loading for the variable lie (-.77) is seen, suggesting that defensiveness, as measured by the Lie scale, is not associated with responding in a pathological fashion. All other variables along factor III show minimal factor loadings.

Factor IV for the inpatient sample can be labeled an "assimilation" factor. Variables exhibiting strong positive factor loadings include assimilation (.73), social desirability (.83), and repression (.46). These findings suggest that for certain individuals experiencing psychological difficulties the coping strategy assimilation may be coupled with a marked degree of repression (nay-saying) and a desire to "look good". In association with this assimilation factor is a moderate factor loading for the embedded figures test (.30). As expected, field-independence seems to be inherent in the coping strategy assimilation. In addition to a moderate loading on the embedded figures test it can be seen that the variable chance loads strongly in the negative direction on factor IV (-.44). This is consistent with earlier notions about the coping strategy of assimilation. It is thought that assimilators tend

to feel in control of their destiny, are inner-directed, and do not see the consequences of their behavior as being a function of chance.

A final examination of Table V reveals a factor which has the major component of conservatism (.75). In addition to this strong loading, strong positive factor loadings are evidenced for the variables powerful others (.72) and chance (.44). On this fifth factor, best labeled "conservatism", there is a strong external locus of control component. Indeed the coping strategy conservatism has been earlier linked with an adherence to traditional values as well as respect for authority. In this sense, for the inpatient sample, earlier expectations about the strategy conservatism hold true. Of interest here is the fact that there exists a belief in chance as being responsible for reinforcing behaviors for a portion of the inpatient sample.

Factor analytic procedures for the psychiatric inpatient sample have yielded five distinct and interpretable factors. The three experimental OPSI scales surfaced strongly and independently on factors II, IV, and V. In addition, factor I surfaced as an intellectual factor while factor III has surfaced as a psychopathology factor. These results, however, should be interpreted with some caution given the small sample size (27 completed test batteries).

#### College Sample

The Varimax factor solution for the college sample is presented in Table VI. Again, a five factor solution was specified. An examination of Table VI reveals factor I to be comprised of strong positive loadings for the variables embedded figures (.93), space-visualization (.83), verbal reasoning (.74), and making objects (.53). The variables expressional fluency (.39) and repression (.32) exhibit moderate positive factor loadings. This first factor can again be labeled as an "intelligence"

factor, given its structural makeup. Factor I represents both verbal and non-verbal components of intelligence as well as representing some degree of cognitive flexibility and creativity as measured by the Expressional Fluency and Making Objects subtests of Guilford's SI model. Interestingly, for the college group, there is some degree of the response set repression (nay saying) associated with this first factor, albeit a mild association.

Factor II is comprised of strong positive loadings for the variables conservatism (.49), dogmatism (.41), powerful others (.84), and chance (.84). This factor can be labeled as an "authoritarian/conservative" factor. As expected, the OPSI variable conservatism relates strongly with the constructs of dogmatism, and external locus of control. The relationship of conservatism to locus of control is in both the areas of perception or reinforcement as being in the hands of "powerful others" as well as being a function of "chance". Interestingly, strong to moderate negative loadings on this authoritarian/conservative factor are found for the variables making objects (-.45) and verbal reasoning (-.27). This suggests that the authoritarian/conservative individual is not likely to perform well on tasks involving cognitive flexibility, nor is s/he likely to perform well on tasks requiring verbal reasoning.

For the college sample, factor III clearly represents a response set factor. Strong positive factor loadings are found for the OPSI variables repression (.48) and social desirability (.76). This factor seems reflective of respondents who were particularly interested in portraying themselves in a favorable light. Of little surprise is the fact that strong negative factor loadings are found for the Eysenk variables psychoticism (-.58) and neuroticism (-.58). For these reasons, factor III can be labeled as a "response-set/negative psychopathology" factor.

Factor IV is perhaps best described as a general "coping" factor. This factor is composed primarily of the three experimental OPSI variables assimilation, conservation, and accommodation. The factor is most similar to assimilation as indicated by a strong positive factor loading for the variable assimilation (.76). The variable accommodation loads second highest (.65), with conservatism also loading very strongly (.57). For the college sample, this factor seems reflective of an active approach toward coping, whereby all three of the postulated systemic strategies are utilized. In relation to this, a moderate positive factor loading is evidenced for the variable internal locus of control (.37), indicating that high scorers on the combined variables assimilation, conservatism and accommodation also tend to perceive the locus of control of reinforcement of behavior to be within themselves. Additionally, a final component of this factor is dogmatism (.47). This may suggest that the high copers, as measured by the OPSI, tends to be somewhat dogmatic in his belief system - adhering to traditional and/or authoritarian attitudes and beliefs. It is not known to what extent the geographic makeup (midwestern) of the college sample may have influenced this finding. A final examination of factor IV reveals a strong negative loading for the variable repression (-.51).

The final factor retained for the college sample is comprised of high positive loadings for the variables extraversion (.80), self-monitoring (.73), neuroticism (.50), and accommodation (.32). This factor is reflective of respondents scoring high on personality variables which represent extraversion and sensitivity to self-presentation. For this reason, factor V can best be labeled an "extraversion neurotic" factor. Of validation importance is the fact that accommodation is inherent in

this factor. This suggests that accommodation coping processes may play a role in the ability to be sensitive to social cues, and may have a significant role in the etiology of some forms of neurosis.

Overall, Varimax factor analytic procedures for the two separate samples have yielded five distinct factors for each group. For the college sample, in addition to intelligence and response set factors, OPSI variables have surfaced in an expected fashion. In contrast to the psychiatric sample, the college sample displays a general coping factor comprised of all three experimental OPSI scales. It appears that for the normal college group, coping situations tend to elicit the use of all three systemic strategies. On the other hand, psychiatric inpatient subjects seem to rely heavily upon one of these coping strategies exclusive of the other strategies. Hence, a preliminary comparison of factor analytic data suggests that effective coping and adaptation may be a function of qualitative as opposed to quantitative differences in the use of the three systemic strategies.

#### College Sample-Procrustean Solution

In an effort to gain a clearer understanding into the structural composition of the three proposed coping strategies it was decided to target the variables assimilation, conservatism, and accommodation in a final Orthogonal Procrustean factor solution. By elucidating these OPSI constructs for a normal college sample it was hoped that further validation of the inventory could be attained.

In order to provide a sufficient target matrix, the variables assimilation, conservatism and accommodation were divided into three sub-scales. As seen from Table VII, the variable assimilation was subdivided into AS1, AS2, and AS3. AS1 was composed of assimilation items

3, 13, and 16. AS2 was composed of assimilation items 20, 22, and 28, while AS3 was composed of assimilation items 32, 38, 42, and 45. Identical procedures were conducted for the OPSI variables conservatism and accommodation. C02 was composed of conservative items 7, 8, and 10. C02 was composed of conservative items 19, 21, and 24, while C03 was composed of conservative items 25, 29, 36, and 44. AC1 was composed of accommodation items 1, 2 and 5. AC2 was composed of accommodation items 15, 18, and 26, while AC3 was composed of accommodation items 27, 31, 34, and 43.

As expected, the targeted factors of intelligence and external locus of control surfaced on factors I and V. Their structural composition was nearly identical to that evidenced in the Varimax solution.

Factor II, targeted as an assimilation factor, indeed has it's strongest loadings on AS1, AS2 and AS3. In addition to these strong positive loadings, the variable internal locus of control surfaced with a moderate factor loading (.29). As originally suggested an assimilative coping strategy includes strong sub-components of self-reliance, inner-directedness, and goal-orientation. Indeed these are qualities that tend to be associated with the perception of an internal locus of control. A final review of factor II reveals a strong positive loading for AC1 (.32). This is most likely the result of the item composition of AC1 and not reflective of non-orthogonality between the OPSI scales. Additionally, it may be that this loading is reflective of the persistence of the general coping factor.

Factor III, originally targeted as a conservative factor, indeed reveals strong positive loadings for the variables C01, C02, and C03. A strong positive factor loading also surfaced for the response set social desirability (.42). Of particular interest to earlier postulates about



conservatism are the strong negative factor loadings evidenced for the variables embedded figures ( $-.42$ ) and making objects ( $-.37$ ). This lends support to the notion of conservatism as being reflective of rigid cognitive processes. It seems that for a sub-group the normal college respondents there is a good deal of cognitive inflexibility, both in verbal and non-verbal realms. In relation to this is the expectation of conservatism as being related to traditional beliefs as well as respect for authority. It can be seen that in this context the variable powerful others ( $.29$ ) loads moderately on this conservatism factor.

For the college sample factor IV, originally targeted as an accommodation factor, exhibits strong positive loadings for the three sub-components AC1, AC2, and AC3. Additional strong loadings are found for the variables extraversion ( $.77$ ), neuroticism ( $.50$ ), self-monitoring ( $.54$ ), and embedded figures ( $.42$ ). These strong factor loadings on validation variables are consistent with earlier postulates regarding the construct accommodation. This evidence further suggests that accommodation involves cognitive flexibility (embedded figures) and an openness in interpersonal relationship (extraversion) with consequent ability to manage self-presentations (self-monitoring). Interestingly, for the college sample, a degree of neurosis, as measured by the EPQ, also tends to surface along this accommodation factor. It might be postulated here that accommodation processes which are flexible in nature produce some oversensitivity to interpersonal as well as coping situations.

In contrast to the general factor which surfaced in the Varimax factor solution, the Orthogonal Procrustean solution has yielded separate factors for each of the three experimental OPSI scales. Sub-components surfacing on each of the three OPSI scale factors tend to support some earlier expectations regarding the theoretical basis of the OPSI.

## CHAPTER V

### DISCUSSION

The present validation study has evolved through conceptualization of individual coping and adaptation processes within a General Systems Theory framework. The Oklahoma Personal Style Inventory, a factorially-derived instrument, was administered to two distinct samples, along with a series of related cognitive, intellectual, and personality measures. Results of factor analytic procedures for the two separate samples have yielded noteworthy and distinct patterns of scores.

Initial factor analyses performed on the separate data revealed perhaps the most interesting findings of this study. It was revealed that indeed normal college respondents tend to utilize the three proposed systemic coping strategies in a fashion that is much different from their psychiatric inpatient counterparts. The college subjects are found to utilize a moderate level of each of the proposed strategies when faced with coping situations. This is most apparent from the general coping factor which surfaced on factor IV of the initial Varimax factor solution. In contrast, the psychiatric inpatients tend to utilize the coping strategies assimilation, conservatism, and accommodation independent from one another. This is most evident from the initial Varimax factor solution where each of the three proposed strategies surface separately on factors II, IV, and V.

The distinct difference in the pattern of responses between the two experimental groups is further indicated by the fact that the inpatient sample yielded higher mean scores for each of the three experimental OPSI scales. For the scale conservatism, this mean difference was significant at the .01 level.

As discussed earlier, coping and adaptation are processes which involve the ability to reduce the stresses of daily living in order to attain a relatively stable or homeostatic psychological state. From data obtained on a group of effective copers (college respondents) it appears that homeostatic psychological conditions are best achieved through timely utilization of the three proposed systemic strategies. Data suggests that when normal college subjects utilize one of these strategies, they are likely to combine this strategy effectively with the other two strategies. On the other hand, data obtained for a group of ineffective copers (psychiatric inpatients) suggests that there exists a relationship between the overutilization of one of the systemic strategies and various forms of maladjustment. Of primary importance here is the fact that the OPSI has shown an ability to differentiate between effective and non-effective patterns of coping responses.

In addition to exhibiting the ability to differentiate effective versus non-effective coping patterns, the OPSI scales have displayed quite different structural compositions between the two groups. A comparison of the three strategies across the two samples is helpful here. Factor IV of the Varimax solution for the inpatient sample was labeled assimilation given the strong positive loading evidenced for this variable. As expected, field-independence displayed a moderate association with assimilation. The locus of control variable chance displayed a strong

negative relationship with assimilation, lending additional support to the notion that assimilative individuals tend to see the world in an ordered and predictable fashion. Most interesting for the psychiatric sample are the high loadings on the assimilation factor for the response set variables repression and social desirability. It is suggested here that when an individual is displaying some level of psychopathology and has available only assimilation coping strategies, there is a tendency to attempt to take charge or control in one's life via defensiveness as measured by the scales repression and social desirability.

In contrast to this, factor analytic data derived through an Orthogonal Procrustean solution for the college sample reveals the assimilation factor to be something quite different. Within this normal group, assimilation is most related to the variable internal locus of control. It appears that for individuals utilizing assimilation as part of a more general coping strategy, there is a perception of oneself as being in control of the consequences (positive or negative) of his/her actions. It is suggested that this kind of perception leads to more "inner-directedness" as described by Reisman (1950) and Bell (1955).

In turning to the proposed coping strategy of conservatism some differences are noted between the two samples. Psychiatric inpatients reveal a conservatism factor which has its strongest association with the variable external locus of control. Consistent with earlier notions about conservatism, this factor (factor V) for the inpatient group had strong association to the variable powerful others, lending further support for the construct validity of conservatism. This strategy involves adherence to authority and tradition (powerful others). Interestingly, another sub-component of this factor is the variable chance. It appears

that for some individuals experiencing some level of psychological disturbance, and who also have available only conservative coping strategies, there is a degree of belief in the world as being unordered and therefore unpredictable. This is likely to result in further adherence to powerful others, as well as the feeling that coping situations are to be avoided.

Similar to factor analytic findings for the inpatient sample regarding conservatism, college data derived from the Orthogonal Procrustean solution suggests that conservatism for a normal group of subjects is also related to an external locus of control. In contrast to the inpatient sample, however, conservative strategies utilized by normals are related only to a belief that powerful others are in control of the consequences of one's actions. This finding is consistent with earlier ideas regarding conservatism. What is most interesting is that for individuals who cope effectively and utilize some degree of conservative coping strategies there is not the perception of the world as being an unordered and hence an unpredictable place.

Further differences between the samples along the systemic strategy of conservatism are noted. For the college sample conservatism has been shown to relate strongly with the response set social desirability. Along with the relationship to powerful others, it appears that normal individuals who utilize conservative coping strategies may attempt to put themselves in a "good light", and that this may be a way of showing allegiance to authority. In contrast to data on the inpatient group, for the college sample conservatism reveals strong negative relationships to the divergent cognitive variables of expressional fluency and making objects. As proposed earlier, conservatism seems to involve a degree of

cognitive rigidity. This tends to preclude the ability to be creative, both in the verbal and non-verbal realms.

For the third and final OPSI scale of accommodation some between group differences exist. Factor analytic procedures for the inpatient sample revealed a second factor which was labeled an hysteric-accommodation factor. Accommodation revealed strong associations with the variables extraversion, self-monitoring, dogmatism, internal locus of control, and chance. It is presumed that the pathological nature of this sample accounts for what seems as a contradiction. Positive loadings for the variables internal locus of control and chance can be explained by the notion that a sub-group of the inpatient sample experiences a sense of internal locus of control via their pathological self-presentations (high self-monitoring). The strong loading for the variable chance is indicative of situational factors, primarily the result of being institutionalized in a state hospital. Under this circumstance there is likely to be a sense of unpredictability in the day to day happenings within this setting.

Similar to factor analytic data derived from the psychiatric sample, college data also suggests strong associations between accommodation and the variables extraversion, and self-monitoring. The variables expressional fluency and neuroticism also exhibit positive relationships to accommodation. For normal subjects utilizing accommodative strategies as part of their coping repertoire, a certain degree of self-consciousness and anxiety seems inherent. This may be suggestive of some link between accommodation and neurotic-like adaptation.

To a great extent, factor analytic procedures have aided in shedding light into the structural makeup of the experimental OPSI scales

assimilation, conservatism, and accommodation. Many of the earlier predictions regarding the three systemic strategies and relationships to other existing cognitive, personality, and intellectual measures has been shown. It is also important here to examine predicted relationships which did not surface, particularly for the normal college sample as the OPSI is not specifically intended as a test to measure psychopathology.

For the strategy of assimilation as utilized by normal subjects the predicted relationships between this strategy and field-independence, space-visualization, and verbal reasoning were not found. This indicates that the coping strategy of assimilation does not appear to be related to these specific measures of intelligence. Assimilation, within a normal group does not appear to be related to the construct of field-independence.

Conservatism, as a systemic coping strategy failed to exhibit the relationship with the construct dogmatism, nor was there found a negative relationship between conservatism and self-monitoring.

Finally, accommodation failed to exhibit any relationship with external locus of control, nor did a negative relationship between accommodation and dogmatism surface. Accommodation, for a normal sample, did not relate to field-dependence as initially suggested.

While the present study has clearly aided in a better understanding into the nature of the experimental OPSI scales, some questions remain. As indicated earlier in this discussion, the OPSI has shown an ability to discriminate between healthy, effective patterns of coping and coping patterns reflective of maladjustment. This discriminative ability is a function of the qualitative differences in the utilization of the proposed coping strategies. How can these qualitative differences be measured? What constitutes the proper combination in the utilization of

assimilation, conservatism, and accommodation? Future research with the OPSI points to a need for clarification and indexing of these qualitative differences in coping patterns. Future research also points to the need for greater specification of personality traits and how they relate to the proposed coping strategies. What is the "high assimilator" like? What are his/her personality strengths and/or weaknesses? The same questions hold true for the "high conservative" and "high accommodator". Further, can the over-utilization of one of these strategies be linked with specific forms of psychopathology or maladjustment?

The question of cultural differences in the use of systemic strategies also points to the need for further research. How do the OPSI strategies relate to the processes of ethnic identity and acculturation? Are one of these strategies more or less important in the processes of acculturation? Indeed these are questions which can only be answered through continued investigation of the OPSI, as well as the theory based behind it.

In conclusion, support for the construct validity of the OPSI has been gained. Earlier descriptions of the three personal coping strategies involve a strong component of internal locus of control beliefs. Conservatism is a strategy that has strong association to the belief in powerful others as reinforcing behaviors. Conservatism also reveals a strong social desirability component, as well as being associated with cognitive processes which are less divergent in nature. Accommodation can be more clearly described as a coping strategy with strong components of extraversion, self-monitoring and divergent thought processes. A sensitivity to others, as exhibited by the accommodator may also account for the elevated neuroticism scores.



Finally, the Oklahoma Personal Style Inventory has shown an ability to clearly differentiate between healthy and maladjusted modes of coping. In this vein, strong support for the discriminant validity of the instrument as a measure of these coping processes has been gained. It is hoped that further research involving General Systems Theory and individual coping processes will continue, not only for the mental health professional but for all persons seeking a better quality of life.

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## APPENDICES

APPENDIX A

OKLAHOMA PERSONAL STYLE INVENTORY

(FORM 3)

## OKLAHOMA PERSONAL STYLE INVENTORY

(FORM 3)

Instructions: Please read the following statements, decide how you feel about each one, and circle your answer on the special answer sheet. For each statement, the answer sheet has five numbers which have the following meanings:

- 4: Agree Strongly
- 3: Agree Somewhat
- 2: Neither Agree nor Disagree
- 1: Disagree Somewhat
- 0: Disagree Strongly

For example, if you strongly agree with the statement "I get angry when people don't keep their promises" you should carefully circle the number for that item as follows, 0 1 2 3 4. If you felt somewhat negatively about the statement "I enjoy historical pageants", you should circle number 1, 0 1 2 3 4. If you felt that the statement "I am an active person" was neither true nor false as applied to you, you should mark number 2, 0 1 2 3 4. There are no "right" or "wrong" answers, but if you should change your mind, be sure to erase your mark completely. Please respond to all the statements and work as quickly as possible.

1. I tend to enjoy those activities which allow me to be with other people.
2. I am a carefree person.
3. I tend to enjoy those activities which allow me to develop my skills.
4. I enjoy the excitement of a crowd.
5. I am often inclined to go out of my way to win a point with someone who has opposed me.
6. My parents and family find more fault in me than they should.
7. When I have difficulties, I tend to look to my family for help.
8. Schools should emphasize moral and religious training.
9. My hands and feet are usually warm enough.
10. I try to avoid situations where I might be in conflict with other people, even if it means not doing something I want to do.
11. It makes me nervous to have to wait.
12. At times I feel like picking a fist fight with someone.
13. I am more self-reliant than most people.
14. Once in awhile I feel hate towards members of my family whom I usually love.
15. I enjoy parties.
16. I can be depended upon to carry my share of the load.
17. I have reason for feeling jealous of one or more of my family members.
18. It is easy for people to get to know me.
19. I value spiritual growth most highly.
20. I take pride in being highly productive.
21. Society is in trouble today because people do not respect the traditional values which have withstood the test of time.
22. I work harder than most people.
23. I like to flirt.
24. For me the good life is one of stability and continuity.



25. I am rather traditional.
26. I usually try to handle uncomfortable situations by trying to change what is happening.
27. I like to spend most of my money on things I want, even if I have to borrow to meet unexpected expenses.
28. I am good at organizing things.
29. It is important to me to feel I have roots in the community where I live.
30. At times I feel like smashing things.
31. I feel comfortable around most people, even if they have backgrounds different from my own.
32. I expect alot of myself.
33. It makes me impatient to have people ask my advise or otherwise interrupt me when I am working on something important.
34. One might as well accept the fact that there will alwyas be conflict among people who want the same thing.
35. My mother or father often made me obey even when I thought it was unreasonable.
36. I enjoy doing things which are routine and familiar.
37. My family does not like the work I have chosen (or the work I intend to choose for my life work).
38. I have long range goals which I hope to achieve.
39. It makes me uncomfortable to put on a stunt at a party even when others are doing the same sort of things.
40. I blush no more often than others.
41. I do not tire quickly.
42. The more challenging the assignment, the more I like it.
43. I enjoy doing things with other people.
44. Life is most satisfying for me when it consists of familiar activities with few surprises.
45. I sometimes work with people I don't like when it's necessary to achieve my goals.
46. Some of my family have quick tempers.

APPENDIX B

KEY - FORM 3

## Key - Form 3

Assimilation Items

3, 13, 16, 20, 22, 28, 32, 38, 42, 45.

Conservatism Items

7, 8, 10, 19, 21, 24, 25, 29, 36, 44.

Accommodation Items

1, 2, 5, 15, 18, 26, 27, 31, 34, 43.

Repression Items

-4, -12, -14, -23, -32, -35, -46.

Social Desirability Items

-6, -9, -11, -17, -33, -37, -39, 40, 41.

## APPENDIX C

### VALIDATIONAL SCALE INTERCORRELATIONS

(COLLEGE SCALE, n=81)

VALIDATIONAL SCALE INTERCORRELATIONS  
(COLLEGE SAMPLE, n=75)

EFT	SV	VR	EF	MO	AS	CO	AC	R	SD	P	E	N	L	SM	DO	I	PO	CH
EFT	<u>.70</u>	<u>.47</u>	.12	<u>.33</u>	.05	-.07	-.07	.24	.02	-.23	.09	-.15	.11	.02	-.10	<u>.25</u>	-.13	-.19
SV	---	<u>.43</u>	.06	<u>.26</u>	-.01	.02	-.06	<u>.27</u>	.03	-.08	.03	-.10	.02	-.11	.01	.15	.01	.02
VR		---	.23	<u>.37</u>	.08	-.14	-.03	.24	-.01	-.01	-.02	-.23	.03	-.08	<u>-.39</u>	.14	-.23	-.20
EF			---	<u>.26</u>	-.09	-.12	.14	-.05	<u>-.33</u>	.12	.12	<u>.33</u>	-.13	.22	.07	-.08	-.10	.02
MO				---	.05	<u>-.28</u>	.12	.05	.02	.18	.10	.05	-.04	-.10	<u>-.26</u>	.23	-.20	<u>-.27</u>
AS					---	.08	.18	<u>-.25</u>	-.00	.19	.13	.03	.07	.08	.21	.22	.01	-.05
CO						---	.20	-.11	.03	-.23	-.03	-.08	-.01	-.18	<u>.27</u>	.07	<u>.27</u>	.18
AC							---	-.10	.06	.04	<u>.47</u>	.20	-.13	.17	.09	.09	.09	.14
R								---	<u>.36</u>	-.22	.05	-.23	.17	.00	<u>-.25</u>	.03	-.12	-.06
SD									---	<u>-.30</u>	<u>.30</u>	<u>-.27</u>	.10	-.07	-.06	<u>.32</u>	<u>-.25</u>	-.22
P										---	.09	<u>.27</u>	-.10	.05	.14	-.11	.02	.04
E											---	.18	<u>-.28</u>	<u>.43</u>	.11	.11	-.21	-.10
N												---	<u>-.29</u>	<u>.28</u>	<u>.26</u>	<u>-.29</u>	.10	.20
L													---	-.14	.01	.20	-.02	-.09
SM														---	.16	-.01	-.07	-.04
DO															---	.00	.20	.17
I																---	-.18	<u>-.47</u>
PO																	---	<u>.67</u>
CH																		---

\_\_\_\_ significant at the .05 level  
 \_\_\_\_ significant at the .01 level

## APPENDIX D

### VALIDATIONAL SCALE INTERCORRELATIONS (INPATIENT PSYCHIATRIC SAMPLE, n=38)

VALIDATIONAL SCALE INTERCORRELATIONS  
(INPATIENT PSYCHIATRIC SAMPLE, n=25)

EFT	SV	VR	EF	MO	AS	CO	AC	R	SD	P	E	N	L	SM	DO	I	PO	CH
EFT	<u>.42</u>	<u>.64</u>	<u>.43</u>	<u>.58</u>	.26	-.07	.01	-.24	<u>.41</u>	.09	.13	-.04	-.21	.13	<u>-.38</u>	-.03	.02	-.21
SV	---	<u>.44</u>	.32	.37	.11	.13	.10	-.22	.13	.15	.33	-.25	.00	.15	-.09	.27	.09	.07
VR		---	<u>.60</u>	<u>.48</u>	.16	.04	-.32	-.21	.04	.04	.11	.11	<u>-.38</u>	.04	-.26	.06	.11	-.27
EF			---	<u>.54</u>	-.20	-.00	-.11	-.32	-.12	.05	.23	-.24	.04	-.08	-.31	-.04	.13	-.10
MO				---	.08	.32	-.08	-.25	<u>.42</u>	-.00	.37	-.19	.14	.09	-.27	.05	.05	-.13
AS					---	.25	.17	.06	<u>.40</u>	.15	.23	.05	-.11	.22	.04	.16	.29	-.24
CO						---	.19	.05	-.02	-.03	.11	.12	.14	-.03	-.02	-.07	.18	.06
AC							---	<u>-.41</u>	.05	.30	<u>.49</u>	-.01	.22	.30	.30	<u>.43</u>	-.01	<u>.39</u>
R								---	.30	-.10	-.21	-.18	-.09	<u>-.61</u>	-.03	-.31	-.23	-.37
SD									---	.12	.15	-.24	.02	-.20	-.22	-.02	-.11	-.35
P										---	.11	.35	-.31	.06	.27	.25	.25	<u>.42</u>
E											---	-.28	.35	.31	.24	<u>.46</u>	.16	.25
N												---	-.35	.19	.19	.05	.29	.21
L													---	.09	.17	.06	.16	.13
SM														---	<u>.38</u>	<u>.51</u>	.28	.30
DO															---	<u>.57</u>	.17	<u>.46</u>
I																---	.16	.20
PO																	---	<u>.53</u>
CH																		---

\_\_\_\_\_ significant at the .05 level

===== significant at the .01 level

VITA

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