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THE CONSTRUCTION AND EVALUATION OF A WORKBOOK
TO FACILITATE PRODUCTIVE SELF-UNDERSTANDING

by

Allan H. Schnarr

A Dissertation Submitted to the Faculty of the Graduate School
of Loyola University of Chicago in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy

July

1982

ACKNOWLEDGMENTS

The author wishes to express his gratitude to Dr. John Shack, director of this dissertation, whose availability, imagination and knowledge were invaluable throughout. Thanks are also due to the other committee members, Dr. Dan McAdams and Dr. Frank Slaymaker for their resourcefulness and useful critiques. The author is also grateful to the faculty and staff of the Applied Psychology Department at Loyola University of Chicago, all of whom contributed to this project. Leila Schnarr, the author's wife is also deserving of special mention for her faithful support and understanding throughout the long process of this undertaking.

VITA

The author, Allan Herbert Schnarr, is the son of Cyril Aloysius Schnarr and Rita (Huber) Schnarr. He was born on June 6, 1949, in Kitchener, Ontario, Canada.

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CHAPTER I

INTRODUCTION

Each individual is continually engaged in processing information which reflects upon his/her understanding of self. From before birth through death the senses are receiving data that must be organized into a meaningful framework. Much of this uninterrupted flow of experience is construed in term of its relationship to the self. From the earliest moments of consciousness the understanding of the self develops slowly, from undifferentiated awareness towards individuated identity. This process of self-understanding is the foundation of a satisfying life. It may be called productive self-understanding (PSU) to the degree that it does enable life satisfaction. Self-understanding can also be distorted and lead to ongoing frustration, depression, or despair.

So valued is a satisfying life that throughout history individuals have found ways to pass on discoveries about it. Religion, philosophy, folklore, music, drama and literature have all detailed what kind of self-understanding leads to the good life. Such wisdom usually consisted of prescriptions about what beliefs or what forms of self-understanding lead to happiness.

Many psychologists have demonstrated interest, not in what form

of self-understanding leads to a satisfying life, but rather in how the process of self-understanding occurs. As is explicated below, explorations of the process of self-understanding began with the introspectionists and continued in varied forms throughout the history of psychology. Recent developments, in the form of information processing theory and social learning theory, have enabled an integrated appreciation of the process of self-understanding. This theory is introduced in Chapter II and detailed in Chapter III.

In this dissertation, building upon the theory of how self-understanding occurs, an attempt is made to facilitate the process. In other words, an understanding of the process of PSU is used to enable individuals to live a more satisfying life. A workbook, consisting of structured exercises to facilitate PSU, was developed. The content and construction of the workbook are outlined in Chapter IV. The impact of the workbook was tested (see Chapter V). The results of this investigation are presented and discussed in Chapters VI and VII.

The novel contribution of this dissertation is the attempt to use an understanding of the process of PSU to systematically facilitate its being productive. Others have attempted to facilitate self-understanding (see Chapter III), but rarely have such attempts been systematic and experiential. Furthermore, to date, the outcome of such efforts has not been investigated.

As has already been mentioned, self-understanding has been

studied from numerous perspectives throughout the history of psychology. A brief exposition of this history serves as valuable background to contextualize the present undertaking. Much of this history is synthesized from an article on "Consciousness in Contemporary Psychology," by Ernest Hilgard (1980). This history reads as a dialectic between subjectivism and objectivism. The theory of PSU builds upon recent attempts at an integration of these two.

The beginning of psychology is sometimes traced to the introspectionists who studied the individual's subjective experience of self. George Trumbull Ladd defined psychology as "the description and explanation of states of consciousness as such" (1887, p. 7). James (1890) initially opposed this view with a kind of early functionalism or purposivism: "The pursuance of future ends and the choice of means for their attainment are the mark and criterion for the presence of mentality in a phenomenon" (p. 8). James later (1892) capitulated to Ladd and adopted his definition. James' definition however, returned with the functionalists, whose tenets do recur in the present theory of PSU.

Focus on subjective experience of self did not maintain this favored position for long. The trends of nineteenth century physical and biological science favored objectivism. Wilhelm Wundt (1905), often called the father of psychology, attempted a more objective exploration. He defined the self in terms of body awareness and measured the reaction he was studying. The trend towards objectivism

was brought to America by Jacques Loeb, whose tropistic psychology (1911) came to be represented at the University of Chicago. Here John B. Watson (1913) used objectivism to extend what he considered the short-sightedness of functionalists like Snyell (1904). Functionalists studied how people adopted themselves to their environments. Watson proposed the study of behavior per se.

Superficially, Watsonian behaviorism had appeared to sweep the field of psychology roughly between 1920 and 1950, with a new vitality in the later years produced by the success of Skinner's (1938) operant behaviorism, a success that retains the loyalty of its devotees to this day. However, the victory over mentalism was never complete. Functionalism, in one form or another, remained a dominant mode of thinking; however, it had no strong symbols around which its adherents could rally, and hence was never as visible as the more strident and committed forms of behaviorism (Hilgard, 1980, p. 5).

Tolman (1932) was among the first behaviorists to modify pure S-R psychology. He proposed cognitive structures which intervened between stimulus and response. This was the beginning of a growing cognitive influence in behavioral circles. Other examples of this influence were the discovery of the role of imitation which did not require gradual shaping (Bandura & Walters, 1963), the proposal of coverants (self-reinforcement through internally hidden operants; Homme, 1965), and cognitive interpretations of classical conditioning at the animal level (Rescorla, 1972). As shown in Chapter III, all of these theories are important to an appreciation of PSU.

In recent years, according to Hilgard, the shift in experimental psychology from behaviorism to cognitive psychology has been evident.

Standard topics of experimental psychology have been reshaped in a cognitive mode. Perception has been reinterpreted as information processing. In this fashion perception has been related to other cognitive processes such as memory. Attention again received focused study. In fact, attentional experiments in vision and audition constituted the bulk of what came to be called cognitive psychology (Neisser, 1967). Imagery began to be studied again, using the orderly manner of other forms of information processing (Holt, 1964).

Traditional behavioral theories went through changes as well. Feedback provided an information alternative to reinforcement. A landmark in this development was the proposal by Miller, Galanter, and Pribram (1960) of a subjective behaviorism. At the same time simulation of higher mental processes was partially accomplished (Newell & Simon, 1956). "Mathematical models and computer programs identified the new learning and problem-solving models with information processing" (Hilgard, 1980, p. 9). However, more subjective aspects of consciousness were more gradually assimilated (e.g., the role of imagery in memory, Bower, 1972). "By now experimental psychology has practically identified itself with cognitive psychology as in the six volume handbook edited by Estes (1975-1978)" (Hilgard, 1980, p. 9). The above developments in experimental psychology especially the refining of the information processing model, form a foundation for the theory of PSU. It is in the information processing model that so-called subjective experience becomes available to a form of objective study. Such objective study is the basis of cognitive psychology.

Hilgard points out that several other topical areas in psychology have become cognitive. Piaget's genetic epistemology has replaced Freud's dynamic psychology as the most influential position in developmental psychology. Psycholinguistics has found a prominent place in the new cognitive psychology (Clark & Clark, 1977). Exploration of dream content via dream diaries has demonstrated the combination of objective and subjective methods in a sensible manner (Stoyva & Kamiya, 1968). Cognitive influence has also been pervasive in social psychology. Tolman (1932) introduced the term cognitive structure, which was taken over by Lewin (1935), and given even greater prominence in Festinger's (1957) work on cognitive dissonance. Further attention to cognitive factors is also evident in Greenwald's (1968) studies of persuasion and Wyer's (1974) work on impression formation. Personality theory has also been reconceptualized in a cognitive framework, especially in the writings of Mischel (1973, 1979). Hilgard also points to "emerging interest in the self" (1980, p. 13), as seen in the work of Gordon and Gergen (1968), as a "sign of the times." The cognitive influence in clinical psychology is evident as well. Psychoanalytic emphasis on two thought processes - primary and secondary - was directly cognitive (Hilgard, 1962). Rogers' (1951, 1958) influence on the field was also highly cognitive with his emphasis upon self-concept. Kelly's (1955) psychology of personal constructs was even more directly cognitive, though less influential than Rogers. Ellis' (1962) rational-emotive therapy had a more significant impact. More recently, Beck (1976) and Meichenbaum (1977)

have proposed other cognitive procedures which serve to assist the individual in the way he or she thinks. Cognitive therapists work at changing annoying or destructive emotional or behavior patterns by changing the thoughts that lead to the emotions or behaviors.

In summary, cognitive factors now occupy a prominent position in many topical areas of psychology. The dichotomy between subjectivism and objectivism is no longer resolved in favor of either dimension. Theories of information processing and social learning have legitimated a middle position, in tension between the two poles. The theory of PSU explicates this middle, or integrated position. Furthermore, subjective experience has proved accessible to objective method. Klinger (1978) discusses five procedures which have been distinguished for obtaining systematic reports of inner experience: questionnaires, thinking out loud, thought-sampling (descriptive), thought-sampling (using ratings), and event-recording. The workbook to facilitate PSU involves a combination of all of these methods. It is proposed that individuals completing the workbook will, to some extent, be able to objectify (in the exercises) their experience of themselves: having recorded their experience in systematic fashion they will be able to stand outside of the resulting picture of themselves and integrate their understanding of themselves from this new perspective.

As shown in the next two chapters, the theory behind PSU is an integration of information processing, social learning, and other cognitive points of view. In Chapter IV, the explication of the construction of the workbook illustrates the cognitive factors integral

to its structure. In this way the present project builds on and extends the developments to date in cognitive psychology.

CHAPTER II

PRODUCTIVE SELF-UNDERSTANDING: A WORKING DEFINITION

Simply put, productive self-understanding (PSU) is the process in which an individual actively discriminates and organizes information about his/her self for the purpose of making informed personal choices. This process is as uninterrupted as the flow of experience itself. New information is continually being attended to and made to fit into current patterns of self-understanding. Occasionally the patterns themselves are changed to fit the information. In the present chapter this process of discriminating and organizing information is clarified. In the following chapter, detailed theoretical support for this theory of PSU is presented.

A. The Process: How Self-Understanding Develops

The definition of PSU has three distinguishable parts: the how, the what, and the why of self-understanding. Each of these elements is explained below. The how of self-understanding has to do with the active process of discriminating and organizing. This process is active in that the individual initiates and is in control of the resulting concepts. The person does not passively receive the conceptualization of experience as if the differentiation and organization were already there, in the data. Instead he or she actively constructs the concepts

that bring order into the chaos of experience.

As a process, PSU is a dynamic activity in which the person is continually engaged. Self-understanding is never a completed task. The cognitive structures that are the product of PSU are always in the process of active revision. Nonetheless, there are periods of time in which refinements are minimal and most data are easily assimilated into existing patterns of understanding. The times of more thorough renovation of the structures, so as to accommodate new information, are less prolonged than the assimilation periods. This appears to happen because the existing construct system influences the perception and analysis of data so as to confirm and extend the postulates of the system.

PSU entails the discrimination and organization of experience. Discrimination refers to making distinctions between various components of experience so as to distinguish uniqueness. Organization refers to the construction of rules by which these components are organized into classes, and rules by which the classes are related. For example, anger must be differentiated from fear, and yet both of these classed as feelings, so as to notice how feelings relate to other classes, such as health, interpersonal relationships, need satisfaction, and so on. In such a fashion, each component of experience differs importantly from every other, and yet important functional relationships can be formed between each component and the others from which it is different. The process of differentiation and organization of experience is called conceptualization. It is the essence of self-understanding.

B. The Structure: What Self-Understanding Entails

The products of the process of differentiation and organization are called cognitive structures. These structures are nothing more than the constructed rules by which the discrimination and organization occurs. Often these rules are not directly attended to, but most of the time people can report the rules if asked. For example, if asked about differentiating anger and fear, a person might say that when afraid he/she withdraws, and when angry he/she protests or tries to change something. Another person might say he/she is afraid when facing possible harm and angry when already hurt in some way.

People use their perceptions of situations, of their own thoughts and physical states, of their behaviors, and of the outcomes of their actions, to determine the complex rules involved in differentiating feelings. All self-referrent cognitive structures are composed of some combination of perceptions of (a) situations, (b) thoughts, feelings and physical states, (c) behavior, and (d) outcomes. These various factors are also the basis for the organization that determines relationship rules between components of the structure. In fact, as the above examples demonstrate, people often use the organization rules for differentiation. In the above example, anger was differentiated from fear in terms of the perceived rules relating each to behaviors, or to stimulus situations. In other words, A and B are often differentiated according to the rules by which each is differently related to C: it is the rules of organization (i.e., relationship of A to C and B to C) that often form the basis of differentiation. Organization and

differentiation, then, are often interconnected and overlapping processes.

Cognitive structures are idiosyncratically organized according to the uniqueness of each person's experience. Human language, however, does provide some common foci for this organization. For example, a person uses the word body to classify a certain group of experiences. Feelings are used to classify other experiences, and so on. These classifications are hierarchically arranged in ever more inclusive categories. Self-understanding can be improved by clarifying the classifications at any level of generality. Especially useful for individuals to construct and understand are the over-arching organizational principles that provide a sense of continuity, integration, and direction.

C. The Objectives: Why Self-Understanding Occurs

Self-understanding enables informed personal choices. This is the manner in which it is productive. The most basic result of PSU is the provision of order and predictability in the face of otherwise chaotic experience. This provides a sense of security to replace the anxiety that would otherwise overwhelm the individual. Furthermore, the more the individual engages in self-understanding, the more does he/she experience himself or herself as able to construct meaning that gives integration and direction to his/her life. Engagement in PSU, then, eventually negates a passive or victim stance towards life: one experiences oneself as able to make decisions that lead to a satisfying

life. This most general of self-conceptualizations then, becomes influential in the organization of all other concepts, as well as in the behavior that results.

Thus, the far-reaching result of PSU is a feeling of capability based on the belief that one is able to think, feel and act so as to live a worthwhile life. Signs of this sense of capability are decreasing degrees of psychological distress, decreasing interpersonal defensiveness, increasing self-acceptance, growing clarity of life-direction, and ongoing psychological development or maturation. These outcomes of PSU are explained in detail in the following chapter.

D. Brief Outline of the Workbook

The choice of elements around which to focus PSU is essentially arbitrary. Individuals do conceptualize themselves idiosyncratically. No two construct systems are alike, even in the foci of organization. The reason for the choice of the units of the workbook was essentially pragmatic. The workbook was to be used by college level introductory psychology students. It was thereby designed to parallel the units of an introductory psychology course. It is the experience of some introductory psychology teachers that their students use many of the theories taught in the course as lenses through which to explore themselves. Furthermore, the content of most such courses is a broad survey of most fields of psychology. As such, the course is already a place where attempted refinements of self-understanding are occurring, and where a comprehensive set of foci for this self-understanding are

provided.

The workbook consists of a series of units, each with structured exercises to facilitate PSU. In the first unit, paralleling the introduction to the course, students explore their membership in the formal and informal groups that make up their lives (country, culture, church, family, neighborhood, and so on). Most introductory psychology courses begin with physiology, so the second workbook unit deals with physical style (internal, regarding activity level, adaptability, stimulation seeking and body sensitivity, and external, regarding physical characteristics). Sensory and perceptual style follows, in which students explore sensory system preferences and perceptual/organizational patterns. When studying cognition and learning, learning style is clarified, in terms of spatial/symbolic and receptive/expressive preferences, and in terms of positive and negative learning experiences. The following unit in introductory texts is motivation and emotion. In the workbook students investigate the relative importance of their needs and ways of handling conflicts between important needs, as well as ways of dealing with the four basic emotions (anger, sadness, fear, gladness). During the developmental unit, students probe relationships with siblings, family roles, relationships with parents, marital implications (if applicable), and the developmental stages involved in achieving identity and interdependence. When studying personality and pathology, students pull together their interpersonal style (in informal and task-oriented situations) and their coping style (pattern of psychological defenses).

The unit on therapy provides an occasion to work at an overall integration of personality. This is achieved by searching the early units for basic personality features, and the later units for features resulting from experience. This leads to a final description of personality in terms of the interaction of basic features with past experience. The final unit of the workbook, usually paralleling social psychology in texts, consists of setting goals for the future and developing plans to meet these goals. The foci are primary relationship plans, career plans, and moral/life-style plans.

CHAPTER III

REVIEW OF THE RELATED LITERATURE ON SELF-CONCEPTUALIZATION

A. Introduction

In the previous chapter productive self-understanding was described as the process in which an individual actively discriminates and organizes information about his/her self for the purpose of making informed personal choices. This definition was discussed in terms of its three elements, simply referred to as the how, the what, and the why of self-understanding. In this chapter, the literature to be reviewed is divided into the same three categories: how self-understanding develops (i.e., the process), what self-understanding entails (i.e., the structure or content), and why self-understanding occurs (i.e., the objectives). In the following chapter, building on this theoretical foundation, the construction of the workbook is described.

B. The Process: How Self-Understanding Develops

In this section the cognitive operations involved in the basic processes of conceptualization are explicated. This provides a basis for exploring the manner in which conceptualizations about the self are formed. Finally, these self-conceptualizations are shown to be the basis for the cross-situational consistency of personality.

1. Conceptualization. Bem (1972) has pointed out a general shift in social psychology from motivational or drive models of cognition to information processing models. The drive models are exemplified in the homeostatic emphasis of Heider's (1946) formal balance theory and the theories of cognitive dissonance (Festinger, 1957) and cognitive consistency (Abelson et al., 1968) that developed out of Heider's work. The essence of these drive models was escaping the emotional discomfort that resulted when one cognition or belief did not match another. According to Festinger (1957) relief from tension could be accomplished in a variety of ways, including suppression of one cognition, decreasing the importance of the cognitions, distorting one or both of the cognitions, changing contradictory behavior, or giving up one of the cognitions. Such drive models do have some value in explaining some of the motivation involved in conceptualization. This value is clarified in part C below, in the discussion of the objectives involved in self-understanding. With the development of information processing models, however, drive models of cognition have proven inadequate for the explanation of the specific mental activities involved in conceptualization.

The information processing model, consists of three stages: detection and processing, memory structure and processes, and high order cognition (see Miller et al., 1960). The first stage consists of the acquisition of information through such processes as sensory registration, selective attention, and encoding. Information is not acquired in the passive receptive manner of a camera or tape recorder. K. J. Gergen

(1977) has pointed out that the "naive realist" (p. 50) position has lost credibility in the physical sciences. This position sought the laws in nature that merely required discovery through the observation of regularities. Physical scientists have instead come to believe that lawfulness is created through the human application of conceptual biases. Similarly each human being is selective about which incoming information he pays attention to, and how he organizes the attended to information (encoding).

Given the rehearsal of this encoded information it is further organized, through a process called chunking (Miller, 1956) which enables its storage in short-term memory (STM). Actually, organizing information into meaningfully related bits or chunks requires the activation of the higher order cognition that is the essence of long-term memory (LTM). This involves the imposition of the rules according to which pieces of information are related. Solso (1979) refers to the construction of the rules by which information is differentiated into classes, and by which these classes are related, as concept formation. K. J. Gergen (1977) calls the same process conceptualization.

The construction of the rules of classification that is the essence of conceptualization is a complex process. It depends upon the other higher order cognitive functions: abstracting and imagining, reasoning, and judging (Bruner et al., 1956). Abstracting and imagining have to do with the organization of information into symbols.

Reasoning consists of the rules of logic for membership within classes and the relationship between them. Judging is the decision-making function which actively engages the constructive aspects of conceptualization.

All stages of information processing are actively constructive. At no time is the human being just a passive recorder of so-called objective information. Attention is selective. Encoding is an organizational process that merges into the chunking of information. Chunking occurs within the rules for membership within a class and the relationships between classes that comprise conceptualization. To call this entire process constructive is to say that the increasing differentiation and organization of information is not objectively present in the experienced phenomenon (naive realism). Instead, the rules for the differentiation and organization of experience are constructed by individuals and imposed upon experience.

Wittgenstein (1953), in his painstaking analysis of human language points out that the members of most common everyday categories do not share one single feature but rather entail a pattern of overlapping

similarities. He describes the process of pattern recognition as the extraction of a central distinctive gist from great diversity. He refers to such categories or patterns as "fuzzy sets." The point is that our language belies the tight order of the naive realist's understanding of conceptualization, and supports the arbitrary imposition of the constructed categories that are at the heart of the information processing model.

One of the early and highly influential voices in cognitive psychology was George Kelly (1955). He based his understanding of personality upon the principle of "constructive alternativism", in which he posited that reality has as many different faces as an individual could construct, and that the individual attempted to develop a coherent system of constructions and impose them upon events. Kelly said that man approached the world as a scientist. The process that man-the-scientist goes through, as represented by Kelly, parallels the evolution of scientific thought as elucidated by Kuhn (1970). According to Kuhn, no scientific theory ever fits all the facts. A theory that is currently accepted explains a large percentage of the data of experience. Contradictory evidence is disregarded by most scientists until a "revolution" occurs in which a new theory is constructed with a better fit to more of the data. Kelly (1955) and Epstein (1973) believe that this same process occurs with regard to each person's understanding of his/her experience.

In other words, individuals construct conceptual theories and

operate as if these were 'scientific facts.' They use these theories for the differentiation and organization which puts order and predictability into the chaos of their experience. New data is selectively attended to, encoded, and chunked so as to confirm their conceptual system. Kelly (1969) referred to a choice corollary by which the individual chooses the alternative through which he anticipates the elaboration of his system. Piaget (1966) referred to this process as assimilation, the incorporation of the perceptions of new experience into the existing conceptual framework.

Blasi (1976), who refers to the assimilative process as selectivity, points out the limitation of this preservation of the cognitive status quo. He says that when a significant experience (or pattern of experiences) conflicts with the accepted conceptual system, the individual must be flexible enough to revise his/her conceptualizations to better fit the emergent data. Piaget (1966) referred to this process as accomodation, the modification and enrichment of cognitive structures as a result of new input. Kelly (1969) did not have a specific corollary to describe this process, but did refer to the evolution of the personal construct system through the progressive differentiation of structure into independently organized subsystems, and the increasing integration of these systems within the system as a whole.

In summary, conceptualization is the active construction of hypothetical laws for (1) the differentiation of experience into classes

and for (2) the organized relationship between these classes. The data of experience are commonly assimilated in a good fit with these laws, until glaring inconsistencies can no longer be overlooked. A period of disorientation (however brief) follows, until a new theory, better explaining the differentiation and organization of experience emerges.

Loevinger (1976) calls this ebb and flow cognitive development (p. 58) and likens it to the orthogenetic law of development described by Werner (1964):

The development of biological forms is expressed in an increasing differentiation of parts and an increasing subordination, or hierarchization. Such a process of hierarchization means for any organic structure the organization of the differentiated parts for a closed totality, an ordering and grouping of parts in terms of the whole organism (p. 41).

Piaget (1966), Jung (1944), and Lewin (1935) all refer to increasing differentiation as the person develops. Piaget is referring essentially to the differentiation of cognitive structures, and Jung and Lewin to the differentiation of personality. However, according to the view of cognitive developmentalism, referred to by Blasi (1976) and Loevinger (1976), cognition and personality are intertwined:

The development of cognitive structures is the fundamental factor in psychological development as a whole, affecting in particular the acquisition of personality structures (Blasi, 1976, p. 40).

Further attention is paid in the following section to the importance of a developmental perspective. For the moment it is sufficient to note the integral connection between the overall process of conceptual-

ization, and the concepts that apply specifically to the individual personality. To this point, the discussion has focused on conceptualization, per se. In the next section conceptualization of the self is explored.

2. Self-conceptualization. The construction of subsystems of self-referent concepts is simply one part of the overall process of conceptualization explained above. The same processes of increasing differentiation and organization occur; so also the ebb and flow between assimilation and accommodation. However, the development of concepts which refer to the self must in some manner be different from the development of concepts referring to the rest of the phenomenal world. Second or third person attributions (e.g., you are, he/she/it is) can be taught and/or consensually validated. Skinner (1953) says that all first person attributions are made the same way, that internal identifications not taught are internal identification not made.

However, the question as to how specifically self-referent concepts develop cannot be answered so simply. In this section the important factors in the development of self-conceptualization are discussed. These include the differentiation of the self and the not-self, the role of significant others, role experimentation, the interaction of person and situation and behavior, the role of the unconscious, selectivity in attention and organization, the cognitive breakthroughs of adolescence, and the experiences of developmental transitions.

2a. Differentiation of the self and not-self. Skinner (1953) has acknowledged that every individual begins with diffuse unawareness and moves to awareness as he/she learns to differentiate and label experience. However, as mentioned above, Skinner believes that differentiated awareness of self must be taught in order to occur. Psychologists in the tradition known as ego psychology (see Blank & Blank, 1974) do not agree. Intensified observation of early infant development has led to a psychoanalytic understanding of the differentiation of the self from the not-self.

Spitz (1965) discovered the necessity of a relationship with a primary caretaker for life itself to continue. She also highlighted the value of frustration for the infant's differentiation of his/her self-representation from object representations (other people). These groundbreaking formulations by Spitz were built upon my Mahler (1968). Her work clarifies in depth the development of a concept of self.

It is not important for the present discussion to review in detail Mahler's stages in the separation - individuation process. A brief review will suffice. The infant's ability to distinguish between his/her self and others develops gradually; it occurs according to the caretaker's response to the infant's needs. The infant begins life in an autistic state of hallucinatory disorientation (0-2 months). Consistent satisfaction of physical needs leads to and through a sybiotic period during which the need-satisfying object is seen as merely an extension of the infant's omnipotent self (2-6 months).

The development of object constancy (Piaget, 1966) facilitates the belief that the caretaker (extension of self) will always be there to meet the infant's needs. Such a feeling of security frees the curiosity propelled by a rapidly developing body. In this stage of separation-individuation (6 months to 2½ years), the infant first moves tentatively and briefly away from the caretaker, always returning to safe anchorage. However, he/she finds increasing pleasure in physical separateness and eventually elatedly indulges in exploration with little regard for the caretaker's presence. This continues until sufficient experiences of frustration lead to attempted 'rapproachments' with the caretaker. However, now unwilling to give up the joys of separateness, the infant tries to coerce the caretaker into becoming again an extension of the self, though now, on the infant's terms. The inevitable failure of such efforts and continuing experiences of frustration lead to what Kaplan (1978) has called the fall from grace. Kaplan says that the infant realizes that the caretaker is a separate person and is not all protecting; that this discovery is humiliating and depressing. It is also the true beginning of a separate identity.

As the cognitive capacity to internally represent objects (18 months - 2½ years; see Piaget, 1966) develops, the infant becomes more capable of carrying the caretaker with him/her internally. He/she begins then to build a sense of autonomy (Erikson, 1968) that enriches the joys of separate functioning while at the same time permitting the security of union with the increasingly internalized caretaker.

In summary, from a psychoanalytic perspective, numerous factors are involved in the development of a sense of self. These include the consistent gratification of important needs, the cognitive capacity to notice a constant object responsible for this need satisfaction, the emotional fusion with this object as omnipotent caretaker, the all-out indulgence of curiosity and practicing with the body, the repeated frustration of some exploratory desires, and the internal representation of the nurturing caretaker. These factors might be grouped into three areas: developing cognitive capacities, increasingly complex internal needs, and relationships with the caretaker.

2b. The role of significant others. The child's interaction with other people expands, in an ever-broadening circle, beyond the primary caretaker. Relationships develop with the other parent and syblings (where applicable), with relatives, neighbors, and other children. The more time the child spends with these individuals and the more influential they are regarding need-satisfaction, the more the child internalizes their attitudes and behavioral patterns. Breger (1974) calls this identification, the process of internalizing persons of emotional significance. For the child, this internalization entails adopting the other's conceptualization of experience, from philosophy of life to self-care. The internalization also includes making part of the child's conceptualization of self, the significant other's conceptualization of himself or herself (Blank & Blank, 1974). From a cognitive viewpoint, this means that the child takes in the rules for the differentiation and organization of self-conceptualizations that

characterize significant others. Before achieving formal operations (Piaget, 1966), these rules remain concrete, referenced to particular objects and behavior.

Not only does the child learn to conceptualize regarding himself or herself just as significant others conceptualize themselves. The child also learns to internalize their attitudes toward him/her. The importance of the reflected appraisal of others was postulated by Charles Horton Cooley (1902). He referred to a looking-glass self, the experience of seeing ourselves reflected (i.e., as though from outside) through the eyes of another. George Herbert Meade (1934) coined the term generalized other for the clustering by the individual of the attitudes of significant others towards himself. This self-evaluation through the eyes of others is known as reflected appraisal. Studies support the occurrence of this phenomenon (see Videbeck, 1960).

Other people are also important as sources of social comparison. It is in the juxtaposition of an individual's behavior and attitudes with the differing behavior and attitudes of others that differentiation of the self is clarified (Gergen, 1971).

2c. Role experimentation. Tedeschi and Linskold (1976) define a role as "the functions a particular person performs when occupying a particular characterization within a social context" (p. 10). Every person acts out a variety of roles throughout the course of life. Each role prescribes certain behaviors according to cultural norms and expectations. One is at different times a son or daughter, a student, a

worker, a friend, a believer, a (prospective) citizen, and so on. Gergen (1971) says that such roles are learned through imitation (see also Mead, 1925) and cognitive rehearsal of the prescribed behavior and attitudes. The task of adolescence, according to Erikson (1968), is to experiment with and eventually construct a consistent integration of these roles.

2d. The interaction of person x situation x behavior. Bem (1972) has developed yet another explanation for the conceptualization of the self. Schachter and Singer (1962) studied the labelling of emotional states. They found that physiological awareness was vague and that individuals relied on the observation of the behavior exhibited by themselves and others in specific situations in order to label their emotional states. These results have not been replicated. Nonetheless, building on this evidence, Bem (1972) has developed self-perception theory (SPT). Its two postulates are:

1. Individuals come to know their own attitudes, emotions, and other internal states by inferring them from observations of their own overt behavior and/or the circumstances in which this behavior occurs (p. 5).
2. To the extent that internal cues are weak, ambiguous, or uninterpretable, the individual is functionally in the same position as an outside observer, who must necessarily rely on these same external cues to infer the individual's inner states (p. 6).

Wylie (1974), in reviewing the studies of the self-concept, agrees that people infer their self-conceptualizations from their behavior. She does not mention situational determinants.

One area of debate is the relative importance of personality and situation. Ross (1977) criticizes a tendency among intuitive psychologists

"to underestimate the importance of situational determinants and overestimate the degree to which actions and outcomes reflect the actor's dispositions" (p. 193,4). Granted the postulates of SPT, the same might also be said of individuals in general. Mischel (1973) reviewed the literature on attribution research. He concluded individuals cognitively transform the meaning and impact of behaviors and situations according to the idiosyncratic, acquired meaning of the specific behaviors and situations in question. Bandura (1978) criticizes even such "partially bidirectional" (p. 345) explanations. He points out the importance of cognitive influences in mediating the reciprocal determinism of person, behavior and situation.

It seems fair to conclude that individuals do rely on their own observations of their behaviors and the situations in which they act, but that these behaviors and situations do not dictate their own meanings. These meanings are actively constructed by the individual in the manner described previously. Furthermore, at the time the behaviors are performed, the personal meanings have already influenced the behaviors and the situations according to anticipated self-prescribed contingencies (Bandura, 1978). In other words, self-conceptualizations result from a complex and highly idiosyncratic interaction of the person's already developed conceptualizations, and the situation, and his/her behavior.

2e. The role of the unconscious. Wylie (1974) criticizes self-concept theorists such as Rogers (p. 9) for being unclear or vacillating

regarding the role of the unconscious in self-conceptualizations. She declares the importance of specificity and consistency on this issue.

The unconscious has pivotal significance in the writings of Freud (1953) and the entire psychoanalytic tradition. Jung and Freud, despite their many differences, agreed upon the uncovering of the unconscious as the essential process in therapy (see Jung, 1953). Jacobson (1964), defined self-representations as "the unconscious, preconscious, and conscious endopsychic representations of the bodily and mental self in the system of the ego" (p. 19).

Not all of Freud's followers agreed regarding the focal role of the unconscious. Adler (1930) did not agree. He claimed that consciousness was the center of personality. Others, in one branch of the psychoanalytic tradition, emphasized the role of the ego and the importance of rational consciousness in determining behavior (Blank & Blank, 1974). Allport (1961) also asserted that, for the normal individual, conscious determinants of behavior were of overwhelming importance. Holmes (1974) and Mischel (1976) point out that research generally contradicts the supposition that the most basic aspects of the self are beyond awareness.

From a cognitive viewpoint, the psychoanalytic notion of the unconscious is not an essential postulate (i.e., referring to diffuse emotional forces, resulting from past experience, and controlling present behavior). However, it is clear that cognitions do occur with varied degrees of

awareness. Such therapists as Ellis (1962) and Meichenbaum (1977) work toward changing irrational beliefs or self-talk that occurs habitually, influencing behavior, without direct awareness. The work of therapy is to focus awareness on these conceptualizations and change them.

Cognitive psychologists have recently begun to study long-term memory and the process of forgetting. Tulving (1974) coined the term cue-dependent forgetting to represent the theory that unretrieved memories are alive and well and situated in an associative web where they wait for the proper stimulation to release them. Impressive support for this theory can be found in studies by Tulving and Pearlstone (1966) and Tulving and Psotka (1971). Numerous other studies also suggest that long-term memory exercises an influential selective function at each stage of information processing, from input to output (Erdelyi, 1974). Erdelyi and others propose that LTM affects the selectivity of information processing before the information even reaches conscious awareness. LTM is active in the selection process at the peripheral receptor systems, afferent sensory storage, iconic storage and encoding. All these steps occur before information reaches short-term storage, the point of conscious awareness. This influence of LTM does occur prior to conscious awareness of the incoming information, and as such provides a kind of "unconscious" influence upon perception. This influence is, given the appropriate cues, accessible to awareness, though economic processing normally militates against such intrusion.

It appears, from this brief review of the literature on the unconscious, that the development of self-understanding need not require the postulation of an unconscious in the psychoanalytic sense. Self-understanding can be facilitated through the clarification of conceptualizations about the self. These concepts may be operative in scarcely attended to self-statements. They may also be stored in long-term memory, awaiting necessary cues for retrieval. A more detailed discussion of selectivity in the processing of information follows.

2f. Selectivity in attention and organization. Epstein (1973) has criticized Kelley for his lack of attention to emotions in the formulation of self-conceptualizations. Epstein proposes a theory which is in agreement with the essence of Kelly's understanding: each individual operates as a scientist, developing, testing and reformulating theories about the self in relation to the world. However, Epstein's research highlights the emotions as the gauge for the self-system.

Epstein is not the first to make such a proposal. Sullivan (1953) hypothesized a self-system which avoided anxiety and preserved consistency through selective inattention to facts inconsistent with the current level of development. Combs and Snygg (1959) presented a picture of a self revolving around a need for adequacy: in order to maintain a sense of adequacy positive self-perceptions became central whereas negative ones were relegated to the periphery of awareness. Coopersmith (1967) also believed that individuals managed self-evaluative feelings by varying the salience of different self-attributions. Rosenberg (1968) stated that a person "values those things at which he

It seems safe to conclude that selective information processing, gauged by the feelings of anxiety and self-esteem, is operative in all forms of conceptualization, and particularly in the conceptualization of the self. These issues are further clarified in the discussion in part D regarding why self-understanding occurs.

2g. The cognitive breakthroughs of adolescence. It has already been made clear that one must be able to get outside to look inside (Bem, 1972; see 2d above). Conceptualization of the self requires the ability to see the self as object. The absolutism or egocentrism of the child negates this perspective (Piaget, 1966). Elkind's (1971) research supports Piaget's contention. Rosenberg (1979) also agrees, and states that empathy is the prerequisite for the introspection of adolescence. It appears that it is only as the latency age child actually appreciates the experience of another, that he or she begins to see himself or herself from varied perspectives.

This breaking through the egocentric narrowness of childhood apparently frees up the fascination with the myriads of possibilities that is an essential hallmark of formal operations (Piaget, 1966). Now able to abstract beyond his/her own concrete perspective, the new adolescent indulges in the hypothetical realities that expand the realm of the possible.

It is not surprising that these newfound cognitive abilities are turned upon the self. Okum and Sasfy (1977) point out that for the adolescent, the development of theories about the self takes on an air

of scientific research. The adolescent, able to see so many perspectives on and possibilities for his/her self, actively engages in exploring and constructing his/her identity. McCanless and Evans (1973) studied adolescents and found evidence that they begin to differentiate their self-concepts, according to situation-specific variables. For example, a 15 year-old boy might see himself as rowdy and aggressive when out with male peers, as sensitive and understanding when on a date, as industrious and responsible when at his job, and as bored and out of place when with parents and adult relatives. Erikson (1968a) sees the developmental task of adolescence as identity formation, the movement towards a "more or less actually obtained but forever to-be-revised sense of the reality of the self within social reality" (p. 198). He highlights the persistent sameness of the integrating self-representations that is essential to identity. Evidently adolescent identity formation entails the cognitive differentiation and organization (or integration) that is central to conceptualization in general and self-conceptualization in particular. This means that adolescence is not only the first stage of life in which self-understanding is possible; it is also the time when self-understanding is the pre-eminent developmental task.

2h. The experiences of developmental transitions. The ebb and flow between assimilation and accommodation has already been discussed. Further clarification is needed, however, regarding the probable developmental timing of these cognitive processes. Levinson and his associates (1978) found the experience of adulthood to consist of a

fairly predictable series of stable and transitional periods. The stable periods are: entering the adulthood world (22-28), settling down (33-40), entering middle adulthood (45-50), culmination of middle adulthood (55-60), and late adulthood (65 and on). These stable periods are focused around the primary task of building a life structure: "a man must make certain key choices, form a structure around them, and pursue his goals and values within this structure" (p. 49). However, eventually the structure of each stable period comes into question and must be modified. This leads to the transitional period wherein some aspects of the previous structure are let go and new elements are integrated into a new life structure.

Apparently assimilation and accommodation are at the heart of psychological development. This is the contention of Breger (1974) who points to the ongoing tension between the two. He speaks of assimilation as a time of stasis, resting in the stability of the past. Efforts are directed towards tension reduction as described by Sullivan (1953). Kaplan (1978) speaks of this time as reaching for the embeddedness or oneness that are the hallmark of prenatal and early postnatal development. Breger points out the danger of a life that succumbs to this protective strategy: dissociation and disorganization of self are the eventual result.

Some degree of assimilative tension reduction is valuable, says Breger, but it must be balanced by the satisfactions of new growth that accommodation brings. Accommodation is a tension increasing process,

in which the individual initiates the expansion and differentiation of his self. Kaplan (1978) describes the process as the extension of the inner push towards separateness that characterizes the bodily and environmental exploration of the infant.

Kaplan characterizes the tension between the desires of oneness and separateness as a pivotal life-long experience. This is Breger's point also regarding the cognitive processes of assimilation and accommodation. Both processes are always in some degree of active tension. However, as Levinson has demonstrated (and Breger agrees), one particular process dominates a particular developmental period. Assimilation pervades the stable periods, marked by feelings of tension reduction, embeddedness, or security. Accommodation is the challenge of the transitional periods, during which feelings of tension increase, anxiety and exhilaration predominate.

In other words, the ongoing process of self-conceptualization is at a relative standstill during the stable periods. The existing structure of the conceptualizations is merely augmented by additional information. In this sense, self-conceptualization is primarily a structure during the stable periods of development. During the transitional periods, however, self-conceptualization is an active process. The pre-existing structure must be dismantled and re-constructed to accommodate new information.

It appears that a workbook to facilitate self-understanding would be of minimal use in a stable period. Perhaps a small degree of

consolidation of the structure would occur. Such a workbook, however, has more potential to assist the accommodation process of a transitional period. The workbook could provide a method for differentiating and reorganizing new information about the self, thereby constructing a new system of self-conceptualization.

3. Cross-situational consistency and multiple determinism.

"A person does not act upon the world; the world acts upon him" (Skinner, 1981, p. 211). "A person is not an originating agent; he is a locus, a point at which many genetic and environmental conditions come together in a joint effect" (Skinner, 1974, p. 168).

Were such statements as these by Skinner accepted as true, self-understanding would not exist. Each person would be the deterministic product of biology and environment. Instead of self-understanding, individuals might be involved in contingency-understanding. Many, however, would see no value in efforts to understand when these efforts themselves would be situationally determined. Blasi (1976) refers to situational theories such as Skinner's as mechanistic. The mind is seen as some sort of "tabula rasa" which merely records and responds to experience. The inadequacy of this "naive realist" approach to science or conceptualization has already been made clear.

Several other points generic to the present topic have also been explicated. The construction of self-conceptualizations has been described as an active process in which the data of experience are

selectively attended to and organized. The organization was shown to happen according to existing rules for membership within and relationship between classes. Such concepts were shown to be imposed upon experience in such a way as to assimilate the data into the existing construct system. Cognitive structures were also shown to be modifiable so as to accommodate information which could not fit the former system. However, even accommodation was explained, not as a deterministic product of the information, but as the active construction by the individual, of a renewed conceptual system which fits more of the data than previously. Self-conceptualization then, is multiply determined, a product of the person, the situation and the behavior (Bandura, 1978).

It is essentially the cognitive constructions of the person that are responsible for the perceived cross-situational consistency of self-conceptualization. Heider (1958) has stated that in the psychology of common sense, people go quickly from act to globalized internal disposition. Mischel (1973) has outlined more specifically five cognitive operations that underlie the perceived consistency. The first and most global of these is the individual's sense of "cognitive and behavior construction competencies," what he/she is confident of knowing and being able to do. This is quite similar to the overall goal of productive self-understanding, to be discussed in part D of this chapter. The second set of operations underlying the consistency is the individual's construct system and encoding strategies. This includes the active reconstruction process which memory is. Third are the individual's

expectancies of behavior and stimulus outcomes. The fourth factor Mischel points out is the subjective stimulus values. Finally, there are the contingency rules regarding situations, behaviors and outcomes that form the individual's self-regulatory systems and plans.

The foundation of each of these factors is the system of conceptual rules regarding the self in interaction with the environment. As already shown, the concepts involved in this system influence the processing of incoming information so as to perpetuate the system. Generally speaking, information is assimilated with good fit to the system. The result is perceived consistency of the self over time. Nor is this consistency merely perceptual: if the self is primarily constituted by the conceptualizations that underlie emotions and actions, then the self is actually consistent also. Of course self-conceptualizations do change, but such accommodations are merely minor adjustments during the extended stable periods of adulthood. Even in times of transition, when major shifts [in the conceptual system may occur, these shifts] are frequently a fairly smooth reorganization which preserves the sense of continuity with the past. Transitional periods are experienced as crises when the individual faces major tearing down of past structures before satisfactory new ones can even begin to be built (Levinson et al., 1978). The experience of crisis is one of disorganization, discontinuity, and thereby anxiety. This entire exposition of the stability (in most people at most times) of self-conceptualizations supports Lecky's (1954) theory of personality being built around the need for self-consistency.

C. The Structure: What Self-Understanding Entails

In this section the content of self-understanding is explored. Though, as has already been explained, every individual's self-conceptualization is a highly idiosyncratic process (Mischel, 1973), still the literature suggests some common differentiated elements around which the individualized concepts are formed. These differentiated elements are here reviewed, as a foundation for the units of the workbook. Then the literature regarding the organization or integration of these elements is reviewed as a basis for the last two units.

1. Differentiation of self in the literature. William James (1910) posited a division of the self into material, social, and spiritual. Since then numerous psychologists have posited various aspects of the self. Although their perceptions are highly diverse, still there are certain elements that recur or overlap. Rather than attempt a thematic discussion of so many diverse points of view, the information is presented in tabular form (Table 1). The organizing principle is the fit with the units of the workbook. Notice that no one point of view covers all the stages. Furthermore, despite the broad sampling of theoretical orientations, no theorist includes sensory and perceptual style. Apparently the most common referred to or studied elements of self-understanding are motivational and emotional style, interpersonal and coping style, and goals and plans (if this is taken to include moral style).

Table 1

Differential Elements of Self-Understanding

Workbook Unit	Bellak (1969) Ego Functions	Epstein (1973)	Breger (1974) Core Life Areas	Loevinger (1976) Elements of Ego Development
I Background Information				
II Physical Style	Stimulus barrier	Body self		Bodily feelings
III Sensory & Perceptual Style				
IV Learning Style	Reality testing; judgment; thought processes			Cognitive style
V Motivational & Emotional Style	Reality testing; regulation of drives & affects		Deal with anger & sexual impulses	Impulse control/moral style
VI Developmental Experiences	Adaptive regression in service of ego; autonomous functioning		Maleness/femaleness; independence with clear conscience	
VII Interpersonal & Coping Style	Reality testing; object relations; defensive functioning		Maleness/femaleness; establish closeness intimacy	Interpersonal style
VIII Personality Style	Synthetic, integrative functioning			
IX Future Goals & Plans	Mastery, competence	Moral self		Moral style
Too global: fits 2 or more categories		Inferred inner self		

Table 1 (cont'd)

Workbook Unit	Murray (1951b)	Rogers (1951) Elements of self-concept	Allport (1955) Functions of proprium	Gordon (1968) Factor analysis of answers to Who am I
I Background Information				Formal & informal group membership
II Physical Style			Awareness of the body self	Bodily attributes
III				
IV Learning Style				Intellectual concerns
V Motivational & Emotional Style	Conflict management, need satisfaction	Value qualities associated w/experiences & objects	Maintaining self-esteem, synthesis of inner needs w/outer reality	Feelings of competence; personal taste
VI Development			Continuing over time	
VII Interpersonal & Coping Style		Percepts of self in relation to others & the environment	Ego extension; synthesis of inner needs/w outer needs	Ways of relating; others' feelings towards me
VIII				
IX Future Goals & Plans	Plans for goal attainment	Goals and ideals	Increase tension; expand awareness; seek challenges	Moral worth
Too Global Fits 2 or more Categories		Characteristics & abilities		Psychological characteristics

2. Choice of workbook units. Since the workbook was developed as a companion to college-level introductory psychology texts, the units were chosen to parallel such a course. Not surprisingly, since introductory psychology consists of a survey of the entire field of psychology, the units of such a course are comprehensive regarding areas of self-understanding. The comprehensive breadth of these units is evident in Table 1 where none of the conceptual orientations towards personality touches upon more than seven out of nine units. Furthermore, the workbook units do subsume all the elements of the various orientations.

Not only are the units of the workbook comprehensive, but the order of the units is meaningful regarding self-understanding. This order consists of three steps: (1) exploration of constitutional elements of self-understanding, (2) exploration of learned elements, and (3) integration of these elements in terms of personality organization and life-goals. The division between the constitutional and learned elements is supported by Allport (1937), Cattell (1950), and the research of Chess, Thomas and Birch (1965).

The units in which constitutional elements are explored are physical style, sensory and perceptual style, and learning style (spatial/symbolic, input/output preferences). The units in which learned elements of self-understanding are explored are motivation and emotion, development and interpersonal and coping style. Details about the structure and content of these units is provided in the following

chapter.

3. Integration of self-understanding: Personality and Future Plans. The goal in this section is to elucidate the importance of integrating one's self-understanding. To limit self-exploration to the discrete elements outlined above would be to leave self-understanding disjointed and to some degree inconsistent.

The importance of personality integration has solid support in the literature. Freud (1923) claimed that the ego was an organization, and that "neurosis . . . (was) only a sign that the ego has not succeeded in making a synthesis, that in attempting to do so, it has forfeited its unity" (p. 253). Adler (1930) saw this unity as being achieved in a "guiding fiction" or "style of life" to which all else in the personality is subordinated. Allport (1937) emphasized the importance of a unifying philosophy of life as a sign of maturity. Jung (1944) highlighted the archetype of the Self, the human striving for unity, in which all parts of the personality are balanced and energy is evenly distributed throughout. He said that one-sided development (placing too much emphasis on one part of the personality) resulted in conflict, tension, and strain. Self-realization for Jung, was the most complete differentiation and harmonious blending of all aspects of the total personality. Lecky (1945) built a theory of personality around the striving for unity. Loevinger (1976) also emphasized the importance of integration:

The striving to master, to integrate, to make sense of experience is not just one ego function among many but

the essence of the ego (p. 59).

Kohut (1977) points out the results of integration or its lack:

The smooth functioning of a cohesive configuration at the center of one's personality is experienced as a sense of self, with a feeling of wholeness and well-being. A fragmentation of the self, that is, loss of its cohesive integration, is experienced with extreme discomfort, such as feelings of depression or even deadness (p. 129).

There is evidently solid support for the importance of integrating one's self-understanding. Considering the inter-connectedness of cognition and personality, it is to be expected that the differentiation and organization that are the essence of conceptualization, would also be central to personality functioning. In conclusion, self-understanding is increasingly "productive" as it involves higher levels of integration. The workbook units on personality and future planning are structured to facilitate this increasing integration. The personality unit is a straightforward series of exercises to draw integrating themes out of the earlier units.

The final unit on future planning completes the integration of self-understanding by facilitating its concretization in future behavior. The importance of goals as integrative principles for the personality was emphasized first by Adler (1930). Murray (1951) stated that "the most important thing to discover about an individual is the superordinate directionality (or directionalities) of his actions, whether mental, verbal, or physical" (p. 276). Allport (1961) claimed that long-range goals were the chief unifying force of the personality. Others who have emphasized the importance of the individual's intentions

are Goldstein (1939), Rogers (1951), and Maslow (1968). The final unit of the workbook assists the individual in clarifying these intentions or goals, and weighing them against the elements of self-understanding highlighted in earlier units. As a result, some goals must be set aside or refined, while others are given added support. Finally, action plans and time lines are developed to assist the individual in realizing the goals.

4. Accuracy of self-reports. This section on the structure or content of self-understanding would not be complete without consideration of the accuracy of this content, and even moreso, the accuracy of the reports of the content of self-understanding. In psychological testing self-reports are received with necessary skepticism. Social psychologists have demonstrated that individuals are actively engaged in impression management, "a self-monitoring process by which one seeks to control one's evaluation by another, usually in a favorable direction" (Tedeschi & Leonesio, 1976, pp. 227-233). The point is that, rather than present oneself "objectively," as one really is, a person's self-presentation is 'distorted' to achieve a desired effect. In the field of psychological testing this phenomenon is known as social desirability. Many tests have built in scales to detect a response set that indicates faking good or faking bad. For example, the MMPI contains an L, F and K scale, all of which give information about dissimulation (see Dahlstrom et al., 1975). However, such scales are controversial at best. Wylie (1974) reviews the literature on social desirability and points out that attempts at social desirability norms or scales are necessarily

inadequate. The reason is that individuals are highly idiosyncratic in their impression management, and what is considered favorable by one, is not by another, and vice versa. For example, Norman (1967) had individuals rate themselves using self-descriptive adjectives. He found that only 19% of the variance in the ratings was due to total persons X attributes interaction (i.e., social desirability); 81% of the variance was shrouded in the fog of individual differences. The upshot of all this is that, while individuals almost certainly do engage in impression management, they do this in an idiosyncratic fashion that belies generalized, socially acceptable standards for behavior.

Mischel (1968) and Peterson (1968) have criticized clinician's attempts to second guess individuals, to see through their attempts at impression management and defensiveness to the real truth of the personality. In reviewing a variety of studies, both claim that self-reports are at least as accurate as the clinician's best judgment. Mischel (1973) concludes that direct information from the person is the best source of data for understanding that person.

The controversy regarding comparative accuracy of clinical judgments and self-reports is not germane to the present discussion, except to highlight the support that does exist for the worth of self-report data. In the context of the information processing model of self-conceptualization, as presented above, impression management is the counterpart of the selectivity that occurs in attention and organization (see 2f in Part B of this chapter). There the position of the

naive realist was exposed as short-sighted, not encompassing all the facts. Here again it seems evident that individuals do not have an "objective personality;" rather they actively construct memories and reports of these memories just as selectively as they construct the differentiation and organization of experience. The point is not to get past these constructions to the real person, but to understand the constructions as representative of the person. Mischel (1979) pointed out that "self-enhancing information processing and biased self-encoding may be the requirement for positive affect" (p. 754). It appears that the same may be said of impression management.

What seems necessary for PSU is to minimize the need for impression management and to assist the individual in exploring and understanding his/her susceptibility to the perceived expectations of others. Wylie (1974) points out that the accuracy of self-reports can be optimized in several ways: 1) maximize specificity of information to make room for realistic knowledge to influence conceptualization, 2) maximize rapport with the experimenter, 3) use simple, clear language, 4) maximize topic salience for subjects, and 5) make it worth the subject's while to be honest. Davids (1955) also suggests offering anonymity. The workbook was constructed with these factors in mind. Exercises are behaviorally referenced wherever possible (1). The managers of the experiment were supportive, available, and responsive to students' needs while doing the workbook (2). Exercises were written for a grade six reading level (3). Exercises were written and examples chosen with

college students in mind (4). Students were informed before beginning, and reminded at intervals, that their gains in self-understanding and satisfying life-direction would only be as great as their willingness to be honest with themselves (5). Steps were also taken to assure anonymity. In the unit on development, individuals do explore their susceptibility to the expectations of others.

D. The Objectives: Why Self-Understanding Occurs

This part of the chapter is divided into two sections. First, the objectives of self-understanding are reviewed in general. Then, the dependent variables used to test the impact of the workbook are reviewed.

1. Why self-understanding occurs. This issue was already partially addressed in section 2f of Part B of this chapter, regarding selectivity in attention and organization. There it was pointed out that individuals engage in the differentiation and organization of experience to avoid the overwhelming anxiety that results when experience is chaotic. Also, it was noted that individuals selectively process information in a manner which maintains positive feelings about the self. Given that individuals experience themselves as constructing the conceptualizations that avoid anxiety and maintain self-esteem, it seems probable that a resulting construct would be something like "I am able to make my life worthwhile," or "I am able to achieve a sense of completion or fulfillment." It is the active, constructive nature of conceptualization that underlies such a feeling of capability.

The importance of a sense of capability has support in the literature. R. W. White (1959) emphasized the importance of competence as the center of the conflict-free sphere of the ego. He pointed out that through success experiences individuals needed to develop a sense of mastery over their environment, a belief that they would be able to meet their important needs. Early in the humanistic tradition, Combs and Snygg (1959) proposed a similar need for adequacy which was the central need underlying all behavior. From White's psychoanalytic perspective, and from the humanistic perspective of Combs and Snygg, a sense of competence or adequacy was proposed as a significant drive affecting all behavior. Bandura (1977) criticizes the postulation of such artifactual drives because they are second order inferences lacking behavioral foundation. Bandura refers instead to a cognitive function that is directly operational. He speaks of the "cognitive appraisal of performance accomplishment" (p. 263), by which people establish a sense of self-efficacy, the conviction that one is able to produce valued behaviors. Bandura points out that efficacy expectations are a major factor influencing whether a behavior will occur in the future: behaviors in the sphere of self-perceived capabilities will be performed, whereas situations calling for behaviors outside this sphere will be avoided. Efficacy expectations are different from outcome expectations: these latter refer to the expected connection between behavior and outcomes.

PSU involves awareness of self-perceived capabilities regarding the performance of behaviors. It also involves the understanding of

which behaviors lead to which outcomes. So it is that the individual engaged in PSU becomes aware of which behaviors he/she is able to perform and thereby which outcomes he/she is able to achieve. In other words, the person develops a realistic sense of which outcomes he/she can achieve, and what situations and behaviors enable the outcome. Consistent experience of oneself achieving valued outcomes results in the understanding of oneself as capable of worthwhile living.

Self-understanding is productive to the degree that it does lead to an increasing sense of capability. The more an individual appreciates the connections between behaviors, situations and outcomes, as well as the range of behaviors he/she can perform, the more he/she will develop a conviction of being capable of a satisfying life. As shown in the next chapter, the workbook contains frequent exercises to develop the appreciation of these connections and the resulting sense of capability.

2. Dependent variables. The conceptualization of oneself as capable of worthwhile living is the most all-encompassing result of PSU. However, this far-reaching self-concept can be differentiated into more specific components for research purposes. These include: (a) an increasing experience of oneself as capable, commonly referred to as ego strength, (b) psychosocial developmental progress or ego development, (c) decreasing psychological distress, (d) an increasing acceptance of one's strengths and weaknesses, (e) an increasing sense of general well-being, (f) increasing clarity and realism in career direction, and (g) decreasing interpersonal defensiveness.

2a. Ego strength. Barron (1953) developed the ES scale to predict response to treatment with brief, psychoanalytically oriented psychotherapy. From the MMPI item pool he selected the 68 items most highly correlated with rated improvement of 33 neurotic outpatients. On cross-validation samples, the scale correlated .42, .38 and .54 with ratings of improvement. But recent reviewers have questioned the adequacy of the scale for this purpose (Clayton & Graham, 1979; Clopton, 1979; Graham, 1977a, 1977b). Graham (1977b) concludes:

While the ES scale predicts response to psychotherapy when neurotic patients and individual psychoanalytically oriented therapy are involved, it probably is not very useful for predicting responses to other kinds of treatment or for other kinds of patients (pp. 35-35).

Though Barron's measure fails to predict change in most forms of therapy, there is evidence that therapy leads to changes on the Ego Strength scale. The ES score increases as a patient's mental status clears (Dahlstrom et al., 1975) and during the course of inpatient treatment (Lewinsohn, 1965). Higher ES scores follow outpatient treatment for VA patients (Lorr et al., 1962; McNair, Callahan, & Lorr, 1962), for obese women, rehabilitation patients, AA members, and neurotic addicts (Hollon & Mandell, 1979). Barron and Leary (1955) found that eight months of treatment led to comparable and significant increases for outpatients in individual and group psychotherapy. The consistent relationship of ES with therapy, evident in the above mentioned changes over treatment, suggest that the scale does have a valid meaning and satisfactory reliability (Barron, 1953; Gaines & Fretz, 1969; Silverman, 1963).

The question of the construct validity of the ES scale needs to be further clarified. An accumulation of data support its validity as a measure of a somewhat nebulous concept, ego strength. The relationship was suggested initially by Barron (1953) on the basis of the content of the scale items. High scores result from endorsing items indicative of satisfactory physical functioning and stability; freedom from psychasthenia, seclusiveness, phobias, various immature anxieties, religious dogmatism, and excessive moral rigidity; a secure sense of reality; and confidence in personal adequacy and ability to cope. To Barron, this represents a "capacity for integration, or ego strength" (p. 329). Crumpton et al (1960) obtained 14 factors from a sample of inpatients and medical students, prominently including absence of symptoms, religious dogmatism, psychopathic tendencies, and lack of anxiety and obsessions. A cluster analysis reported by Stein and Chu (1967) substantially confirms these accounts. Three interrelated clusters tap physical, cognitive, and emotional aspects of well-being.

Further attempts to validate the scale have included correlational studies in which the ES is related to test scores and behavioral indices of effective functioning and empirical comparisons between groups presumably differing in ego strength. Crumpton et al (1960) summarize published results prior to 1960:

Correlates of high ES scores are such variables as low MMPI clinical symptom scales, intelligence, and lack of ethnic prejudice; ratings of poise, drive, etc., Q-sort items descriptive of personality functioning; independence of judgment in a group situational test (Asch-type); ability to orient oneself correctly to the vertical plane in the

dark (Witkinson's field dependence); favorable aspects of functioning such as Wand M on the Rorschach; denial of need for help; improvement in hospitalized patients (pp. 283-284).

A diverse network of interrelationships links ES to effective ego functioning. It is consistently related to intelligence. Correlations with the Wechsler scales range from .32 to .44 (Adams & Cooper, 1962; Barron, 1953; Tamkin & Klett, 1957; Williams & Lawrence, 1954). Correlations with the CPI index of intellectual efficiency are even higher, ranging from .47 to .52 (Adams & Cooper, 1962; Barron, 1953). Not surprisingly, ES is also related to educational level (Clopton, 1979; Fowler et al., 1967).

Other relationships include a negative correlation with ethnocentrism (-.47 for patients and -.46 for graduate students; Barron, 1953). David (1968) factor analyzed patient's self and ideal-self descriptions and found ES loading on a factor with lenient self-evaluation, large self-ideal discrepancies, an ideal distinct from that of parents, and low psychopathic tendencies. The composite suggests a more individuated and self-accepting person. Similarly, Fiske et al (1964) found that ES loaded highly on a positive self-evaluation factor which included Q-sort adjustment. ES scores have also been shown related to constructive responses to stress (Grace, 1960; Dahlstrom et al., 1975). A negative relationship to anxiety and symptoms has also been demonstrated (Distler et al., 1964; Ends & Page, 1957; Spitzer, Fleiss, Endicott, & Cohen, 1967; Levine & Cohen, 1962).

Despite the naming of the above mentioned factors, it would be premature to call ES a measure of ego strength inasmuch as it shares only the most minimal common variance with similarly intended scales derived from other instruments. Intercorrelations include: .09 with the Rorschach Genetic Level (Levine & Cohen, 1962); .08 with the Goldberg scale (Kidd, 1968); -.12 with the Bender Gestalt Z-score (Roos, 1962); .12 with Cartwright's revision of the Rorschach Prognostic Rating Scale (Adams & Cooper, 1962); .13 with Klopfer's Rorschach Prognostic Rating Scale (Adams & Cooper, 1962). After finding only 2 of 36 significant intercorrelations among different ego strength measures, Herron et al. (1965) seem to have understated the situation in concluding "there seems to be little evidence for the construct of objectively measurable ego strength" (p. 404). In absence of convergent validation on this point, the ES must be evaluated in terms of its correlation with other measures. The literature surveyed has been consistent in showing high ES scores to have more cognitive resources, greater self-acceptance, greater resilience, and relative freedom from anxiety and other pathological symptoms.

Further validation is available when comparisons are made between high and low ES scorers on a variety of dimensions. In his original validation study on 40 graduate students, Barron (1953) found that high scorers were rated as functioning better, directing their energy more effectively, having broader cultural backgrounds, being more physically adequate, and more at ease socially. Korman (1960) found that psychiatric inpatients high in ES scores outperformed lower

scorers in a sensory discrimination task. Students self-referred for therapy were found to have higher ES scores than those referred by others (Himmelstein, 1964). Student counselees were lower in ES than those not requesting counseling (Reschke, 1967). Weikowitz (1960) studied neurotic and psychotic group therapy patients. Those higher in ES showed a more positive attitude towards therapy, were more sociable, and interacted more during the session. Greenfield et al. (1959) compared ES scores of those recovering quickly or slowly from mononeucleosis. The quick recovery group was significantly higher in ES. To summarize this disparate group of students, it is again apparent that hypothesized relationships between ES and ego strength are generally supported despite a variety of perspectives, multiple methods, and diverse criteria. Consistent results in the face of such varied applications are powerful support for the general application of ES as an index of ego resources.

Another important area of research assessing the adequacy of ES as a measure of ego strength consists of comparisons of groups varying in degree of psychopathology. The general conclusion supported by these studies is that the scale functions well in making gross distinctions - as between normal and psychopathological groups - but is inconsistent with more refined discriminations (Dahlstrom et al., 1975). Of nine studies, only one failed to report significant differences (Winters & Stortroen, 1963). Those studies supporting the discriminating power of ES (between normal and psychopathological samples) included: Crumpton et al., 1960; Gottesman, 1959;

Himelstein, 1964; Quay, 1955; Silverman, 1963; Spiegel, 1969; Stein and Chu, 1967; Taft, 1957. The use of ES in discriminating between diagnostic groups has not been so favorable (see Dahlstrom et al., 1975).

Graham's (1977b) review concludes that the ES scale generally works as a measure of adjustment. Valid discriminations can usually be made between normals and psychiatric patients, and between neurotics and psychotics. However, two limitations need to be pointed out. First, the scale is multidimensional: the general accuracy in measuring adjustment will be disrupted when one of the dimensions is particularly pertinent to a specific comparison group (e.g., religiosity among schizophrenics: Stein & Chu, 1967; students from a fundamentalist medical school: Crumpton et al., 1960). Second, as a self-report instrument it will underestimate the pathology of those who deny or ignore their pathology. People with ego syntoxic disorders will score higher on ES than those whose symptoms are ego-alien (e.g., studies of sociopathic types: Gottlesman, 1959; Roos, 1962). Apart from these limitations, ES is often capable of fine discriminations among diagnostic groups, and is certainly adequate at the molar level as an index of adjustment.

The ES scale, in summary, has been validated with a wide range of designs and measurement techniques, for a wide cross-section of the population. It has been shown to be a multi-dimensional index of ego strength related to cognitive resources, emotional resiliency, decreased anxiety, self-acceptance and relative freedom from symptoms.

The relationship of the ES scale to PSU is now apparent. As already clarified in part D-1, self-understanding is productive precisely to the degree that it leads to a consistent experience of oneself as having the cognitive and emotional resources to live with minimal anxiety and symptomatology and maximum self-acceptance. The resulting (unarticulated) sense of personal capability, as it is referred to in this study, is nearly identical to Barron's intended concept of ego strength, especially as validated in the studies reviewed here.

2b. Ego development. An integration of several theories of psychological development has been attempted by Loevinger (1966, 1970, 1973) and various co-workers. She has combined theories of what others have referred to as "moralization," "relatability," "integration," "self-system," and "cognitive complexity" (Adler, 1930; Harvey, Hunt, & Schroeder, 1961; Isaacs, 1956; Kohlberg, 1964; Peck & Havighurst, 1960; Piaget, 1932; Sullivan, 1953). Loevinger (1976) resists a formal definition of ego development, although she does clarify the role of the ego: "the organizing or synthetic function is not just another thing the ego does; it is what the ego is" (p. 5); "meaning is not so much what the ego seeks as what it is; so anxiety is not what the ego experiences, but is the opposite of ego: disorganization and meaninglessness" (p. 61). The similarity to productive self-understanding is evident: PSU leads to increased organization and meaning. Hauser (1976) has pointed out that "ego development is marked by a more differentiated perception of oneself, of the social world, and of the relations of one's thoughts and feelings to those of

others" (p. 621). He is referring to the processes underlying the conceptualization of self. These processes have already been explicated as the basis of PSU. It appears there is reason to believe that the facilitation of PSU should lead to gains in ego development. This relationship will become more clear as this review proceeds.

Loevinger and Wessler (1970) have divided ego development into 10 discrete steps, made up of stages, and transitions between stages (see Table 1). The first stage (I-1) has two phases, Presocial (infant is oblivious to all but immediate need gratification) and Symbiotic (strong attachment to primary caretaker but self is not differentiated from this person). Stage II (I-2) is the Impulsive stage during which egocentric impulses predominate and control is undependable. The third stage (Delta) is Self-protective: moral and interpersonal decisions are made on the basis of self-interest. The person is experienced as exploitative or manipulative. The next level (Delta/3) is transitional. Though the theoretical basis for this stage is unclear (Hoppe, 1972), responses appear insufficiently complex for I-3 subjects, and not impulsive enough for Delta actions. The fourth stage (I-3) is known as Conformist. Here rules are obeyed for their own sake and relationships are seen in terms of concrete behavior rather than feelings and motives.

In the transition between Conformist and Conscientious stages (I3/4) introspective capacities open the door to pluralism, contextual relativity, and the beginnings of psychological (mindedness, self-awareness, and self-criticism). The fifth stage (I-4) evidences the

EGO DEVELOPMENT

TABLE 2
MILESTONES OF EGO DEVELOPMENT*

Stage	Impulse control, "moral" style	Interpersonal style	Conscious preoccupations	Cognitive style
Presocial (I-1) Symbiotic (I-1)		Autistic Symbiotic	Self vs. nonself Self vs. nonself	
Impulsive (I-2)	Impulsive, fear	Receiving, dependent, exploitive	Bodily feelings, especially sexual and aggressive	Stereotypy, conceptual confusion
Self-protective (Delta)	Fear of being caught, externalizing blame, opportunistic	Wary, manipulative, exploitive	Self-protection, wishes, things, advantages, control	
Transition from self-protective to conformist (Delta/3)	Obedience and conformity to social norms are simple and absolute rules	Manipulative, obedient	Concrete aspects of traditional sex roles, physical causation as opposed to psychologi- cal causation	Conceptual simplicity, stereotypes
Conformist (I-3)	Conformity to external rules, shame, guilt for breaking rules	Belonging, help- ing, superficial niceness	Appearance, social acceptability, banal feelings, behavior	Conceptual simplicity, stereo- types, clichés
Transition from conformist to conscientious; self-consciousness (I-3/4)	Dawning realization of standards, contingencies, self-criticism	Being helpful, deepened interest in interpersonal relations	Consciousness of the self as separate from the group, recogni- tion of psychological causation	Awareness of individ- ual differences in attitudes, interests and abilities; men- tioned in global and broad terms
Conscientious (I-4)	Self-evaluated standards, self-criticism	Intensive, responsible, mutual, concern for communication	Differentiated feelings, motives for behavior, self-respect, achieve- ments, traits, expression	Conceptual complexity, idea of patterning
Transition from conscientious to autonomous	Individuality, coping with inner conflict	Cherishing of interpersonal relations	Communicating, expressing ideas and feelings, process and change	Toleration for paradox and contradiction
Autonomous (I-5)	Add: Coping with conflicting inner needs ^b	Add: Respect for autonomy	Vividly conveyed feelings, integration of physiological and psychological causa- tion of behavior, role development, role conception, self- fulfillment, self in social context	Increased conceptual complexity; complex patterns, toleration for ambiguity, broad scope, objectivity
Integrated (I-6)	Add: Reconciling inner conflicts, renuncia- tion of unattainable ^b	Add: Cherishing of individuality	Add: Identity	

* From Loevinger and Wessler, 1970; Hoppe, 1972.

^b "Add" means in addition to the description applying to the previous level.

internalization of morality. In this Conscientious stage interpersonal relations are seen in terms of feelings and motives, individual differences replace earlier stereotypes, and conscious thought focuses on obligations, ideals, and achievements as gauged by inner standards.

The third transitional stage (I-4/5) represents increasing complexity of responses, especially the ability to tolerate paradoxes rather than reducing them to polar opposites. In the Autonomous stage (I-5), individuals are characterized by awareness of, and ability to cope with inner conflicts, and by interdependence in relationships. The highest stage (I-6) is known as the Integrated one. Here a person's conflicts are reconciled and individual differences cherished. This final stage lacks empirical description because less than 1% of most social groups is at this stage (Loevinger & Wessler, 1970).

Loevinger (1976) has outlined other more general attributes of ego development. She points out that ego development is not a polar variable in which the only difference between low and high scores is in amount. Ego development represents "milestone sequences" (p. 55), in which each stage is discontinuous with the preceding and following, and marked by an inner logic basic to the stage. This postulate has led to the formulation of another: that each stage represents a specific typology or characterology. Another related assumption is that the stages follow an invariable sequence, that stages cannot be skipped. A discussion of studies exploring the validity of these constructs occurs below.

Loevinger and her co-workers (1970) have managed to create a test, the Washington University Sentence Completion Test (WUSCT), and a system for scoring the level of ego development. This test and scoring manual have enabled empirical investigation of the theoretical components of ego development. The test consists of 36 sentence stems. The completion of each is scored for the level of ego development it represents. The core level of ego development is obtained through a system of ogive rules (Loevinger & Wessler, 1970) which allow the computation of a total protocol rating (TPR). Another less reliable method for obtaining an overall score is by summing all scores on the individual stems. Loevinger and Wessler (1970) have developed practice exercises to enable raters to learn the complex scoring system. In their studies, the median inter-rater correlation for personally trained raters was .86. The correlation of TPR's between personally trained and self-trained raters ranged from .89 to .92. These impressive results have been replicated by Cox (1974) and Hoppe (1972).

The reliability of the test itself has also been investigated. Redmore and Waldman (1975) reported on two studies using 51 ninth graders (modal age 15) and 81 college undergraduates (modal age 19). They looked at test-retest and split-half reliability as well as internal consistency (coefficient alpha). Test-retest reliability was .79 for the first study. Though lower ($r = .44, .64$) for the second study, the correlations were still significant. Split-half reliability was .90 and .85. Coefficient alpha was .80 and .89. These generally high correlations are impressive evidence for the reliability of the

SCT. However, one caveat is necessary: it seems likely that "motivational sets" (Hauser, 1976) may be responsible for the lower test-retest reliability in the older group. Since the retest scores were generally lower, it seems logical to assume that the task is less meaningful the second time around, that subjects put forth less effort, and thereby attain lower scores. The higher levels generally require more elaboration than the lower levels. Hence, a good rationale presented to the subjects seems important to the reliability of their scores.

Discriminant validity. The TPR obtained from the WUSCT has been differentiated from measures of intelligence, verbal fluency and age. Blasi (1972) studied grade 6 working class, black boys and girls. The mean IQ was 94.5. Ego development level correlated .46 for boys and .50 for girls. Hoppe (1972) investigated middle class adolescent boys (mean IQ, 122), I-level and IQ correlated only .14. McCrae and Costa (1980) found that, for adult males (35 to 80 years old), TPR correlated .28 with intelligence. Thus ego development level and IQ have been shown to share between 2% to 25% of the variance. Clearly they are related, though not equivalent variables. Hauser (1976) speculates that I-level may have a different relationship to IQ at different levels of education.

Correlations with verbal fluency are higher than with intelligence. Loevinger and Wessler (1970) found a median correlation of .31 between TPR and total number of words. McCrae and Costa (1980) found a

correlation of .64. Vetter (1978) also found a significant relationship. Loevinger and Wessler (1970) point out that this relationship is expected since conceptual complexity is part of ego development. They also note that word count correlates more highly with item sum ratings than with TPR. In conclusion, word count and I-level, though related, are measuring different things.

Correlations between TPR and age are seldom reported in the literature. Sullivan et al (1970) do not directly report such correlations. However, their correlations between TPR and moral development, or TPR and conceptual complexity, drop an average of .30 when corrected for age. Their subjects were 12 to 17 years of age. Lambert (1972) used individuals between 11 and 60 years of age. His correlations dropped .20 when controlled for age. McCrae and Costa (1980), working with a large sample of adult males (35 to 80 years of age), found no significant correlation with age. It seems reasonable to conclude that correlations between I-level and age decrease with age, until in adulthood, the correlations are non-significant. It seems likely that most adults stabilize at a particular I-level in early and adulthood.

Construct validity: Key assumptions. Loevinger and Wessler (1970) refer to the assumption of structural coherence, that diverse personality traits are but facets of ego development, which is related to a more general, underlying factor. Their study of 543 women of various ages, races, educational and socioeconomic levels supports this assumption. Factor analysis revealed one factor accounting for

20% of the variance and highly correlated with TPR. Other factors were so small as to be insignificant. Lorr and Manning (1978) studied 225 males and 423 females between 15 and 21 years of age. Their factor analysis also demonstrated a general factor accounting for 20% of the variance with all other factors explaining less than 4% of the variance each. Lambert (1972) was unable to isolate a "moral factor." The process underlying the general factor has yet to be identified. Lorr and Manning (1978) consider this general factor to contradict Loevinger's construct of milestones. This is not necessarily the case however, since up to 80% of the variance is open for explanation by specific factors at specific stages. Evidence supporting the milestone construct is presented below in the discussion of external validity.

Another assumption requiring validation is that of invariable sequence. Loevinger (1979) points out that complete validation of this assumption would require frequent testing, error free measurement, and no effects of measurement. She indicates the incompatibility of the first and third requirements, since frequent testing leads to frustration or resentment which adversely affects reliability of scores. However, Loevinger highlights 5 different kinds of evidence for sequentiality: cross-sectional age differences (Loevinger & Wessler, 1970; Coor, 1970; Hoppe, 1972), comparison of item distributions of different stages (Loevinger & Wessler, 1970), retests in longitudinal studies (Redmore & Loevinger, 1979; Loevinger, 1978), change following intervention (Blasi, 1972; Sullivan, 1975; Exum, 1977; Lasker, 1977), and asymmetry of comprehension (i.e., inability to take a role play

higher, ego levels: Redmore, 1976; Blasi, 1972). Loevinger (1979) concludes that these studies more or less support the assumption of sequentiality. She admits, however, that they are not totally convincing.

External validity. By far the greatest number of studies of the WUSCT relate it to other variables, both test scores and behavioral indices (Hauser, 1976). Because ego development is such an inclusive construct, in which Loevinger attempts to integrate a broad range of theories, there is no single test nor specific constellation of behaviors with which TPR can be correlated and validated. Studies are done which validate components of the theory. In this fashion a cumulative kind of construct validation is in process.

A few investigators have attempted to validate TPR scores by having ego development level rated independently on the basis of an interview (Brinkerhoff, 1971; Farrell, 1974; Lucas, 1971). Correlations between TPR and the interview score were .48, .32, and .81 respectively. The problem with such studies is the circularity in measurement (Loevinger, 1979). The criteria used to rate the interviews are identical to those used to obtain the TPR. Thus the studies merely highlight two different ways of obtaining and measuring data for the same construct.

In some studies maturity and relaxed constructs have been compared to ego development. Rock (1975) found that, for undergraduate females, The WUSCT correlated .40 with Heath's (1968) Perceived Self Questionnaire,

a measure of maturity. He also found correlations of .53 and .52 with created measures of self-insight. His conclusions were that psychologically-minded self-reflection begins in the Conformist-Conscientious transition, and blossoms in the conscientious stage; and that people at I-5 and I-6 present themselves in complex psychological terms, often with dynamic understanding of the reasons for behavior. Such deepened self-understanding is a predicted outcome of PSU. In another study a sociometric index of the maturity level of sorority sisters were calculated. Each sorority member rated every other regarding perceptions of the maturity of each (in terms of career satisfaction, community involvement, and expected success at parenting and in marriage). A significant correlation with TPR was found ($r = .35$). Two studies investigated the relationship between I-level and Marcia's (1966) ego identity status. Predicted relationships were found to be significant (Hopkins, 1977; Adams & Shea, 1979). Here again, since PSU is expected to aid identity formation, it appears it can also be expected to influence gains in ego development level.

Another group of studies relate ego development and moral development. Sullivan et al (1970) investigated the relationship between Kohlberg's (1963) stages of moral development and TPR. Subjects were 12 to 17 years of age. The correlation was .40 when corrected for age. Lambert (1972) studied a broader age range (11 to 60) and found a correlation of .60, corrected for age. McCrae and Costa (1980) found that subjects at higher I-levels were less dogmatic. In several studies delinquency was also found to be related to ego development.

Frank and Quinlan (1976) studied 66 Black and Puerto Rican 16 year old females. Delinquents had a significantly lower I-level ($p < .01$). Subjects with lower scores engaged in more street fighting, homosexuality, and running away. Cresswell and Lacks (no date) found that, of 30 delinquent females, 22 were at the Self-protective stage (Delta), while only 6 out of 30 junior high school females were at Delta. In a study of male offenders, Powitzky (1975) predicted increasing ego development for type of crime (from lowest to highest: car thieves, bank robbers, opiate offenders, marijuana offenders, embezzlers, and conscientious objectors). These predictions were confirmed at the .01 level.

There appears to be solid evidence for a moderate positive relationship between moral and ego development. Given the hypothesized connection between conceptualization and moral development (Piaget, 1966; Kohlberg, 1964), it seems reasonable to expect that improved self-understanding (PSU) would positively impact ego development.

Studies have also been done of responsibility taking, political involvement, and leadership. Blasi (1972, 1976) observed the responsibility-taking behavior of 109 grade 6 boys and girls. A significant relationship ($r = .56$ for girls, $.54$ for boys). Students at the Impulsive and Self-protective levels, showed lower discrimination of feelings and insight into motives than those at higher levels. Impulsive students tended to externalize blame. Self-protective students recommended excessively harsh punishment. Those at the Conformist level recognized roles more clearly. These findings support Loevinger's

(1966) description of the stages. Political involvement in adults was investigated by Candee (1974). Different forms of political reasoning were found at each stage of ego development. Snarey and Blasi (1978) compared I-levels of the founders of a commune with those who joined later. Founders had significantly higher I-levels.

Another related group of studies are those investigating conformity and social desirability. Harrakal (1971) first found a curvilinear relationship between TPR and several indices of conformity. Hoppe (1972) and Hoppe and Loevinger (1977) found similar results. In all studies, as predicted by theory, conformity peaked at I-3. Fischer (1973) found that social desirability peaked at I-3 also. Goldberg (1977) studied early beginners in college (16 and 16 years old). After the first year, the number of preconformists declined, while the number of postconformists increased. Post-conformists were rated by faculty as more serious about studies and tending to have psychological problems.

The relationship between ego development and various personality variables has also been investigated. Haan et al (1973) used data from psychiatric interviews to analyze ego process variables. They found no significant correlation between ego development level and specific defenses. However, there was a hint of alignment between successful coping and I-level. Haan and his associates speculated that ego development may be related to increasingly successful use of defenses. Improving coping is also a predicted outcome of PSU. This leads again to the probability that PSU can positively affect ego development.

Gold (1980) used MMPI profiles to explore the relationship between I-level and pattern of adjustment. He found a significant relationship between Impulsivity and Hypochondriasis, between Conformity and Hysteria, as well as between Conformity and K. Pre-conformists scored significantly higher than post-conformists on 8/10 clinical scales, and significantly lower on ego strength. Profile analysis also evidenced significant differences ($p < .0002$), between pre-conformists, conformists, and post conformists. The hypothesized relationship between Self-protective scorers and those scoring high on Psychopathic Deviancy was not supported. The lack of Conscientious subjects did not permit exploration of the hypothesized relationship with Obsessive-compulsiveness and Paranoia. Both of these studies suffered from a restricted range of I-levels. Further investigation is necessary to clarify the relationship which apparently exists between ego development and, coping and adjustment patterns.

Other personality traits have also been investigated. Lorr and Manning (1978) found that personality scales accounted for 75% of the variance in females, and 63% in males. The scales generally supported Loewinger's description of the stages. For example, higher I-level subjects were more tolerant and role-free, more sensitive, and more psychologically minded. Another study which yielded impressive evidence supporting differentiated character patterns at each I-level was done by Rozsnafszky (1981). She used Q-sort trait ratings done by self and others. Theorized milestone traits were generally supported for each of the seven major levels. Pre-conformists were characterized

by confused thinking, lack of socialization, and limited self-awareness. Conformists showed a high value placed on rules, physical appearance, material possessions, conventional socialization and stability. Post-conformists stood out especially for being "socially perceptive for a wide range of interpersonal cues" (p. 117). They were also seen as having more insight into their motives and behavior, and demonstrated introspective valuing of the uniqueness of self and others, and concern with communicating feelings. Generalization of this study is limited by the use of ipsative measurement.

McCrae and Costa (1980) used a complex scale measuring Openness to Experience (see Rogers, 1961). Correlations with openness to values, actions, aesthetics and ideas were generally small (around .25) but significant. One problem with this study was a 9 month gap between assessment of I-level and openness. Nonetheless, mean overall openness (a composite score) did increase with I-level: .8 at Delta/3, 4.3 at I-3, 7.9 at I-3/4, 16.6 at I-4. These differences between I-levels were significant at .001. In a study by Atkins (1976) women were rated on Gendlin's Experiencing Scale (Klein, Mathieu, Gendlin, & Kiesler, 1969). The women were divided into two groups: those at I-5 or above and those at I-3/4 or below. Of the high I-level group, 42% scored a 4 on Gendlin's scale, while only 4% of the low I-level group scored a 4.

Interpersonal variables have also been studied. Zielinski (1973) studied graduate students using Carkhuff's indices of communication

and ability to discriminate empathy. The former was significantly correlated with I-level ($r = .46$). Ability to discriminate empathy did not initially correlate with TPR, but subjects at higher I-levels showed significantly greater gains in this ability as the result of training, than did subjects at lower levels of ego development. Cox (1974) studied grade 8 middle class white and black boys. Low I-level subjects demonstrated helping behavior the lowest percentages of the time, and vice versa for those with high I-levels. These differences, however, were not significant.

Summary. Loevinger (1979) summarizes the impact of most of the studies reviewed here:

Evidence of validity pertaining to the preconformist stages is shown by overrepresentation of preconformists in all studies of delinquents, and by the relation of specific deviant behaviors, such as fighting to low ego levels. Evidence for the validity of scores in the Conformist range is the curvilinear relationship between measures of conformity and the SCT. Evidence for validity of scores in the postconformist range consists not so much in specific behaviors as in correlations with attitudes, philosophy of life, ability to communicate empathy, and the like.

. . . In summary, the SCT of Ego Development is adequately validated for research use, but it is neither so valid nor so reliable that it can be used as a clinical instrument without confirming data (pp. 307,308).

In the course of this review connections between ego development and PSU have also been noted. According to theory, PSU leads to conceptual organization and meaning in life. Loevinger (1976) calls this organization and meaning, the essence of the ego. Hauser's (1976) characterization of ego development highlighted processes also essential to PSU, especially the differentiation of oneself, the social world,

one's own thoughts and feelings, and those of others. SCT was also seen to be related to self-insight (Rock, 1975). Rock concluded that self-reflection begins in I-3/4 and blossoms in I-4. Holt (1980) referred to I-3/4 as the Self-Aware stage. Rock also found that those in I-5 and I-6 present themselves in complex psychological terms, often with dynamic understanding of reasons for behavior. PSU is the process by which such deepened and increasingly complex self-knowledge occurs. Such self-understanding is likely influential in the moderate correlations of ego development with coping, moral development, and openness to experience. It seems reasonable to expect that an intensive experience to facilitate productive self-understanding would result in gains in ego development.

WUSCT Short Form. Holt (1980) has created a 12-item short form of the WUSCT. Two samples were used: 1,006 college students and 2,516 non-college young people between 16 and 25 years of age. Both samples were selected to represent the full range of geographic and socioeconomic differences in the United States. Inter-rater reliability, both in terms of percentage of agreement and correlations, were comparable to the data presented by Loevinger and Wessler (1970). Of the 24 items (12 female, 12 male), 8 were from published manuals, 8 from preliminary manuals, and 8 were without manuals to support classification. As expected, lowest correlations were found on those items without manuals. Internal consistency calculations of reliability were .77 for females and .76 for males. Though lower than reliability for the 36 item WUSCT, these reliabilities are adequate

"to make the 12-item form useable for most research purposes" (Holt, 1980, p. 915). Holt also presents national norms for the distribution in the population of 16 to 25 year olds. One problem however, was in the relative absence of levels above I-4. Holt points out possible artifactual reasons for this: the constricted response space on the forms, and the fact that the 12 items were completed following a long interview.

2c. Psychological distress. Such self-report inventories as the Minnesota Multiphasic Personality Inventory (MMPI; Hathaway & McKinley, 1967) and the Psychological Screening Inventory (PSI; Lanyon, 1970) have proven useful for the description and classification of psychopathology, but have not appeared useful in assessing change. The Hopkins Symptom Checklist (HSCL; Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974) was developed from the item pool of the Cornell Medical Index to provide a "measure of clinical states subject to therapeutic intervention" (Hoffmann & Overall, 1978).

Investigations of the original 58-item HSCL have found four to six factors accounting for most of the variance. Factors were depression, anxiety, somatic concerns, obsessive-compulsive themes, and interpersonal sensitivity. The SCL-90, a 90-item revision of the HSCL was created to also tap symptoms of more serious psychopathology. Content of the added items included psychotic symptoms, paranoid ideation, phobic anxiety, and hostility (Derogatis, Lipman, & Covi, 1973). Factor analysis of the SCL-90 has highlighted eight factors: Inter-

personal Sensitivity, Phobic Anxiety, Retarded Depression, Anger-Hostility, Somatization, Obsessive-Compulsive, Agitated Depression, and Psychoticism (Lipman, Covi, & Shapiro, 1977). Hoffmann and Overall (1978) question the diagnostic dependent nature of all previous factor analytic studies: diagnostic differences have affected the interpretation of the factors. Therefore they chose to study a broad spectrum of undiagnosed psychiatric outpatients. Their results demonstrate five normalized varimax factors: Depression, Somatization, Phobic Anxiety, Functional Impairment, and Hostile Suspiciousness. Split-half reliability was .976 and the alpha coefficient was .975.

Kopta (in press) investigated responses to the SCL-90 by outpatients at a Community Mental Health Center (CMHC). He found that 27 factors carried most of the variance in assessing change over time as a result of treatment. On this basis he formed the B-SCL-27 which he administered to 418 patients of varying ages, races, socioeconomic statuses, and diagnoses at the CMHC. In factor analyzing the data from these 418 patients he found 4 factors, Depression, Hostility, Paranoid Ideation, and Sleep. Correlations between factors ranged from .38 to .61 (using item totals as factor scores). Alpha coefficients for each factor were adequate (Depression, .89; Paranoid Ideation, .80; Hostility, .86; Sleep, .81). The alpha coefficient for the BSCL-27 was .91.

Since the BSCL-27 was developed for its responsiveness to therapeutic intervention, and since adequate reliability has been

demonstrated, it is used in this study as a measure of "psychological distress" (Hoffman & Overall, 1978, p. 1190). The factor structure permits investigation of the impact of the workbook, not only upon psychological distress in general, but also upon each factor in particular. It is hypothesized that improved self-understanding leads to decreases in disorganization, meaninglessness, and anxiety, and thereby to decreases in the psychological distress which results from these.

2d. Self-acceptance. Wylie (1961, 1974) in her review of the literature on self-esteem concludes that self-acceptance has the best possible chance of construct validity because the subject not only references the discrepancy between his actual and ideal self, but also judges how disturbing or acceptable this discrepancy is. Wylie (1961) also recommends the Bill's Index of Adjustment and Values (Bills et al., 1951) as having the best construct validity and reliability. The test consists of three self-ratings on a list of 49 adjectives. Subjects rate how often the adjective is accurately descriptive of them, how much they accept themselves as described by the first rating, and how often they would like the adjective to be descriptive of them. Bill's reports a split-half self-acceptance reliability of .91. Convergent validity studies have found correlations from $-.80$ to $.60$ with similar measures. Robinson and Shaver (1973) review a variety of such studies and conclude that the higher correlations are more common. Crowne, Stephens and Kelly (1961) found correlations averaging $-.5$ with Edwards social desirability scores. These correlations are favorable

considering the generally low correlations between self-concept measures (Wylie, 1974).

The 1958 manual reviews several studies which suggest that individuals high in self-acceptance tend to be rated as having greater leadership potential by themselves and others. They also tend to be more assertive in introducing themselves. Studies relating self-acceptance to self-understanding were not found. However, the connection seems reasonable, especially considering the emphasis given by Rogers and Dymond (1954) to using self-concept measures to determine the outcome of improved self-understanding in the course of therapy. In fact, Rogerian therapy centers on the client's growing self-acceptance through self-understanding (Rogers, 1958). PSU, as a process of improving one's self-understanding, should also lead to gains in self-acceptance.

Wylie (1961, 1974) criticizes self-concept measures for attempting a global index of self-regard. She sees this as the reason for low correlations between such measures. People are selective about the sources of positive and negative self-evaluation (see Rosenberg, 1968). Hence, unless tests have highly comparable items, their correlations cannot be expected to be very high. Much of the unaccounted for variance may well be due to the fact that each test is indexing different sources of self-evaluation. As a result, Wylie recommends more specificity regarding the referents of the self-evaluation, and less attempt to calculate a global rating of self-concept.

In response to this challenge, Schnarr and Shack (1981), in an unpublished study, developed a test which takes into account individual selectivity in self-evaluation. Subjects are directed to write "three specific personal qualities" which they like the most, and then to evaluate themselves regarding these qualities. Evaluations cover a seven point scale: 1-Delighted, 2-Accepting, 3-Resolved, 4-Resigned, 5-Uncomfortable, 6-Disgusted, and 7-Despairing. (See Appendix for details). This yields a rating of acceptance of positive qualities (APQ). The same format holds for rating the acceptance of negative qualities (ANQ). Subjects were instructed to write "three specific personal qualities with which (they) are most dissatisfied." On a sample of 77 students in a course in introductory psychology, APQ correlated .32 with Bill's self-acceptance score. The correlation with ANQ was .40. Though these correlations are not high, they are above the median for correlations between self-report measures. It is possible that some of the unaccounted for variance between the two tests is due to the open-ended selectivity which APQ and ANQ allow. Further study is essential to establish the reliability and clarify the construct validity of the Schnarr and Shack test.

The method of arriving at APQ and ANQ was developed to be sensitive to the changes in self-evaluation that would happen as a result of the use of the PSU workbook. The design of the workbook represents an attempt to allow individuals to explore a broad range of personal qualities and feeling responses to these qualities. The final chapter of the workbook consists of goal-setting on the basis of perceived

strengths and defecits. It is hypothesized that the discovery of strengths enabling goal-attainment, and the consideration of defecits requiring goal-refinement (not goal-abandonment), will lead to increased acceptance of both positive and negative personal qualities.

E. Other Self-Improvement Programs

A wide variety of books are available to assist individuals in improving themselves in one way or another. In the last decade an extensive proliferation of books has occurred making the discoveries of psychology available to the masses. The present section of this dissertation does not represent an attempt to review this literature in a thorough fashion. Rather, of value to the present undertaking is a review of a representative sample of the different styles, formats, and topics that occur in the literature on self-improvement.

The two broad categories into which such literature can be divided are 1) theoretical expositions with little or no experiential involvement, and 2) experientially involving works. Books in the latter category vary according to the amount of their theoretical input and according to the degree of structure in the experiential exercises.

1. Theoretical expositions. Horney (1942) in her book entitled Self-analysis, took up the question of how well an individual could arrive at self-knowledge on his/her own. She saw this struggle for self-understanding as different from the goal of such advice-giving books as Carnegie's (1937) How To Win Friends and Influence People,

which had little to do with the recognition of the self. She explained the three steps involved in any analysis (recognition of neurotic trend; discovery of its causes, manifestations, and consequences; discovery of its relationship with other parts of the personality) and described in general terms, how a person could go through this process on his/her own. She highlighted the goal of getting the unconscious into consciousness, and recommended free association as the means. The rules were to 1 - express what one really feels rather than what one is supposed to feel; 2 - "to let interpretation be directed by interest . . . (to) simply go after what arrests his attention, what arouses his curiosity, what strikes an emotional chord in him" (p. 253); 3 - to verify according to intellectual alertness. She disagreed with the traditional analytic notion that we are helpless against our defenses, saying that this ignores the constructive forces in the personality. She pointed out that resistance can be recognized by the individual in the form of preservation of the status quo, and that it can be challenged as such. Horney's program for self-discovery remains quite general, but she has made a compelling case for the validity of self-directed striving for self-knowledge.

Another book in which the value of self-discovery is supported is Hiltner's Self-understanding, (1951). His basic premise is that "knowing ourselves is understanding our personal history, comprehending what we are in the light of how we have become that way" (p. xi). He attempts to educate the reader regarding dated emotions (emotions that continue happening long after their days of usefulness are over),

seeing straight (how present perception is selective and "warped" according to past experience), Knotty conscience (too strict or too loose), and a variety of other topics (freedom, sex, social issues, and aging). Many of his chosen topics parallel the PSU workbook. However, his treatment of all topics remains at the level of theoretical input and does not involve the reader in any guided or structured self-exploration.

Several books on career development also provide background information about a process without actually leading the reader through the process. Tiedeman (1963) proposed a model of career development, "conceived as the process of fashioning a vocational identity through differentiation and integration of the personality as one confronts the problem of work in living" (p. v). Tiedeman specifies steps in a decision-making process. The first step is Anticipation, involving the differentiation of previously absent alternatives, a costs/benefits analysis, and a choice. The second step is Implementation, involving induction into a system, conflict between one's self and the system, and reciprocal integration of the self and the system. Tiedeman highlights some of the same principles as have been outlined under PSU, especially differentiation and integration, and the use of a problem-solving format. However, the specifics of how to carry through on such a process are left up to the reader. No program is provided. Another work highlighting principles of self-evaluation which are quite similar to those of PSU is by Kroll and associates (1970). They recommend an optimal fit of constructs of the self with constructs of

positions at work, through attention to the processes of differentiation and integration, selective perception and cognition, assimilation and accommodation, and personal and situational determinants. While their theory is also attractive, they provide no specific program to follow it through.

Other influential theories of career development are also without self-directed programs to assist the individual in completing the process. Roe (1957) has clarified the role of early psychological climates in affecting career satisfaction. Holland (1966) developed a comprehensive theory of vocational choice. The interaction of heredity, culture, social class, personal forces, parents, peers, significant adults, and physical environment leads to a certain personal orientation, a preferred pattern in dealing with environmental tasks. Certain personal orientations fit best with certain careers. Super (1963) detailed specific stages of his model of career development, with approximate ages and developmental tasks for each stage. He saw work as a way to selfhood, including the satisfaction of needs and the development of identity. Neither Roe, Holland, nor Super set out to write "how-to-books" for the individual. Their work is theoretical and stands on its own merits as such. The task of applying such theories to specific programs has been taken on by others (Bolles, 1977; Hollis, 1976). These are reviewed below.

While the workbook to facilitate PSU is not, strictly speaking, a career development program, it does engage the individual in applying

the improved self-understanding towards the goal of a satisfying career. It is interesting to note similarities between PSU and the above mentioned theories. The developmental unit of the workbook, attends to early psychological climates. The workbook process also entails the exploration of each of the factors identified by Holland, and the integration of a personality style from these factors. Also, as already presented, the theory behind PSU does have a developmental framework. In fact, this particular workbook has been constructed primarily for adolescents in the process of transition to early adulthood.

Another area of the literature in which numerous self-improvement books are written is the human potential movement. One prototypical work in this field is entitled, JOY: Expanding Human Awareness. In his introduction Schutz (1967) writes:

Joy is the feeling that comes from the fulfillment of one's potential. Fulfillment brings to an individual the feeling that he can cope with his environment; the sense of confidence in himself as a significant, competent, loveable person who is capable of handling situations as they arise, able to use his own capacities, and free to express his feelings" (p. 17).

Notice the similarity to the proposed outcome of PSU, referred to above as a "sense of being capable of living a worthwhile life." Schutz, however, does not outline a comprehensive program to achieve joy. Rather he describes the conditions necessary for such experience. These are the free flow of feelings; creativity; interpersonal inclusion, control, and affection; and organizational openness. Schutz does suggest experiential exercises that should facilitate these conditions;

however, the follow-through and cognitive integration of these experiences if left up to the individual. Schutz is concerned with the freeing up of immediate feeling awareness, creativity and intimacy. Cognitive integration is not important to his theoretical orientation. The workbook to facilitate PSU has more structured, cognitive exercises which involve reflecting on patterns in past and present experiences. The focus on immediate experiential awareness is not a central part of PSU.

A final category of theoretical self-improvement books in the area of transactional analysis (TA). A highly influential best-seller in this category was I'm OK - You're OK. In this work Harris (1967) set out to educate the reader about the Child, Parent, and Adult parts of herself or himself. The goal is to stay in one's Adult, and from this vantage point to recognize and take care of one's Child, and to recognize and temper one's Parent. This self-awareness should lead to being able to recognize and respond appropriately to the Child or Parent in others. In this manner one can learn how to analyze what's really happening in an interpersonal transaction, and to make informed decisions about how to act as an Adult. Harris applied such analyses to marriage, child rearing, and morality.

This approach shares with PSU a cognitive emphasis. Harris points out that the Parent and Child parts of oneself are the inner registrations of past experience. The Parent consists of the inner recordings of unquestioned or imposed early events. The Child is made

up of the inner reactions to these events (feelings). The role of the Adult is to be the data processor who updates the Parent and Child through reality testing. In the process of PSU one is also involved in analyzing patterns of thoughts, feelings, and behaviors. The improved self-understanding which results forms the basis for informed personal decision-making. Harris' presentation of TA is limited to patterns resulting from interactions between Child, Parent and Adult. He provides no guided experiences to facilitate the reader's application of his theory. PSU has a broader focus (any influential pattern of thought, feeling, or behavior is important), and the workbook provides exercises to surface such patterns.

2. Experiential involvement. In the field of career development two books were found containing structured experiential exercises. A popular seller on college campuses is What Color is Your Parachute? Bolles (1977) criticizes the Neanderthal job hunting process and recommends structured career and life-planning. He provides a variety of exercises to this end. These include a life diary (memories of past), an analysis of one's hobbies, analysis of skills evident in the 2 major achievements of each 5 year period of one's life, a synthesized picture of oneself from the past, leading to a decision about career direction. Then he leads the reader through an analysis of the present via fantasy, things that make one happy, who am I, and a career search. Finally, one is directed to look into the future, in terms of what one wants to accomplish before death. Though Bolles has provided valuable self-exploration exercises, the logic of their

organization in a decision making process is difficult to ascertain.

A more highly structured and logically coherent program for career development was developed as curriculum for a college course by Hollis (1976). He has developed a complex schema for analyzing skills levels regarding data, people and things, and leads the reader through self-evaluation on all three skill areas in terms of past work for pay, volunteer work, family-related work, and school-related work. This is followed by an analysis of likes and dislikes as seen in hobbies, school learning, organizations, family and peer activities. Next, the participant is led through exercises to clarify values and attitudes, to synthesize an identity, and clarify his/her interpersonal style. All this information about self is then systematically compared to a thorough list of occupational clusters. Finally, Hollis leads the participant through the formation of a plan to realize an occupation from one of the appropriate clusters.

Hollis' workbook has much in common with the PSU workbook. His focus is clearly upon self-knowledge as a basis for informed decision-making leading to a satisfying career. The PSU workbook has a similar general framework, but the self-knowledge serves as a basis for decisions about life-values and a primary relationship, as well as career choice. Hollis provides a much more detailed focus on skills and interest patterns. The PSU workbook is less specific in these areas, but draws out more specifics in terms of perceptual, cognitive, motivational, emotional, interpersonal, and coping styles. The PSU

workbook does not provide the detailed career clusters to facilitate appropriate choices.

A rapidly expanding area of the self-improvement literature is that of therapeutic self-help. Psychologists translate the effective therapy techniques used by professionals into treatment programs for the layperson. Some such works are primarily behavioral. One example of these is a book entitled, Self-Directed Behavior: Self-Modification for Personal Adjustment. In this work Watson and Tharpe (1977) propose that "self-direction is the ability to actualize one's values" (p. 11), that personal adjustment is a value judgment, best defined as personal goal-attainment. They outline and lead the participant through specific steps towards this adjustment.

The first step is concrete specification of a goal in terms of behavior-in-a-situation. Next, a chain of target behaviors necessary to reach the goal is specified. Then observations are recorded of the status quo regarding these target behaviors in terms of antecedents, behaviors, and consequences. These observations are carefully analyzed in terms of the technology of behavior change and a plan for change is established. Finally, the plan is implemented, with ongoing recording, analysis, and revision.

Though their program is essentially behavioral, Watson and Tharpe do employ a broad definition of behavior, including thoughts and feelings. Antecedents, behaviors, and consequences may be internal as well external events. Their techniques include shaping, using incompatible

responses (overt and covert), rehearsal (behavioral and imagined), modeling, relaxation training, self-instructions, punishment (minimized), extinction, reinforcement (extrinsic and intrinsic), the Premack principle, and numerous other behavioral techniques and principles. They explain in clear and simple terms each of these techniques as they have a place in the step by step program.

The PSU workbook and Watson and Tharpe's book have much in common. Both are carefully structured with exercises to heighten self-knowledge as a means to personal goal-attainment. Both contain an emphasis on antecedents and consequences of behavior, taken in its broadest meaning. Watson and Tharpe's program however, is focused on changing specific behaviors using behavioral technology. Though the PSU workbook does rely on significant behavioral principles, its central focus is on obtaining a broad and integrated cognitive picture of oneself, and this as a basis for planning for goal-attainment. PSU, in summary, is more highly cognitive and general in scope.

A more recent book in the field of therapeutic self help is called Spare the Couch. In this work, Tasto (1979) provides specific treatment packages for specific problems, including depression, phobias, assertion, obsessions and compulsions, stress, couples problems, and sexual dysfunction. Each treatment package consists of brief theoretical input, a brief, self-administered diagnostic tool, and the application of behavioral, cognitive, and environmental changes. The specific tools for change include relaxation, reinforcement contingencies,

desensitization, flooding, positive scanning and fantasizing, thought stopping, modeling, paradoxical procedures and cueing.

Tasto's program is less thorough than Watson and Tharpe in his use of behavioral technology. He is also more broadly cognitive. Both of these works provide much more theoretical input than the PSU workbook. Spare the Couch also differs from the PSU workbook in that it provides specific packages for specific problems. He does not lead the participant to a broad-based and integrated self-understanding, as does PSU.

In the field of developmental psychology one work stands out for its use of experiential exercises. The book is called Moving Into Adulthood. Egan and Cowan (1980) outline ten developmental tasks in the transition to early adulthood. These include competence, autonomy, values, identity, sexuality, friendship and intimacy, marriage and family, career, community involvement, and use of leisure. A chapter is devoted to each task. Each chapter follows a problem-solving format including brief theoretical input, needs assessment, goal setting, program development, implementation, and evaluation. Structured exercises are provided for each step in the problem-solving process. In a final chapter an integration of all the previous tasks is attempted.

Egan and Cowan's work bears many similarities to the PSU workbook. Both are directed primarily towards those in the transition to early adulthood. The PSU workbook is structured around the units of an

introductory psychology course. In each unit a different element of one's self-understanding is explored. The resulting self-understanding is channeled into the final chapter in which planning is undertaken around the three primary developmental tasks: career, primary relationship, and life-values. Egan and Cowan's focus is on a broader range of developmental tasks throughout. It is meant to be used as curriculum for a course in adolescent development. Group exercises are included in each chapter. Both workbooks are oriented towards a broad-based, integrated self-understanding as a basis for satisfying decisions and actions. The impact of Egan and Cowan's program has not been tested.

The final book to be reviewed is part of the human potential movement. The People Press by Tegeler (1975) also has interesting similarities to the PSU workbook. The book contains a step by step program for changing destructive life-scripts. The first step is a list of tensions: feelings about oneself and things that cause worry on the job and in relationships. Next a list of past and present IFS is developed (i.e., if you do this, then you get that), along with the contradictory messages that blocked satisfaction, and the resulting feelings. In the third stage, Tegeler leads the participant into anger and rebellion against the self-defeating script, which must be externalized as messages one has received about oneself, but not as the reality of who one is. Then one is led to act against the script and experience the joy of becoming a new person. Finally, the support of a significant other is engaged through the sharing of the script

and one's efforts to overcome it.

Tegeler's program is more directed and focused than the broader scope of the PSU workbook. He directs the participant to discover a specific pattern of a central self-defeating script and to react with anger and act with rebellion against this script. The PSU workbook is never as directive: the structured experiences are more open ended, leading to whatever action plans the participant creates. Despite this significant difference, however, the two books do have important common elements. The first steps of Tegeler's program are essentially cognitive, as is PSU. He leads the participant to uncover recurrent patterns of thought which underly negative emotions and behaviors. Tegeler also leads his participant through each step with little or no theoretical input. The process itself is instructive. This is also true of the PSU workbook. In this way these two programs differ from the others reviewed above, all of which are characterized by more thorough theoretical input.

CHAPTER IV

WORKBOOK CONSTRUCTION

Introduction. The workbook was written in the order in which the units occur. The author of this dissertation and a practicing clinical psychologist, met weekly for a nine month period during which the workbook evolved into its present form. At the end of any given meeting writing assignments were divided and drafts brought to the next meeting. Most units were given a trial run with one or two other people to assure clarity and avoid oversights.

A number of principles emerged during the early stages of the process. These became guiding norms for all that followed. They are listed below.

1. Emphasis is put on personal uniqueness, the ways one differs from others, and especially on the acceptance of strengths.
2. The experience of doing each exercise must be its own reinforcement. Learning about self must be immediate and satisfying.
3. Each exercise must be as behavioral and concrete as possible to get people to look at who they are rather than who they'd like to be.
4. All vocabulary is directed approximately towards a sixth grade reading level.
5. Simplicity is essential. Directions and explanations should

be minimal. Psychological sophistication should be unnecessary. Maximum time to complete a unit should be 1½ hours.

6. Other creative means of maintaining interest should be used, for example, cartoons, famous sayings, poems, encouragements, humor, and varied page colors.

Unit I: Background Information. This unit consists primarily of thorough demographic information. It was included because all the information in the workbook is to form a data bank for ongoing personality research. Added to the usual demographics are a section on family heritage, including nationality of grandparents, and age, education, occupation and religious affiliation of parents, and syblings. Information is also obtained regarding the kind of homes, neighborhoods, and schools one grew up in, as well as number of family moves. A brief educational survey leads to information about classes that were enjoyed, disliked, or were sources of difficulty. Then a survey of job experiences, community activities, and independent leisure time activities, is filled out, including a satisfaction rating of each experience. Finally, a brief medical history is obtained.

As a beginning of the process of productive self-understanding, this unit was intended to raise the participant's awareness of the impact of some of the important systems that have influenced his/her life. These systems include cultural and religious heritage, schools and neighborhoods, leisure, job and community settings. This is not an exhaustive list of influential systems. For a thorough discussion of the

importance of specific systems in human development, see Egan & Cowan, 1979. The exploration of systems is not exhaustive at this point in the workbook because family, educational, and peer systems are investigated in depth later in the workbook.

An oversight in the first printing of the workbook was an exercise to make explicit the continuing impact of the systems described in this first unit. As it stands now, this unit is merely descriptive of external facts and does not lead the participant to personalize the effect of the systems as outlined. This deficit is remedied in the second printing which is a follow-up to the present exploratory study.

Unit II: Knowing My Body. This unit is divided into two sections: physical appearance and internal physical style. In the first section, the participant first checks adjectives appropriately describing his/her hair, eye features, facial features, complexion, and general body characteristics. He/she is invited to include other features or defects not captured by the above adjectives. This exercise serves to make him/her concretely aware of his/her external physical self. This awareness is the foundation for the next, and more important exercise, in which the participant explores the impact of their appearance on their own thoughts, feelings, and behavior, as well as the responses of others.

This second exercise is in a tabular format that is repeated throughout the workbook. It is therefore described in detail here. The exercise is a structured method of analyzing behavioral patterns

from a behavioral and a cognitive orientation. The analysis consists of four sequential steps, known as 1-stimulus, 2-organism, 3-response, 4-consequences (SORC). The first step is a description of the stimulus situation (where, when, with whom, etc.). This stimulus experience has led to thoughts and feelings within the organism. These are described next. The behaviors (response) resulting from these thoughts and feelings are then outlined. Finally, the consequences of these behaviors are noted. This SORC analysis integrates classical conditioning (the influence of cues), operant conditioning (the influence of consequences), and cognitive psychology (the influence of thoughts upon feelings and behavior). Learning to understand oneself in terms of these factors (SORC) is one of the primary benefits of the workbook.

In the first unit, the participant, considering physical characteristics as the stimuli, analyzes the impact of positively and negatively evaluated qualities of appearance upon thoughts, feelings, behavior, and the reactions of others.

The second section of "Knowing My Body" consists of exploration of inner aspects of physical style. These characteristics are drawn from the research of Thomas, Chess and Birch (1968) who found individual constitutional differences between children at birth. They found nine factors. Four of the presumably most influential factors were chosen for this exercise. (This decision was made according to clinical experience.) These are: activity level, adaptability, stimulation seeking, and body sensitivity. The relative strength of each factor

is analyzed by checking a series of self-descriptive behavioral statements. Space is provided to check only high and low scores. This was done because a Likert-type scale was thought to be too complex for easy self-interpretation, and because the scores at the extremes represent the most significant factors in getting a straightforward picture of one's style. For example, regarding activity level, here are two statements:

Usually True		Rarely True
_____	I am usually doing something active	_____
_____	Given a choice, I will take part in	_____
	an activity rather than watch it.	

Having completed these checklists, the participant then describes the pattern that emerges. Finally, he/she again does an SORC analysis of the valued and devalued elements of this pattern. As in the first unit, an oversight in the construction of this unit was a summary exercise to integrate the present impact of the elements of self-understanding discriminated in the component exercises.

Unit III: Sensory and Perceptual Styles. This first section of this unit assists the participant in identifying his/her sensory style. The exercises are based on the theoretical framework known as neurolinguistic programming (NLP) (Bandler & Grindler, 1975). A focal assumption of NLP is that each individual has a preferred sensory modality. Individuals apparently rely primarily on either visual, auditory, or kinesthetic cues as sources of information. Linguistic

analysis demonstrates that a preferred sensory mode also becomes a predominant processing channel. These preferences are betrayed in a person's use of language. An exercise to analyze such preferences was conducted. Given ten sentences with a choice of three words to fill in a blank, the participant was instructed to "choose the word that comes most naturally . . ." For example:

1. I can (see, hear, grasp) what you want me to do.
2. Your idea (feels, appears, sounds) strange to me.
3. This place (sounds, looks, feels) OK for lunch.

The participant counts the number of times he/she circles auditory, visual, or kinesthetic words.

A second exercise provides further input regarding sensory style. Individuals rate and explain their strengths and weaknesses regarding eyesight, hearing, internal body sensitivity, musical performance ability, drawing and/or visual arts ability, sensitivity to others' feelings, and ability to remember things one has seen (or hear, or felt). This exercise ends with four situations involving again a particular sensory preference (making decisions, listening to music, reading, and trying to remember what one was told by another).

The second section of this unit leads to an exploration of perceptual style, seen primarily in terms of how one selects and organizes incoming information. Three inkblots were created for this purpose. Participants were provided space for six responses to each blot. They then analyzed their own pattern of response determinants (shape, shading,

color, depth, texture and appearance), as well as content categories (humans, animals, plants, etc.) and their method of approach (whole to part, or vice versa). Information is provided about the meaning of various patterns, and individuals end the unit by summarizing the implications of the patterns they have found for their present life.

Unit IV: Learning Style. The first exercise of this unit is based on research into the functions of the right and left hemispheres of the brain, and on the basic structure of the nervous system. Studies have shown that the left-hemisphere controls speech, reading, writing, and mathematical calculations: the symbolic functions (Sperry, Gazzaniza, & Bogen, 1969). The ability to understand spatial organization, including orient oneself in space, recognize structural shapes and textures, and recognize and remember musical forms is localized in the right hemisphere. Research has shown that particular individuals may rely more on one hemisphere than on the other (Bakan, 1971; Gur & Gur, 1975).

The nervous system consists of two basic neuronal groupings; sensory and motor. Sensory neurons carry incoming information for processing. Motor neurons carry the response to the processed information. The clinical intuition of the workbook authors led them to believe that individuals may develop an orientation favoring the reception of information (receptive), or favoring the expression of processed information (expressive).

Exercises were constructed to enable a participant to identify

which combination of the four factors he/she favors. This information forms the basis of his/her learning style, the identification of the ways that he/she learns best. A sample question from this exercise follows:

1. When learning a new job, I would want to:

_____ see or hear someone else actually do it (A)

_____ try out doing it myself (B)

_____ read or be told how to do it (C)

_____ describe to someone else how I would do it (D)

Participants mark first and second preference. A is a spatial receptive orientation; B is a spatial expressive orientation; C is a symbolic receptive orientation; D is a symbolic expressive orientation. Six such examples are provided. The sum for each letter indicates the strength of a particular preferred learning style.

The second section of the learning style unit involves an examination of one's unique learning history. Three positive and negative learning experiences from one's past are briefly described. These form a basis for choosing one positive and one negative learning experience in the present. (The present choices are to be similar to the past experiences.) Participants then do an intensive SORC analysis of the present learning experiences. This exercise is intended to enable one to see how past patterns are still operative, as well as the present factors influencing the learning. These factors, as explained above (see SORC) are elements of the learning situation, thoughts and feelings in the situation, behavior in response to the thoughts and feelings, and

consequences of the behavior. The final exercise of the unit consists of writing a summary paragraph integrating the understanding gained in this and the previous unit, into one's present approach to learning.

Unit V: Motivation and Emotion. In the first section of this unit the participant is led through an exploration of his/her needs. Eight needs are sequentially explored: achievement, affiliation, aggression, autonomy, change, nurturance, order, and submission. These needs were chosen as representative on the basis of Edwards Personal Preference Schedule (Edwards,1953). Each need is first defined (e.g., Achievement: I need to accomplish significant tasks). Then the participant completes a checklist for each need to determine its relative strength. Each checklist consists of six behavioral, self-descriptive statements which were written to represent a broad spectrum of behavioral expressions of the particular need. Each statement is checked according to extremes only (usually or seldom). This was done again for simplicity and ease of interpretation. Here are a few sample statements regarding achievement:

Usually

Seldom

_____ When I play a game I'm very disappointed if I _____
don't win.

_____ I am my own hardest critic, expecting myself _____
to do a job as well as I can possibly do it.

Often

_____ Others have told me I push myself too hard and _____
need to learn to slow down.

The first four statements are always descriptions of behavior actually performed. The last two are always statements of the perceptions others have actually expressed. In this way, the strength of a need is inferred from concrete behavior which is expressive of the need. Thereby distortions resulting from social desirability are minimized.

Having completed the checklist and assessed the relative strength of his/her needs, the participant proceeds to do an in depth SORC analysis of the two strongest needs. Each need is analyzed in terms of two situations in which the need occurs. The participant gains an extensive understanding of situations in which the need occurs, thoughts and feelings arising in this situation, behavioral responses, and outcomes of the behavior. The final exercise involves an SORC analysis of two situations in which significant needs come into conflict.

The second section of this unit involves an SORC analysis of four basic feelings: sadness, anger, gladness, and fear. These emotions were chosen, not as a comprehensive representation of the broad spectrum of human emotion, but as four emotions that, from a clinical perspective, are especially significant in being well-adjusted.

The participant analyzes himself or herself in two situations where he/she experiences each emotion. This provides concrete data in which to see the patterns specific to one's experience of each feeling. These patterns can be situational consistencies, recurrent thoughts or emotional nuances, behavioral responses, or consequences.

The final exercise of the chapter consists of integrating the

patterns involved in one's experience of the broad spectrum of needs and emotions. This integration is completed in terms of a description of the manner in which the patterns continue to affect one's present life.

Unit VI: The Milestones of My Development. This unit is the most complex of the entire workbook. It contains numerous exercises to assist the participant in understanding the present impact of previous developmental experiences. The first exercise leads to an investigation of the relationship between oneself and one's syblings. A list of 24 self-descriptive adjectives is provided (e.g., conforming, idealistic, intelligent, punished, spontaneous). One is instructed to check with respect to the rest of one's syblings, whether one was most or least on any of the factors. The same checks are then made for two significant syblings. Only children are instructed to use their closest peers to age 8 for comparison. The second part of this exercise is description of the roles one played in one's family (guardian, black sheep, counselor, organizer, comedian, mediator, competitor, gadfly, and ghost). The exercise ends with an evaluation of what one likes and dislikes about the patterns that stand out, and the way such patterns continue to be acted out in the present. This is an essentially Adlerian approach to developmental influences (see Ansbacher & Ansbacher, 1956).

The second exercise is a parental sketch. Participants examine the relationship with their parents in terms of three dimensions: availability, affection, and discipline. These are significant aspects

of Parent Effectiveness Training (Gordon, 1975) and were chosen as representative of the most significant elements of a parent-child relationship. Each dimension is scored for extremes on five behavioral descriptions. An F is placed where appropriate to relationship with father and an M for mother. For example:

a) Availability:

Often _____ spent time relaxing or playing _____ Seldom
or recreating with me around home

Often _____ easy to talk to about most _____ Seldom
anything on my mind

The behavioral descriptions regarding affection and discipline were based upon research by Schaeffer (1959) and Becker (1964), and upon clinical experience.

The next part of this exercise consists of a canvas of 2 positive and 2 negative milestone experiences with parents. Then the participant is directed to re-read what has been remembered above and to write a summary paragraph regarding relationship with each parent in childhood, adolescence, and adulthood, and to summarize the ways he/she does or doesn't want to be like either parent. Finally, the participant summarizes the way that his/her present behavior has been shaped by the experience of his/her parents. These latter experiences are based primarily on clinical experience with clients in therapy, where certain critical experiences and the modeling of one or both parents becomes evident as having major impact upon present behavior patterns.

Family therapists have also discovered the impact of each spouse's family of origin upon behaviors in their own family as adults. For this reason, participants who are involved in a primary relationship and/or have children are invited to explore that patterns already described in this unit continue to recur or have changed. This exploration takes the form of open-ended description.

The final exercise of this unit is complex. It is called "Exploring My Passages," and is intended to assist a person in evaluating the stage of his/her development regarding the process of identity formation. Participants first describe three important beliefs and three important role models. Then they are given extended input regarding an integrated three stage developmental theory. This theory is not published at this time and hence cannot be referenced. It is briefly described here. The full description as in the workbook is in the Appendix. The first stage is preadolescence and consists of the three steps involved in the process of internalization: exposure, behavior, and internalization. Breger (1974) refers to these steps as modeling, imitation, and identification. The process involves taking in the values and expectations of significant others as if there were one's own.

Stage 2 is adolescence during which these internalizations are brought into question. This questioning leads to disillusionment or cynicism, which often leads to a sense of identity loss and depression. The experiences of this process have been elucidated by Erikson (1968a) and Marcia (1966).

The third stage is adulthood during which one begins to positively define oneself by choosing values, relationships, and a life-style. This process is ongoing as one struggles to behave in congruence with one's chosen identity. Little elaboration of the stages of adult development is provided in the workbook since it is aimed primarily at college students.

Participants descriptively trace the development of each of the three beliefs and relationships with role models that were identified earlier. A designation is made as to what stage of development one is at with each of these values and role models. Finally, an overall assessment of developmental stage is made and the participant describes what work must be done to bring him/her to the next phase of development.

Unit VII: Interpersonal and Coping Styles. The first section of this unit, the exploration of one's interpersonal style is based on the research of Lorr and McNair (1965). Their research enabled them to isolate a broad spectrum of interpersonal interaction factors. Correlations between these factors showed them to have a circumplex arrangement in which factors furthest apart could be roughly considered to be opposites. From this circumplex model a series of bipolar dimensions were constructed. Some factors were reworded for simplicity and to minimize social desirability differences. The dimensions arrived at are: dominant-submissive, affectionate-self-contained, receptive-nurturing, agreeableness-aggression, respectful-cautious, exhibition-composure, sociability-self-denial, gregarious-intimate, optimistic-careful, political-constant. The last three dimensions were added because their

importance was suggested by clinical experience.

The fact that interpersonal interactions are partly situationally determined was also taken into account in this exercise. Participants are led to consider their behavior in both informal social settings and task-oriented situations. Due to the complexities and subtleties of interpersonal style it was decided that a Likert-type scale would be more valuable than the checking of extremes as done previously. Here is an example of one of the bipolar dimensions:

Dominant

I am usually the one who is the leader. I have a major impact on the decision and actions of any group I'm with.

Submissive

I usually let others take the initiative and make the decisions. I like to join in with whatever is decided.

1 2 3 4 5 6

Informal Situations

1 2 3 4 5 6

Task-oriented Situations

The exercise is completed with a descriptive summary of one's interpersonal style.

The second section of this unit is an exploration of one's coping style, of the pattern of defenses that are used to cope with "certain kinds of feelings or conflicts which are either too uncomfortable or interfere with tasks at hand" (from the workbook). Twenty situations are described. The situations were chosen as representative of a broad

variety of challenging situations which a college student is likely to face. Each situation is described briefly. The participant is then instructed to fill in the blanks regarding his/her impulse, his/her actual behavior, and the thoughts occurring at this time. Here is an example:

1. It's rush hour and I'm riding the subway. Someone roughly pushes me. My impulse is to _____
_____,
and/but I _____
while I'm thinking _____

Having completed twenty such responses the participant reads through a list and explanation of coping mechanisms. These are actually seven defense mechanisms as they are explained by A. Freud (1946). For example:

1. I return to childlike ways of acting with hopes of getting what I want. REGRESSION.
2. I notice the unwanted feeling in someone else or blame someone else (so as to avoid noticing it in me or blaming me).
PROJECTION.

The other mechanisms include introjection, denial, displacement, reaction formation, and intellectualization. The participant rereads the completed sentences, identifies the coping mechanism used in each, and counts the number of times each mechanism is used. He/she is then invited to carefully study and describe the pattern, and to look

through previous workbook exercises for four other examples of this pattern. Finally, the implications of this coping style for present and future life-satisfaction are described.

Unit VIII: Personality: Pulling It All Together. This unit is based upon the distinction between constitutional and learned elements that has already been discussed in Chapter III, Part C.2. As mentioned there, this distinction is based upon the theories of Allport (1937) and Cattell (1950), and the research of Chess, Thomas, and Birch (1965). The unit begins with a brief explanation, for the first time in the workbook, of the interaction between constitutional and environmental factors. The units on physical style, sensory and perceptual style, and learning style are identified as the exploration of consituational factors. All other units are said to contain the results of environmental experience.

The first exercise consists of highlighting and prioritizing constiuational features, "the most enduring and perhaps inherited features" (from the workbook); and of examining the interactional outcome of the three or four most significant features. The next exercise consists of a descriptive charting of the most important basic features, the manner in which each has interacted with life experience, and the resulting current behavior pattern. Finally, an expanded "essay on the origin and nature of the features of your personality" (from the workbook) is written.

Unit IX: My Future. The importance of goals for personality integration has already been discussed in Chapter III, Part C.3. Adler (1930), Goldstein (1939), Murray (1951b), Rogers (1951), Allport (1961), and Maslow (1968) all support the importance of such goals. The value of specific planning for goal attainment has been discussed by Egan

Since this particular workbook is directed towards college students in the transition to early adulthood, the developmental tasks facing this population were chosen as foci for this final unit. Breger (1974) says that these tasks are: the formation of a primary relationship, the initial choice of a career, and the beginning establishment of life values. These represent the three sections of this unit.

The first section is the preparation for a primary relationship (or for the deepening of a present primary relationship). A modified force field analysis (Lewin, 1945) is undertaken. First, each workbook unit is analyzed in terms of enabling features, and obstacles to a primary relationship. Then action plan ideas for minor obstacles are brainstormed, and one action plan is worked out in detail. This is followed by a review of the major obstacles and considerations of how adjustments will be made to accommodate these factors. Finally, qualities of a person who would provide the best fit with the minor and major obstacles are explored.

The second section of unit nine involves preparation for a career decision. The basic assumption behind this section is that "the best career choice is one that best fits our major needs and style character-

istics" (from the workbook; see also Holland, 1966). First a list of descriptors of job needs and functions is provided (condensed from Hollis, 1976). Here are a few examples: supervisory, long hours, sedentary, high status, artistic skill. Forty such descriptors are provided to represent a wide spectrum of job experience. The participant then completes a chart regarding his/her present career plan. The chart consists of a listing of career job functions and a listing of the personal needs or styles which are compatible with each job function. If two or more job functions do not fit with personal needs and style features, the exercise is repeated for a second career choice. Finally, the participant is challenged to invent a third choice, combining the best of the first two, with maximal compatibility.

The final section involves preparation for life values. Participants are invited to identify two life values which are likely to endure, and to develop a plan to activate and develop each value throughout life. The assumption, as stated in the workbook is that "values are meaningful only to the extent that they are actualized in behavior." The plan for each value is developed in terms of short-term, mid-life, and before death objectives, with specific action steps for each objective. One example is spelled out in detail. It is provided below.

LIFE VALUE: social activism for ecology

a) Short-term objective: In the next 5 years I will become knowledgeable about contemporary threats to our environment and choose one particular area as a focus for my involvement.

Action steps:

1. Subscribe to and read 2-3 eco magazines.
2. Explore existing activist groups by attending meetings
3. Develop a relationship with 2-3 people who share my values at least to the extent of discussing the issues
4. Keep a journal to aid my decision about where to invest my energy
5. Decide

b) Mid-Life objective: I will have invested myself consistently in the ecological issues I have chosen, and will have seen significant fruits of my labor.

Action steps:

1. Join in a group (or form one) that shares investment in the issues I have chosen
2. Keep a record of actions we take and results
3. Celebrate every time we have an impact
4. Encourage friends to join
5. Give talks at schools and churches

c) Before death objective: I will have written a book about social activism that will let others know what I have learned during my years on the front lines.

Action steps:

1. Take a few years to reflect on the experiences in my journal, noting patterns and themes
2. Write it

3. Find a publisher
4. Publish

CHAPTER V

METHOD OF WORKBOOK EVALUATION

Subjects

Students in four introductory psychology classes were engaged in the evaluation. The classes were held at a middle class liberal arts university college in the center of the city of Chicago. All classes were made up predominantly of white Caucasians, with small percentages of Black and Hispanic minorities. In the trial run both experimental and control groups were composed primarily of first year students. The experimental group was made up of 20 females and 15 males; the control group had 15 females and 17 males. The experimental group had 20 business majors, 8 majors in arts, and 7 persons undeclared. The control group had 25 business majors and 7 people majoring in arts.

The second time the workbook was used both the experimental and control groups had a broader cross-section of students in terms of year in college. The experimental group was composed of 6 first year students, 8 sophomores, 6 juniors, and 1 senior. The control group was not quite as evenly spaced, with 12 first year students, 4 sophomores, 3 juniors, and 2 seniors. The mean ages for the groups were 21 and 20, respectively. The experimental group had 10 females and 12 males, while the control group had 11 and 10, respectively.

Both groups were again composed primarily of business majors, with smaller numbers in the arts (14 to 8, and 15 to 6, respectively).

Measures

Several measures were used to test the impact of the workbook. Most of these have been reviewed above: The Brief Symptom Checklist (BSCL-27; Kopta, in press), Barron's (1953) ego strength scale, Loevinger's (1970) test of ego development, and the self-acceptance scale of Shack and Schmarr (1981). Other measures are described briefly below. All of the tests are available in the Appendix.

A straightforward rating of present well-being was used. Participants were asked: "How well do you feel that you are getting along, emotionally and psychologically at this time?" Ratings were from 0 ("Very well; much the way I would like to") to 5 ("Quite poorly; can barely manage to deal with things"). Validity and reliability data for this rating have not been obtained.

Ratings were also devised regarding career certitude and use of self-understanding in making a career decision. Both ratings were based upon the participants subjective evaluation of his/her brief written description of career plans, and of the major factors influencing career choice. Career certitude was rated on a six point scale, from 7 ("No matter what the job, I'll never be satisfied with it") to 6 ("Clear about what I want and sure I can achieve this"). Use of self-understanding in one's career decision was also rated on a six point scale, from 1 ("I thought one or more significant others

probably know what was best for me") to 6 ("At least one of the factors involved systematic careful reflection upon what I know about my personality, interests and abilities"). All options were carefully worded and the ratings were placed in random order to lower the influence of social desirability. These ratings were created for this study and no validity or reliability data have been obtained.

The last measure written for this study involved rating one's response to interpersonal confrontation. Participants were asked to describe their response to a friend who challenges him/her about "not caring about others, that all you're doing is looking out for yourself." The written response is then subjectively rated from 1 ("Abusive Name Calling: you use any number of unprintable slurs to put your friend down") to 6 ("Invitation to Explore: you tell your friend you'd like to understand what it is about you that might create such an impression"). Wording and order of ratings were again chosen to minimize social desirability. No validity or reliability data was obtained.

The reason for creating measures for this study was the need to minimize testing time, while at the same time maximizing the range of testing for possible impact of the workbook. The exploratory nature of the study necessitated such a broad range of tests; theory did not provide any one, focused, predicted consequence of doing the workbook.

Procedure

The study consisted of a "Nonequivalent Control Group Design" (Campbell & Stanley, 1963, pp. 47-50). Groups consisted of "naturally assembled collectives," that is, they were not randomly assigned. Only the experimental group participated in the workbook. Partial course credit was given for completion of the workbook. Confidentiality was assured by having the students hand in a signed affidavit testifying to their completing the workbook to the best of their ability. This affidavit was handed in separately from the workbook which was identified by a code number known only to the student. The psychology classes were of four month duration. Both groups were involved in an introductory psychology course and were tested at the beginning and at the end of the semester. All tests were administered as pretests and posttests. The one exception to this was the Loevinger test of ego development which was not available for pretesting on the trial run and was used as a post-test only. Campbell and Stanley point out that this design is superior to random assignment within classrooms because of the reactive awareness of the experiment that such a design creates. The design used in this study allows adequate control for the main effects of history, maturation, testing, and instrumentation. However, several areas may not be adequately controlled, including intrasession history, regression, and the interactions between selection and maturation, testing and the experimental treatment, and selection and the experimental treatment. These are reviewed further in the discussion in Chapter VII.

During the trial run an attempt was made to obtain qualitative data by performing a content analysis of personality self-descriptions written by 10 members of both groups at the end of the semester. Participants were instructed to write a 2-3 page essay on the origin and nature of the features of their personalities. The basic assumption of the analysis was that those using the workbook would make more internal, personal, and abstract references (as opposed to external or concrete) than those in the control group. Content categories for the analysis were: conflict, negative characteristics, causal attribution, self-change, interpersonal/emotional traits, values/beliefs, skills/abilities/competencies, needs, and long-term goals. The last five categories were adapted from McClelland's (1971) division of personality into traits, schemas (values, beliefs), motives (needs, goals), and skills. A sample rating form and more specific description of each content category is provided in the Appendix. Ratings were done by two senior graduate students in clinical psychology.

The second time the workbook was used, a formal written evaluation of the experience was conducted. A form was devised (see Appendix) in which the following information was requested: specific helpful exercises and positive outcome of each, frustrating or confusing exercises with analysis of deficits and suggestions for improvements, and a description of what way the participant is or is not different as a result of doing the workbook.

The second time the workbook was used is referred to below as

INTENSIFIED USE. The experimental treatment here differed slightly from the trial run. The workbook was exactly the same, but more conscious effort was made by the instructor to explain the workbook in class, to structure some classroom input to clarify workbook exercises, and to invite questions in class regarding the workbook. It was presumed that this modification in the class structure would intensify student involvement with the workbook.

Statistical Analysis. An analysis of covariance (ANOVA) was performed as the first step in a multiple regression analysis (MRA). Rupert and Slaymaker (1982) have argued for the superiority of MRA over change score methods of analyzing pretest-posttest data. MRA is sensitive to within group error variance (not well controlled by commonly used analysis of variance) and controls for differential treatment effects as a function of pretest performance level (not well controlled by ANCOVA). However, the ANCOVA results, as presented in the following chapter, were not sufficiently significant to justify further steps in MRA. Therefore, the results of the data analysis are presented in an ANCOVA table (Table 5).

ANCOVA is a procedure which enables analysis of the dependent variable independent of pre-treatment differences. This is done by using pretest scores as a control variable to adjust for chance differences between treatment groups and to reduce error variance. In other words, ANCOVA minimizes the influence of selection (of subjects into groups) upon posttest differences (Nie et al. 1970).

Loevinger's ego stages represent an ordinal, not an interval measure. Nonetheless, there are precedents for the translation of these stages into interval data for the purpose of statistical calculation (Rootes et al., 1980; McCrae & Costa, 1980). This study followed the method of Rootes and associates in assigning ascending numerical values to the stage scores (I2 = 1, delta = 2, . . . I5 = 8, I6 = 9).

CHAPTER VI

RESULTS

Pretests and posttests

Descriptive statistics for the results are provided in Tables 3 and 4. Since there was no control over the quality of a student's engagement in the workbook, possible lack of significant results could have been due to some number of students doing a haphazard job of completing the exercises. For this reason, criteria were established by which subjects could be eliminated by failure to complete the workbook at a minimum level. It was decided that subjects leaving blank five or more non-optional exercise components would be dropped. The non-optional exercise components left blank were usually SORC analyses or space left for integrating information and exploring its present implications. No attempt was made to evaluate quality or length of exercise completeness. Only blank exercises were counted. On this basis seven of the 35 experimental subjects were eliminated. Data on the remaining 28 was then re-analyzed. The results are presented in Table 3 under the heading "Purified" Trial Run.

Visual inspection indicates that changes in mean scores are very small on most variables. As could be expected then, the analyses of covariance showed few measures to be significant. The analysis of the "Purified" Trial Run shows that, contrary to expectations, response to

Table 3

Descriptive Statistics for Purified Trial Run

EXPERIMENTAL GROUP

PRETEST

POSTTEST

VARIABLE	MEAN	RANGE	S	MEAN	RANGE	S
Well-being	1.559	4	1.02	1.500	4	.896
Career Certitude	4.600	3	1.063	4.514	3	1.040
Use of Self- Understanding in career de- cision	3.325	3	1.232	3.314	3	1.207
APQ	5.743	4	.919	5.686	4	.867
ANQ	5.029	6	1.294	5.200	3	.964
Response to interpersonal confrontation	5.353	4	.950	5.830	6	1.489
Ego Strength	24.486	29	8.921	24.286	29	8.402
BSCL-27	110.848	184	43.316	97.500	222	48.173
BSCL-Depression	25.229	59	15.253	20.114	63	14.403
BSCL-Hostility	31.303	38	13.277	25.971	45	17.068
BSCL-Paranoid Ideation	21.371	45	12.412	19.714	45	13.944
BSCL-Sleep	13.794	27	9.540	12.486	25	8.122

Table 3 (cont'd)

Descriptive Statistics for Purified Trial Run

VARIABLES	CONTROL GROUP					
	PRETEST			POSTTEST		
	\bar{X}	RANGE	S	\bar{X}	RANGE	S
Well-being	1.844	4	.954	1.812	4	.931
Career Certitude	4.844	3	.954	4.781	3	1.039
Use of Self- Understanding in career de- cision	3.656	3	.937	3.562	3	.914
APQ	5.906	4	1.027	5.781	6	1.128
ANQ	4.937	3	1.105	5.250	3	1.016
Response to interpersonal confrontation	5.562	3	.716	5.531	5	1.016
Ego Strength	24.719	28	7.680	22.812	28	7.332
BSCL-27	106.452	171	42.960	97.161	194	40.669
BSCL-Depression	23.781	47	14.180	19.719	54	12.208
BSCL-Hostility	28.656	45	13.300	26.500	45	11.750
BSCL-Paranoid Ideation	20.531	43	12.407	17.312	35	10.624
BSCL-Sleep	15.469	27	9.565	14.063	27	8.428

Table 4

Descriptive Statistics for Intensified Use

	EXPERIMENTAL GROUP					
	PRETEST			POSTTEST		
	\bar{X}	RANGE	S	\bar{X}	RANGE	S
Well-being	2.227	5	1.193	1.818	5	1.181
Response to interpersonal confrontation	2.591	4	1.403	1.955	5	1.290
Ego strength	26.273	21	6.941	32.860	29	7.839
Ego Development	5.364	3	1.347	5.545	3	1.224
BSCL-27	102.091	125	38.719	104.864	115	34.776
BSCL-Depression	20.818	41	10.404	22.955	42	12.662
BSCL-Hostility	29.591	43	12.508	29.727	43	14.868
BSCL-Paranoid	21.045	45	12.556	21.909	38	11.625
BSCL-Sleep	12.864	26	8.790	13.682	27	8.704

Table 4 (cont'd)

Descriptive Statistics for Intensified Use

	CONTROL GROUP					
	PRETEST			POSTTEST		
	\bar{X}	RANGE	S	\bar{X}	RANGE	S
Well-being	2.095	4	.994	1.900	3	.912
Response to interpersonal confrontation	2.667	5	1.278	2.571	4	1.028
Ego Strength	27.095	22	6.984	30.752	28	7.762
Ego development	5.429	4	1.073	5.381	2	.852
BSCL-27	106.476	148	40.908	105.619	157	48.180
BSCL-Depression	20.714	49	11.909	19.048	42	12.528
BSCL-Hostility	29.714	44	12.947	27.476	45	16.624
BSCL-Paranoid	22.857	40	11.766	21.762	44	13.505
BSCL-Sleep	14.143	27	9.216	13.476	27	9.288

interpersonal confrontation dropped in significance from the Trial Run. However, ego strength was significant ($p < .05$). BSCL-Depression increased noticeably but did not reach significance. Ego development, which was given as a posttest only, was not significantly different between groups.

Results for the second semester, when the workbook was used more intensively, are presented in Table 5 under the heading INTENSIFIED USE. It may be that the increased classroom attention to the workbook had some effect since, on the basis of the above "purification" criteria, none of the subjects in this experimental group could be eliminated. Note that the tests which were created for this study and which did not approach significance on the trial run, were dropped to save test-taking time. Given the intensified use of the workbook, as described here, the results indicate a significant effect only for response to interpersonal confrontation. Ego strength was no longer significant at $p < .05$, but was significant at $p < .1$.

Content analysis of personality descriptions

Several content categories were eliminated after completion of the rating since there were too few references made by subjects. These included negative characteristics, values/beliefs, and skills/abilities/competencies. The category interpersonal/emotional traits was also dropped because raters attained only a 40% agreement at differentiating concrete/behavioral traits from abstract personalized ones. Inter-rater agreement for the other categories averaged 80%. A chi-square analysis was performed for each category. Chi-square

Table 5

F-Ratio Results of Analyses of Covariance

Measure	Trial Run df = 1,63	"Purified" Trial Run df = 1,56	Intensified Use df = 1,39
Well-being	.911	.215	.252
Career certitude	.342	.598	N/A
Use of self-understanding in career decision	.192	.000	N/A
Acceptance of positive qualities (APQ)	.004	.162	N/A
Acceptance of negative qualities (ANQ)	.071	.349	N/A
Response to inter- personal confrontation	2.362	1.605	2.893*
Ego strength	.819	2.639*	1.573
Ego development	N/A	N/A	.274
BSCL-27	.186	.052	.405
BSCL-Depression	.144	1.695	.002
BSCL-Hostility	.991	.410	.121
BSCL-Paranoid Ideation	.005	.121	.310
BSCL-Sleep Disturbance	.215	.848	.356

*
p < .05

was not significant for conflict and causal attribution. References to personalized needs, however, were made significantly more often by the experimental group ($p < .005$). References to self-change and long term goals were also made significantly more often by the experimental group ($p < .005$ for each). When frequencies were summed across all categories with 80% inter-rater agreement, the experimental group had made 30 internal or abstract versus 3 external or concrete references, as compared to 15:5 for the control group. This difference was also highly significant ($p < .01$).

CHAPTER VII

DISCUSSION

Design limitations

Before exploring possible implications of the results, the limitations of the design of the study must be discussed. In this quasi-experimental design, the areas which may not be adequately controlled are intracession history, regression, interactions between selection and maturation, testing and experimental treatment, and selection and experimental treatment. The likelihood of a differential impact of regression or the various interactions is minimized by the apparent homogeneity of subjects in the experimental and control groups. As presented in Chapter V, differences between these groups on factors of age, sex, year in school, major, race, and socioeconomic status are minimal. The groups also were not significantly different on the pre-rest variables.

Intracession history, however, may have contributed to some of the post-test differences between the groups. Students in the control group experienced a fairly traditional introductory psychology class, consisting primarily of lectures and using multiple choice exams. The male instructor was in his late 40's. The experimental class was part of a more informal, experientially based course, maximizing class participation and demonstration, and using short-answer quizzes

designed to be humorous and enjoyable. As mentioned already some time was spent discussing the workbook. The class was also team-taught by two male clinical psychology graduate students in their early 30's. It is possible that most posttest differences between groups are due to these differences in classroom experience. For this reason, replication of the results in other conditions is necessary if the impact of the workbook itself is to be made clear. At the present time, however, discussion of the workbook experience must be taken to include the classroom environment mentioned above.

In the above context, the results of the data analyses support a number of tentative conclusions. In general, this study did not demonstrate the workbook having the broad impact that was predicted from theory. On only two of the measures, ego strength and response to interpersonal confrontation, did the results approach significance. Also, perception of self-change, personalized need statements, long-term goals and overall internal references were significant in the content analysis of personality descriptions. In this chapter the workbook feedback is explored to set a context for the discussion which follows regarding possible explanations for the lack of results on most measures, as well as the meaning of the trends toward significance. Finally suggestions are made regarding improvement of the workbook experience and regarding further needed evaluation of the workbook.

Workbook feedback

The return rate of the forms for workbook feedback was quite low. Only five out of 20 were returned. This may be because they were handed out during the last week of classes when students were in the midst of papers and finals for other courses, and were also working on the last unit of the workbook. This feedback cannot be considered representative. Nonetheless, the feedback is worth looking at since it gives a flavor of how some students responded to the workbook.

Regarding specific exercises and positive outcome, every unit in the workbook was signalled out by at least one person. The units on sensation and perception, learning style, and motivation were each identified by three people as having had beneficial results. Descriptions of the results were usually rather vague, despite a request for specificity. Examples are given below.

Learning Style: I like this exercise a lot. I learned from it, and it helped to improve my present learning habits.

Pulling It Together: Made me examine my inner being and bring problems to the surface.

Coping Style: Really helped me to examine the ways I deal with my problems.

Development: Gave me insights into my true role in my family.

Interpersonal Style: With this workbook I feel I really learned how I relate to others. I realized part of my personality that sometimes turns other people off.

Sensory Style: Before this workbook I never was much aware of my sensory system and how it affects my life and my reactions. I found that I am basically a kinesthetic person.

Motivation: I have always had a problem motivating myself and never knew why. With this exercise I put my finger on how I deal with my needs and emotions and the patterns I have in developing and using them.

Physical Style: I like the exercise because it showed me that I would stay at home then go out. It made me understand me.

These descriptions leave the exact results of any exercise or workbook unit uncertain. It may be that students were merely saying what they thought was expected. It seems more likely however, that students had positive feelings about their experiences with the exercises, but were unable or chose not to specify the beneficial consequences.

Students were also asked to specify in what way, if any, the workbook had made a difference in their lives. Most statements were again rather general, but are still worth quoting to get a sense of how they feel about their experience with the workbook.

The workbook has taught me how I learn and act in given situations. I learned very much about myself and personality that I did not know before. It also helped me to learn something about my brothers and sisters that I never realized before.

It opened myself up to me and I realize I have problems. This is good because I don't know how much longer I could have gone on without admitting to these inner frustrations. Now that I know what I'm fighting I've got a chance and that is all I've ever needed.

I see myself, my world, and the direction of my life in a new way. I feel I have accepted myself, my body, who I am, in a deeper way, because I've realized and now understand how I work. I learned that I'm afraid to trust others and that the way I see myself affects my learning habits and my relationship with others. In closing I will say that I see some problem areas in my life. The workbooks helped me see and understand what they are. Now I can work to improve those areas and thus be a happier person.

The above statements indicate the students' beliefs that their understanding of themselves has improved. They indicate a sense of hopefulness about this new awareness leading to behavior change in problem areas, but the changes have not yet happened. One of the students found such an awareness of problem areas and needed changes to be frustrating:

Take time to be available to students who need to talk about those personal things that come from such exercises. I felt at times I was hanging because I realized things about myself, even things that were painful. I did not know what to do with those feelings. I felt confused and even unhappy because I had no one to help put the things I realized into perspective. . . People's feelings, emotions and experiences can be harmful if they don't know how to handle them or deal with them.

Two students did approach the instructor to talk about personal struggles raised by the workbook. One chose to begin psychotherapy. Apparently the student quoted above and probably others as well, would have benefited from a more explicit invitation to discuss personal struggles regarding the workbook material.

Students gave other responses as well to the questions about what was confusing or frustrating in the workbook. Most units were singled out by at least one student as unclear and needing more specific directions. This means that what one student found confusing, others as quoted above, found interesting and helpful. Other complaints were not seeing any value in a particular exercise, redundancy within a given workbook unit, and boredom when units got too long. Here are a few examples.

- Perceptual Style: I felt that it was no point to it. Not specific enough.
- Learning Style: All I can say is that this unit did not assist me in what I already did not know. I just could not get in touch with my learning history.
- Motivation: The three columns about my thoughts and behavioral responses seemed to be not clearly explained as to what you wanted.
- Development: I think it was complicated and stupid.
- Coping Mechanisms: I needed outside help to determine what type of coping mechanism I use.
- Pulling It All Together: I could not find my personality without some guidelines more closely defined.
- Future: Too long - shorten it.

Time was offered in class to clarify exercises or discuss issues or questions raised by the workbook. However, this was done on the day the workbook unit was due. Students may have felt it was too late to receive helpful input. They may also have been hesitant to ask questions with personal implications in front of the whole class. Clarifications and explanations were also given when a workbook unit was first handed out. It may be that, for some, this input was not clear or was not useful until they had begun to be personally involved with the exercise. Perhaps students needed time, between receiving the workbook and handing it in, to encounter the exercises, surface their questions, and have them answered.

Non-significant measures

Results on five of the six non-standard tests were not significant. In the areas of subjectively perceived well-being, career certitude, use of self-understanding in one's career decision, and acceptance of positive and negative qualities, the workbook does not seem to have significant effect. This conclusion must be qualified because the lack of significance may be due to lack of validity or reliability on any of these measures.

However, at the present time it seems likely that the workbook does not raise one's subjective sense of well-being. This may be because sense of well-being is primarily situationally determined at times of high stress such as the beginning and ending of a college semester (i.e., times of heightened anxiety). It may also be that as indicated in the workbook feedback, some participants experience the workbook as raising personal issues that do not get settled, and leave the participant dissatisfied with aspects of his/her present life.

It also seems likely that the workbook, as used in this study, does not significantly impact career decision-making. This may happen as a result of the timing of the completion of the final workbook unit. In the feedback one student said that he/she found the exercises on career choice long and tedious. The structure of the exercise is deemed necessary because of the complexity of personal information to be integrated as a basis for career choice. If this final unit were done before the last week of classes, or partly completed during class time, perhaps students would find themselves

able to make better use of the exercises.

The lack of significance for the tests of self-acceptance may also be due to lack of reliability or validity. However, it is possible that the workbook experience does not measurably influence self-acceptance. Feedback indicates that, for some, the experience with the workbook raises issues that require further attention. This may lead to a temporary drop in acceptance of negative qualities. This lack of resolution of some personal issues is discussed further below. Considering the importance of self-acceptance to the construct of productive self-understanding, it is important to use a standardized test to evaluate more clearly the impact of the workbook in this area.

The non-significant categories on the content analysis were conflict and causal attribution. The references to conflict were sparse. Only 4 out of 10 participants in the experimental group and 2 out of 10 in the control group made references to conflict. Three out of the four experimental group references were internal, whereas, in the control group, one reference to conflict was internal and one external. Though a trend toward more frequent reference to internal conflict by the experimental group seems evident, the difference is not significant and the numbers are too small to indicate a reliable trend. It may be that experience with the workbook does not lead to increased references to personal conflicts.

References to internalized causal attribution were more frequent

than externalized references for both experimental and control groups. Differences between groups were negligible in this category. Within the limits of inference resulting from the low inter-rater reliability, it seems that the workbook does not lead to increasingly internalized attribution of the causes of one's personality features.

Trends toward significance

Ego strength and response to interpersonal confrontation were both found to be significant in one of the semester experiences with the workbook. Both also showed a trend toward significance in the other semester experience. The lack of full replication means that conclusions about the meaning of these results can only be tentative. It seems likely that participation in the workbook process does have a positive effect on these two variables.

If participation in the workbook does lead to increased ego strength, this is support for the prediction from theory that experiencing oneself as creating self-understanding or meaning results in an increase in a sense of being capable of living a satisfying life. In other words, the workbook experience would be shown to facilitate the process of productive self-understanding in that it leads to an increased sense of personal capability. Given the lack of full replication of the results, further study maximizing the quality of participation in the workbook experience is required.

The workbook experience also seems to have some impact on the participant's response to interpersonal confrontation. These results

are highly tentative since the validity and reliability of this measure is unknown. The results may be the consequence of instability or fluctuation in an individual's test scores over time. Assuming this is not the case, face validity must also be assumed before the meaning of these results can be discussed. The scale for assuming one's response to interpersonal challenge is presented below.

1. Abusive Name Calling: you use any number of unprintable slurs to put your friend down.
2. Counter-attack: you turn the tables and accuse your friend of some fatal flaw.
3. Avoidance: you avoid getting involved with the other and just walk away.
4. Defensive Challenge: you demand evidence saying something like, "Name once," or "Prove it."
5. Self-justification: you defend yourself by explaining how the accusation is not true.
6. Invitation to Explore: you tell your friend you'd like to understand what it is about you that might create such an impression.

The lower end of the scale consists of hostile negative reactions, derogating the other. Options 3 and 4 consist of defense against the challenge by refusing involvement with the other person (avoidance) or by refusing involvement with the challenge. Though the fifth option remains defensive, it does entail some degree of engagement with the challenge. The highest level response is not defensive and consists of exploring the response. If one accepts the logic of this ordering, then it would appear that upward movement on the scale

indicates progressively more involvement with the other and with the other's challenge. If this interpretation is correct, then the workbook experience may be a factor in the participant's readiness to engage in intimacy when this requires self-confrontation. This would be reasonable considering the acknowledgement of unresolved issues that the workbook generates. Further research is necessary to investigate the validity of these interpretations of the data.

In the content analysis of personality descriptions four significant differences between experimental and control groups were found. Before discussing these, the limitations regarding internal and external validity of this analysis must be noted. First all inferences must be tentative given the minimally adequate inter-rater reliability (80%, on the average). Secondly, the content categories and the division within them were created for this study. One must rely on face validity to interpret them. Thirdly, the personality descriptions by the experimental group were done as part of the workbook unit entitled "Pulling It All Together," while the descriptions by the control group were done as a special optional assignment for credit in the last week of class. Finally, the differences between the groups have occurred in written response to specific directions with anonymity preserved, and may not occur under different conditions. In other words, generalization to other circumstances must be made with caution. With these caveats in mind the possible implications of the results of content analysis are discussed below.

Personalized references to oneself as having changed over time were made significantly more often by those who used the workbook. This result, however, is especially tentative since inter-rater agreement was only 65% on this particular category. Nonetheless, it may be that experience with the workbook does lead to increased awareness of personal development. This is a reasonable outcome since many of the workbook exercises involve reflecting on patterns of past experiences and implications for present behavior.

References to personal needs were also made significantly more often by the experimental group. In fact, members of the control group made no references to needs. Since inter-rater agreement was 85% it can be concluded that experience with the workbook does result in personality descriptions which include explicit reference to the lack of and/or desire for something, whether concrete or more abstract. Actually, all need expressions were abstract; no references to needs for specific objects or behaviors were made. For example, one student wrote: "I need a lot of loving because I haven't received much before and I never really loved." Another reflected: "I never dared to go against my mom, but as I grew older, I began to get a need for some independence and breaking away."

Admission of need means acceptance of being in some way unfinished or incomplete. This requires some amount of vulnerability or non-defensiveness. Such awareness could happen as a result of the consistent reflection upon oneself that the workbook experience involves.

This is discussed further below.

Participants in the workbook also made significantly more references to long-term goals than did non-participants. Inter-rater agreement was again 85%. It seems the workbook process results in goal-setting. This is noteworthy because the personality descriptions were completed before the final unit on goal-setting was undertaken. It may be that the workbook process leads to implicit or explicit awareness of being 'unfinished' and that this leads naturally to goal-setting for the sake of a greater personal sense of completeness. These inferences are highly speculative, given the fact that only four out of ten personality descriptions from workbooks contained references to goals. The kind of research needed to clarify these issues is discussed below.

The last result of content analysis to be discussed is that workbook participants had a significantly higher ratio of internal or abstract to external or concrete references than did members of the control group. It may be that the workbook does facilitate cognitive development in terms of self-conceptualization. This is to be expected according to the theory of PSU. External or concrete concepts are less complex and thereby develop first. Internal or abstract conceptualizations are much more complex in terms of the rules required for differentiation and organization (see Chapter III). The workbook exercises entail recurrent differentiation and organization of personal and abstract self-related constructs. It is reasonable

that such experience would affect one's description of oneself.

Summary and follow-up

The above discussion indicates that the workbook experience does appear to have some impact. Students participating in the workbook may raise their belief in their own capability of living a satisfying life; they may be becoming more willing and able to be aware of themselves as being in process, that is recognizing parts of themselves with which they are dissatisfied, recognizing ways that they are incomplete and in need of other people or further experiences; in response to this awareness of being unfinished, they may become more goal-directed; finally, they may become more skilled in the higher cognitive functions of personalizing and abstracting. In summary, it may be that the workbook experience increases not only one's sense of capability, but also one's awareness of need to and thereby motivation for change, as well as some cognitive skills necessary for such change. There is an evident tension here between a sense of capability and a sense of dissatisfaction. It is uncertain whether this tension leads to temporarily lowered self-acceptance. Optimally, a belief in self-efficacy would make awareness of incompleteness more personally acceptable, since one would trust one's ability to accomplish satisfying goals.

The probable impact of the workbook experience, as described immediately above, is consonant with the theory of productive self-understanding as presented in Chapter III. It was predicted that the

workbook would be more valuable to those in developmental transition since the workbook would facilitate the accommodation to new information which is essential to the process of transition. Though it cannot be said that the workbook facilitates closure of this process, it does seem that the workbook gives the process a boost. Awareness of areas of dissatisfaction appears to crystallize, goals may become more clear, a sense of capability may increase, and ability to personalize and abstract may improve. Given these changes, a satisfying resolution of the transition seems more likely.

Follow-up tests would be required, perhaps at six month and one year intervals, to determine if the workbook has indeed facilitated resolution in the developmental transition. Such a design would necessitate pretesting subjects to determine which were and were not in the process of transition during the workbook experience. It is presumed in the present study, that the age and undergraduate student status of the participants places most of them in the transition to early adulthood.

The lack of significant results on Loevinger's test of ego development may also be related to the lack of resolution of participants' developmental transitions. The time length of the study may have been too short to permit much noticeable movement on Loevinger's scale. Other studies using ego development as an outcome measure were evaluating programs of a minimum of eight months duration (Blasi, 1972; Sullivan, 1975; Exum, 1977; Lasker, 1977). If Loevinger's

construct of milestone sequences is accepted and given the fact that the ogive rules for determining TPR artifactually create such discontinuity, then it is reasonable to expect that the gradual shifting toward a new level of ego development is not discernible. Again it seems that six month and/or one year follow-up testing would indicate more reliably whether or not the workbook has an effect on ego development. Such an effect is only to be expected if the quality of the workbook experience is maximized for each participant, so that to some extent productive self-understanding becomes an ongoing process in the person's life.

This maximizing of the quality of the workbook experience is essential to any follow-up to the present study. The more intense the student's participation in the workbook, the more likely it is that the process of self-understanding will be productive for him or her. Such maximizing requires several conditions. Participants need resource persons available to them both inside and outside the classroom. Faculty members and staff at the student counseling services might be made available for brief consultations. An open classroom atmosphere is also necessary to surface less personal questions for clarification. The workbook also needs to be revised in the light of the feedback from participants. Redundancies must be weeded out, directions clarified, and examples provided. Some exercises must be made more self-explanatory and intrinsically rewarding than they already are. The entire workbook should be streamlined where possible

to minimize the experience of tediousness. It seems advisable also to invent a course assignment that presents a viable option to participation in the workbook so that mostly interested persons get engaged.

If the workbook experience is thus maximized it seems likely that its impact will be more clearly measurable. The measures worthy of consideration in a follow-up study can be deduced from the tentative results of this study. A belief in one's capability or self-efficacy could be measured again by Barron's (1953) scale or by a measure of self-esteem or self-acceptance. Acknowledgment of personal incompleteness and/or personal needs might be indicated by measures of defensiveness or readiness for intimacy, or need inventories. A measure of goal-directedness would also be valuable, as would a test to determine progress in cognitive development, especially formal operations.

SUMMARY

The project was both a theoretical and an applied undertaking. First the theoretical basis for the construct of Productive Self-Understanding (PSU) was detailed. PSU was simply defined as the process in which an individual actively discriminates and organizes information about his/her self for the purpose of making informed personal choices. The elements of this definition were explained in detail according to the social learning and information processing models. This explanation involved an explication of the process (how self-understanding develops), the structure (what self-understanding entails), and the objectives (why self-understanding occurs).

On the basis of this theory, a workbook was developed. The workbook consisted of a series of structured exercises to facilitate PSU. The content and construction of the workbook were outlined. The units of the workbook follow the units of a basic, college-level, introductory psychology course. Finally, the impact of the workbook was tested. Four introductory psychology classes were engaged in the evaluation. This included 56 female and 54 male students. The experimental classes used the workbook as a part of their assigned workload. Optional assignments were available for those who chose not to participate. Pretests and posttests were completed by all students.

It was predicted that engagement in the workbook experience would result in 1) gains in ego strength, 2) gains in ego development, 3) lowered psychological distress, 4) increased self-acceptance regarding positive and negative personal qualities, 5) an increased general sense of well-being, and 6) lowered interpersonal defensiveness. Standardized measures used were Barron's (1953) Ego Strength Scale, Loevinger's (1970) Sentence Completion Test (SCT) of Ego Development, and the BSCL-27, a revised form of the SCL-90 (Derogatis, Lipman & Covi, 1973). The other dependent measures were created for this study. Content analyses of personality descriptions and written workbook evaluations were also used.

The workbook experience did appear to have some impact but the results were considered to be highly tentative. Students participating in the workbook may raise their belief in their own capability of living a satisfying life; they may become more willing and able to be aware of themselves as being in process, that is, recognizing parts of themselves with which they are dissatisfied, recognizing ways that they are incomplete and in need of other people or further experiences; in response to this awareness they may become more goal-directed; finally they may become more skilled in the higher cognitive functions of personalizing and abstracting. The lack of results on the BSCL-27 and the SCT was discussed and recommendations for follow-up evaluation and revision of the workbook were made.

The recommendations included follow-up study with additional pre and post-tests on measures of self-esteem and readiness for self-exploration. Pre-testing of differences on ego identity status was also discussed.

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APPENDIX

ID CODE _____

Sex M F

Age _____

Major _____

- Year in School (circle one)
- 0 - 1st Semester Freshman
 - 1 - 2nd Semester Freshman
 - 2 - Sophomore
 - 3 - Junior
 - 4 - Senior

Please follow these instructions: 4

- FIRST COMPUTER SHEET: Part A and Part B
- SECOND COMPUTER SHEET: Part C
- Sentence Completion: On Separate Page for Males or Females

Please put your ID CODE on EACH PAGE.

Be sure you use the same ID # on pre-test and post-test.

PLEASE MARK 0 IN THE SPACE FOR 10.

INTRODUCTION

You have an opportunity to participate in a large study of college students and the way that they experience their world. What is learned through this study depends completely on the genuineness of your response to the questions below. It is essential that you answer the questions honestly. The use of a code number will assure your anonymity. At the end of the semester the class will receive feedback about what has been learned. Please work as quickly as you can.

PART A
Instructions

Below is a list of problems and complaints that people sometimes have. Please read each one carefully. After you have done so, please mark on the answer sheet the number to the right that best describes HOW MUCH THAT PROBLEM HAS BOTHERED OR DISTRESSED YOU DURING THE PAST 7 DAYS INCLUDING TODAY. Mark only one number for each problem and do not skip any items. Please read the example below before beginning.

EXAMPLE

HOW MUCH WERE YOU DISTRESSED BY:

Ex. Nervousness or shakiness inside.....0 1 2 3 4

Descriptors

- 0 Not at all
- 1 A little bit
- 2 Moderately
- 3 Quite a bit
- 4 Extremely

BE SURE TO MARK THE APPROPRIATE NUMBER ON THE ANSWER SHEET

1. Nervousness or shakiness inside..... 0 1 2 3 4
2. Repeated unpleasant thoughts that won't leave your mind..... 0 1 2 3 4
3. Feeling others are to blame for most of your troubles..... 0 1 2 3 4
4. Feeling easily annoyed or irritated..... 0 1 2 3 4
5. Feeling that most people cannot be trusted..... 0 1 2 3 4
6. Temper outbursts that you could not control..... 0 1 2 3 4
7. Blaming yourself for things..... 0 1 2 3 4
8. Feeling lonely..... 0 1 2 3 4
9. Feeling blue..... 0 1 2 3 4
10. Worrying too much about things..... 0 1 2 3 4
11. Feeling fearful..... 0 1 2 3 4
12. Feeling others do not understand you or are unsympathetic..... 0 1 2 3 4

FOR THE PAST 7 DAYS, HOW MUCH
WERE YOU DISTRESSED BY:

Descriptors

- 0 Not at all
1 A little bit
2 Moderately
3 Quite a bit
4 Extremely

13. Trouble falling asleep	0 1 2 3 4
14. Difficulty making decisions.....	0 1 2 3 4
15. Feeling hopeless about the future.....	0 1 2 3 4
16. Trouble concentrating.....	0 1 2 3 4
17. Feeling tense or keyed up.....	0 1 2 3 4
18. Having urges to beat, injure, or harm someone.....	0 1 2 3 4
19. Awakening early in the morning.....	0 1 2 3 4
20. Sleep that is restless or disturbed.....	0 1 2 3 4
21. Having urges to break or smash things.....	0 1 2 3 4
22. Having ideas or beliefs that others do not share.....	0 1 2 3 4
23. Getting into frequent arguments.....	0 1 2 3 4
24. Others not giving you proper credit for your achievements.....	0 1 2 3 4
25. Feelings of worthlessness.....	0 1 2 3 4
26. Shouting or throwing things.....	0 1 2 3 4
27. Feeling that people will take advantage of you if you let them.....	0 1 2 3 4

HOW WELL DO YOU FEEL THAT YOU
ARE GETTING ALONG, EMOTIONALLY
AND PSYCHOLOGICALLY, AT THIS
TIME?

28. I AM GETTING ALONG:

MARK YOUR ANSWER IN THE SPACE FOR
NUMBER 28 ON THE ANSWER SHEET.

- 0 Very well; much the way I would like to
- 1 Quite well; no important complaints
- 2 Fairly well; have my ups and downs
- 3 So-so; manage to keep going with some effort
- 4 Fairly poorly; life gets pretty tough for me at times
- 5 Quite poorly; can barely manage to deal with things

PART B-1

DESCRIBE IN 2 to 3 SENTENCES WHAT YOUR CAREER PLANS ARE:

29. NOW CHOOSE ONE OF THE FOLLOWING STATEMENTS, THE ONE THAT IS MOST TRUE OF YOU. READ ALL CHOICES BEFORE SELECTING ONE. (Mark your answer in the space for number 29.)

"At this time in my life, regarding career choice, I feel ...

- 1 Unclear about what kind of work I would really like to do
- 2 Clear about what I want to do but uncertain about whether I can achieve this
- 3 That I have some worthwhile and realistic options, but need need some time to explore them before deciding
4. That no matter what the job, I'll never be satisfied with it
- 5 Clear about what I want and sure I can achieve this
- 6 That just about any job would be OK with me

PART B-2

IN 2 to 3 SENTENCES, DESCRIBE WHAT HAVE BEEN THE MAJOR FACTORS INFLUENCING YOUR CAREER, TO WHATEVER EXTENT THAT DECISION HAS BEEN MADE.

30. NOW CHOOSE ONE OF THE FOLLOWING STATEMENTS, THE ONE THAT IS MOST TRUE OF YOU. READ ALL CHOICES BEFORE SELECTING ONE. (Mark your answer in the space for number 30 on the answer sheet.)

"Regarding the above factors influencing my career choice,

- 1 Most importantly, I wanted to please one or more important people
- 2 At least one of the factors involved systematic careful reflection upon what I know about my personality, interests and abilities
- 3 I saw a pattern in the experiences I've enjoyed to this point in my life

continued on other side

ID CODE _____

30. CONTINUED

"Regarding the above factors influencing my career choice,

4 The most important factor was wanting to be like someone I knew and admired

5 I thought that one or more significant others probably knew what was best for me

6 I never really thought about it all that much - what I chose just seemed right for me

PART C-1

WHAT ARE THE THREE SPECIFIC PERSONAL QUALITIES ABOUT YOURSELF THAT YOU LIKE THE MOST?

1. _____
2. _____
3. _____

31. HOW DO YOU FEEL ABOUT THESE PARTS OF YOURSELF? CAREFULLY READ ALL THE FOLLOWING STATEMENTS AND CHOOSE THE ONE THAT BEST APPLIES (Mark your answer in the space for #31 on the answer sheet.)

- 1 Resolved: These strengths are OK, but I am capable of better and will work hard to improve myself.
- 2 Uncomfortable: I wish there was more that I could say I liked about myself.
- 3 Accepting: I like these strengths; I am pleased with myself and feel fairly confident I can live a satisfying life.
- 4 Despairing: when I think of how little I like about myself, I wish I'd never been born.
- 5 Disgusted: I do my best to hide how badly I feel about myself
- 6 Resigned: These personal strengths could be better, but at least they're enough for me to live a satisfying life.
- 7 Delighted: I really feel just great about myself; I'm sure my future will be highly satisfying.

PART C-2

WHAT ARE THE THREE SPECIFIC PERSONAL QUALITIES ABOUT YOURSELF WITH WHICH YOU ARE MOST DISSATISFIED?

1. _____
2. _____
3. _____

PART C-2 CONTINUED

32. HOW DO YOU FEEL ABOUT THESE PARTS OF YOURSELF? CAREFULLY READ ALL THE FOLLOWING STATEMENTS AND CHOOSE THE ONE THAT BEST APPLIES (Mark your answer in the space for #32 on the answer sheet.)

- 1 Resolved: I cannot accept these negative parts of myself and will do what I must to change them.
- 2 Accepting: I expect to have some areas of weakness that will always be part of me; I understand how these have grown out of my past experiences and I appreciate even these negative parts as integral to the whole me.
- 3 Disgusted: I am revolted by these negative parts of myself and try at all times to hide them.
- 4 Resigned: I don't really like these negative parts of me, but that's the way I am and I can still live a satisfying life.
- 5 Uncomfortable: I wish I didn't have these negative parts of myself to bring me down.
- 6 Despairing: when I think of these things I wish I'd never been born.

PART D

One day, quite to your surprise, a close friend of yours says, "I've debated about whether or not to say this to you, but I think I owe it to you. I've watched you for a long time and sometimes I'm convinced that you don't care about others, that all you're doing is looking out for yourself."

You respond by saying (please fill in what you would say.) "_____"

33. WHICH STATEMENT BELOW BEST DESCRIBES YOUR RESPONSE. (Mark your answer in the space for #33 on the answer sheet.)

- 1 Self-justification: you defend yourself by explaining how the accusation is not true.
- 2 Avoidance: You avoid getting involved with the other and just walk away.
- 3 Invitation to Explore: You tell your friend you'd like to understand what it is about you that might create such an impression.

33. CONTINUED

ID CODE _____

- 4 Abusive Name Calling: You use any number of unprintable slurs to put your friend down.
- 5 Defensive Challenge: You demand evidence, saying something like, "Name once," or "Prove it."
- 6 Counter-attack: You turn the tables and accuse your friend of some fatal flaw.

PART C

PLEASE ANSWER THIS SECTION ON THE SECOND COMPUTER SHEET.

PLEASE READ THROUGH THE FOLLOWING SELF-STATEMENTS AND DECIDE IF THEY ARE GENERALLY TRUE OR FALSE TO YOU. MARK THE ANSWER SHEET 1 FOR TRUE AND 2 FOR FALSE. PLEASE DO NOT SKIP ANY.

1. I have a good appetite.
2. I have diarrhea once a month or more.
3. At times I have fits of laughing and crying that I cannot control.
4. I find it hard to keep my mind on a task or job.
5. I have had very peculiar and strange experiences.
6. I have a cough most of the time.
7. I seldom worry about my health.
8. My sleep is fitful and disturbed.
9. When I am with people I am bothered by hearing very queer things.
10. I am in just as good physical health as most of my friends.
11. Everything is turning out just like the prophets of the Bible said it would.
12. Parts of my body often have feelings like burning, tingling, crawling, or like "going to sleep."
13. I am easily downed in an argument.
14. I do many things which I regret afterwards (I regret things more or more often than others seem to.)
15. I go to church almost every week.
16. I have met problems so full of possibilities that I have been unable to make up my mind about them.
17. Some people are so bossy that I feel like doing the opposite of what they request, even though I know they are right.
18. I like collecting flowers or growing house plants.
19. I like to cook.
20. During the past few years I have been well most of the time.
21. I have never had a fainting spell.
22. When I get bored I like to stir up some excitement.
23. My hands have not become clumsy or awkward.

PART C - CONTINUED

ID CODE _____

Mark the answer sheet 1 for True and 2 for False

24. I feel weak all over much of the time.
25. I have had no difficulty in keeping my balance in walking.
26. I like to flirt.
27. I believe my sins are unpardonable.
28. I frequently find myself worrying about something.
29. I like science.
30. I like to talk about sex.
31. I get mad easily and then get over it soon.
32. I brood a great deal.
33. I dream frequently about things that are best kept to myself.
34. My way of doing things is apt to be misunderstood by others.
35. I have had blank spells in which activities were interrupted and I did not know what was going on around me.
36. I can be friendly with people who do things which I consider wrong.
37. If I were an artist I would like to draw flowers.
38. When I leave home I do not worry about whether the door is locked and the windows closed.
39. At times I hear so well it bothers me.
40. Often I cross the street in order not to meet someone I see.
41. I have strange and peculiar thoughts.
42. Sometimes I enjoy hurting persons I love.
43. Sometimes some unimportant thought will run through my mind and bother me for days.
44. I am not unusually self-conscious.
45. I am embarrassed by dirty stories.
46. I try to remember good stories to pass them on to other people.
47. My worries seem to disappear when I get into a crowd of lively friends.
48. Whenever possible, I avoid being in a crowd.
49. I would certainly enjoy beating a crook at his own game.
50. I have had some very unusual religious experiences.
51. One or more members of my family is very nervous.

PART C - CONTINUED

Mark the answer sheet 1 for True and 2 for False

52. I am attracted by members of the opposite sex.
53. The man who had most to do with me when I was a child (such as my father, stepfather, etc.) was very strict with me.
54. Christ performed miracles such as changing water into wine.
55. I pray several times a week.
56. I feel sympathetic towards people who tend to hang on to their griefs and troubles.
57. I am afraid of finding myself in a closet or small closed place.
58. Dirt frightens or disgusts me.
59. I think Lincoln was greater than Washington.
60. In my home we have always had the ordinary necessities (such as food, clothing, etc.)
61. I am made nervous by certain animals.
62. My skin seems to be unusually sensitive to touch.
63. I feel tired a good deal of the time.
64. I never attend a sexy show if I can avoid it.
65. If I were an artist I would like to draw children.
66. I sometimes feel that I am about to go to pieces.
67. I have often been frightened in the middle of the night.
68. I very much like horseback riding.

Please complete the following sentences

Form For Females

1. For a woman a career is _____

2. A girl has a right to _____

3. The thing I like about myself is _____

4. Education _____ A _____

5. A wife should _____

6. Rules are _____

7. When I get mad _____

8. Men are lucky because _____

9. I am _____

10. A woman feels good when _____

11. My husband and I will _____

12. A woman should always _____

ID Code _____

Please complete the following sentences

Form For Males

1. If I had more money _____

2. A man's job _____

3. The thing I like about myself is _____

4. Women are lucky because _____

5. A good father _____

6. A man feels good when _____

7. A wife should _____

8. A man should always _____

9. Rules are _____

10. When his wife asked him to help with the housework _____

11. When I am criticized _____

12. He felt proud that he _____

CONTENT ANALYSIS RATING FORM

CODE # _____

EXPLICIT REFERENCES

	NONE	EXTERNAL / SITUATIONAL	INTERNAL / PERSONAL
CONFLICT	-0-	-1-	-2-
		"My parents want me to do well in school and also be popular.	I am self-centered but also care about others
NEGATIVE CHARACTERISTIC (S)	-0-	-1-	-2-
		EXPECTATIONS/APPROVAL I know others think I talk too much.	INNER STANDARDS I'm (not) upset with how demanding I can be.
CAUSAL ATTRIBUTION	-0-	-1-	-2-
		COMPLETELY EXTERNAL My dad was always strong-willed and so am I.	MIX OF EXTERNAL & PERSONAL (#1 plus) It's really me who avoids closeness with authority figures.
SELF-CHANGE	-0-	-1-	-2-
	(static picture)	CONCRETE/BEHAVIORAL/CONVENTIONAL I never used to cry, but now if I'm upset the tears flow.	ABSTRACT/PERSONALIZED I used to be very shy, but now I'm assertive when I choose.
INTERPERSONAL /EMOTIONAL TRAITS	-0-	-1-	-2-
		CONCRETE/BEHAVIORAL/CONVENTIONAL I usually tell my girl-friend everything that's bothering me.	ABSTRACT/PERSONALIZED I am an affectionate person especially with my girlfriend.
VALUES/BELIEFS	-0-	-1-	-2-
		CONCRETE/BEHAVIORAL/CONVENTIONAL It's important to me to give some of my earnings to charity.	ABSTRACT/PERSONALIZED I value compassion in myself and others - it enables me to live with suffering.
SKILLS/abilities/COMPETENCIES	-0-	-1-	-2-
		CONCRETE/BEHAVIORAL/CONVENTIONAL I can write (sing, dance, sew, study, ...) very well.	ABSTRACT/PERSONALIZED I'm a non-judgmental, understanding person.
NEEDS	-0-	-1-	-2-
		CONCRETE/BEHAVIORAL/CONVENTIONAL I need to stay active, to do a lot of walking or jogging.	ABSTRACT/PERSONALIZED I need to feel that I'm accomplishing something worthwhile.
LONG-TERM GOALS	-0-	-1-	-2-
		VAGUE/GENERAL I hope someday to make a contribution to society.	SPECIFIC ACCOMPLISHMENT I want to be a corporation lawyer and earn enough to own my own house.

CONTENT ANALYSIS CATEGORIES

CONFLICT: Mention within 3 consecutive sentences of 2 characteristics that are inharmonious, incompatible, inconsistent, incongruous . . .

NEGATIVE

CHARACTERISTICS: Must be explicitly evaluated according to some norm, either external (approval, expectations) or internal.

CAUSAL

ATTRIBUTION: References to the source of traits must be explicit, as coming from the influence of others and situations, and/or internally determined.

SELF CHANGE: Explicit references to some change, either in concrete behavior, or in more abstract and personalized traits.

INTERPERSONAL/

EMOTIONAL TRAITS: Explicit references to (concrete) behavior patterns, or to more abstract (broadly inclusive of various behaviors) personal traits.

VALUES/BELIEFS: Explicit references to values/beliefs, introduced by such phrases as I value, I believe, It is important to me, I appreciate, prize, cherish, esteem, treasure. . i.e., a statement regarding the personal Worth of something. Include any positive references to religion.

**SKILLS/ABILITIES
COMPETENCIES:** Concrete references are to a specific behavior which he/she states he/she can do well. More abstract references to abilities that are comprised of various complex, component behaviors.

NEEDS: Explicit reference to the lack of and/or desire for something concrete (an object or behavior), or something more general/abstract.

LONG-TERM

GOALS: Explicit reference to future intentions regarding career, life-style, values, interpersonal style, etc.

B. Which exercises did you find most frustrating or time-wasting? What was it about the exercise that resulted in your negative experience? Can you suggest a change or would you just eliminate this exercise?

Identification of Exercise	SPECIFICALLY, here's what was wrong with the exercise.	How improve it? Or drop it?
1.		

APPROVAL SHEET

The dissertation submitted by Allan H. Schnarr has been read and approved by the following committee:

Dr. John R. Shack, Director
Professor of Psychology, Loyola

Dr. Dan P. McAdams
Assistant Professor of Psychology, Loyola

Dr. Frank L. Slaymaker
Assistant Professor of Psychology, Loyola

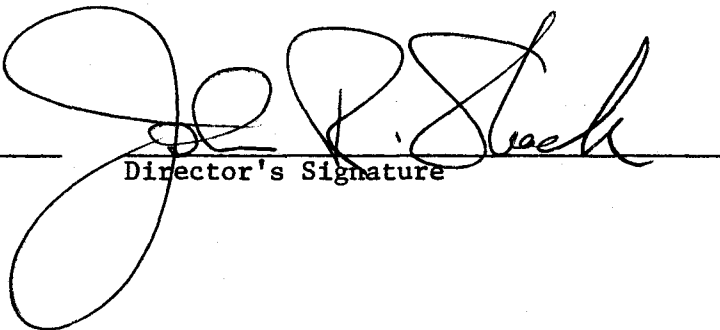
The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

Date

9/1/82

Director's Signature

A large, stylized handwritten signature in black ink, appearing to read "John R. Shack", is written over a horizontal line. The signature is highly cursive and loops around itself.