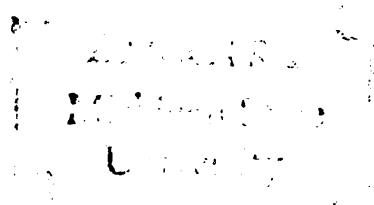




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AN EXPLORATORY STUDY OF ADULT
PLAYFULNESS AND SOME PERSONALITY CORRELATES

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AN EXPLORATORY STUDY OF ADULT
PLAYFULNESS AND SOME PERSONALITY CORRELATES

By

Eric Thomas Olsen

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

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ABSTRACT

AN EXPLORATORY STUDY OF ADULT PLAYFULNESS AND SOME PERSONALITY CORRELATES

By

Eric Thomas Olsen

Behavioral and ego psychological definitions of playfulness were critically examined and found lacking in their relative neglect of phenomenological factors which uniquely characterize playfulness. An existential definition was offered which posed playfulness as a form of conflict-free self-expression rather than an adaptive and functional behavior.

The following hypotheses were proposed regarding the relationship between the predisposition to engage in playful behavior and certain personality characteristics:

- I. Playfulness is negatively correlated with the individual's reported level of trait anxiety.
- II. Playfulness is positively correlated with an internal locus of control.
- III. Playfulness is positively correlated with the capacity for absorption in self-altering experiences.
- IV. Playfulness is positively correlated with temporal relatedness.
- V. Playfulness is positively correlated with extension of future time perspective.
- VI. Playfulness is positively correlated with extension of past time perspective.

The data were collected by administering self-report questionnaires to 158 male and female undergraduate students in two phases. In the first phase 125 subjects (85 females, 40 males) completed a questionnaire composed of the following scales: Haan's Regression in the Service of the Ego Scale (playfulness) from the California Psychological Inventory, a 15 item Existential Scale of playfulness developed by the present author, a self-rating measure of playfulness, the Taylor Manifest Anxiety Scale, Rotter's I-E Scale, the Absorption Scale from the Differential Personality Questionnaire, and a projective and self-report measure of temporal relatedness. An additional 33 subjects completed a second questionnaire which consisted of the future and past time perspective measures (omitted in the first phase) and the Haan and Existential Scales.

Statistical analyses of the data yielded low to moderate but significant correlations which generally supported the hypotheses regarding anxiety, absorption, and temporal relatedness. However, contrary to expectation, the Haan Scale correlated positively with the Manifest Anxiety Scale while the Existential Scale correlated negatively, which is consonant with expectation. Some trends toward sex differences appeared in the data.

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CHAPTER I

INTRODUCTION

The prevailing approach to the study of human behavior has emphasized its functional and goal-oriented aspects. Psychologists have viewed almost all behavior as functioning to reduce drive tension, to bring about pleasurable stimulation, to defend against anxiety, etc. Despite the fact that functionalist psychology (whether behavioral or psychodynamic) has greatly increased our abilities to understand, predict, and control behavior, not all classes of behavior are best suited to the functional interpretation. Play is one such class of behavior. For as long as philosophers, theologians, and social scientists have theorized about the meaning and dynamics of play, one aspect of play has remained paramount: it is not goal-oriented and, in fact, its "function" seems to consist of immediate pleasure intrinsic to its enactment.

Most, but not all, scholars of play would include this "autotelic" dimension (Klinger, 1969) in their definitions and explanatory theories of play. This lack of consensus in defining play has proved a major obstacle to the experimental investigation of play. As yet no single definition of play has been universally or even generally accepted by the behavioral sciences community. This relative

confusion is compounded by the plethora of theories of why persons play and, again, no one explanatory theory has unqualified support.

The word "play" connotes a multitude of behaviors whose nature defies a discrete category outside of which all behaviors would be "non-play." The layman commonly defines play as "not-work"; but this definition ignores the possibility of a playful attitude towards one's work. Huizinga (1949) described the conceptual and linguistic problems posed by a definition of play:

The conceptual value of a word is always conditioned by its opposite. For us, the opposite of play is earnest, also used in the more special sense of work; while the opposite of earnest can either be play or jesting, joking. However, the complementary pair of opposites play-earnest is the more important.

We can say, perhaps, that in language the play-concept seems to be much more fundamental than its opposite. The need for a comprehensive term expressing "not-play" must have been rather feeble, and the various expressions for "seriousness" are but a secondary attempt on the part of language to invent the conceptual opposite of "play." . . . Play is a thing by itself. The play-concept as such is of a higher order than is seriousness. For seriousness seeks to exclude play, whereas play can very well include seriousness. (pp. 44-45)

In short, the attempt to define behavior as play or not-play is fraught with semantic confusion.

Classical and contemporary students of play have nevertheless sought to define play in terms of its motive

or in terms of its behavioral content (Ellis, 1973). A motivational definition asserts that motive 'x' produces or causes play. Sabora and Mitchell (1961, p. 114), for example, cite the frequent assertion that play is the product of an aimless discharge of surplus energy. This type of definition requires a method of determining the presence of the inferred motive (the need to discharge the energy) and of measuring the intensity of this motive. In addition to this often insurmountable methodological problem, one must also clearly define what behaviors constitute play. To define play, for example, as behavior resulting from the aimless discharge of surplus energy would be circular reasoning.

The content definitions of play, developed primarily by ethologists, first attempt to distinguish play from non-play behavior and then to ascertain the characteristics of the animal, its behavior, and the setting which coalesce to produce play behavior. This type of definition requires prolonged and exacting behavioral observations which become highly complex in the study of human behavior. Moreover, this approach is vulnerable to the criticism of any definition that play consists of a particular class of behavior. Consider, for example, the highly competitive and non-playful attitude with which humans often engage in games and sports.

Despite the complex obstacles to reaching an acceptable definition of play, there has been no dearth of research on play in the recent past. Literally hundreds of studies of children's play have been published in the past two decades (Herron & Sutton-Smith, 1971). These studies have focused primarily on the role of play in fostering the child's cognitive, affective, and social development. In contrast, the number of theoretical and research publications on play in adulthood is extremely small. This situation exists for several possible reasons.

First, in a society dominated by the Protestant work ethic a non-productive behavior like play is viewed with ambivalence by adults. Although adults may enjoy play (for they were once children), they may also feel that their adult role requirements preclude frivolity or absorption with the "make-believe" world of play. Psychologists have perhaps followed in step with society's ambivalent stance toward adult play by failing to regard it as a legitimate area of study.

Second, the forms of play change as the individual matures from childhood to adulthood. Overt forms of play such as "cops and robbers" become less common as the individual matures. Games and sports replace the very young child's "free play" and even later play behavior seems to become internalized in fantasy and other imaginative processes (Klinger, 1969). In adulthood an individual may

retain an attitude of playfulness which s/he can express in almost any realm of behavior, including work. Therein lies a major difficulty in defining adult play because, depending on attitudinal factors, one man's work may be another man's play. Moreover, a person may approach an activity commonly regarded as play with an earnest competitiveness that inhibits all playfulness. Thus, the study of adult play that attempts to define which activities are play and which are not would suffer the same criticisms as described previously.

An alternative approach to the element of play in adulthood is to define and investigate the attitude of playfulness that characterizes all playful behaviors, regardless of their specific content. Lieberman (1977) has pioneered this approach in a series of studies which explored the relationships among playfulness, imagination, and creativity at several developmental levels. Her beginning efforts pave the way for further studies of playfulness as a personality trait, "a relatively persistent and consistent behavior pattern manifested in a wide range of circumstances" (Chaplin, 1968). This approach enables one to conceptualize playfulness as present in all persons in varying degrees of strength and to link playfulness with other personality characteristics.

DEFINITIONS OF PLAYFULNESS

Currently two empirically based definitions of playfulness exist, one developed by Lieberman (1977) and the other by Haan (1977) as part of her research on coping and defense mechanisms.

In her first study Lieberman (1964) investigated the relationship between playfulness and creativity among kindergartners. She defined playfulness as a unitary behavior dimension consisting of five component traits: manifest joy, sense of humor, physical, social and cognitive spontaneity. The measure of playfulness was a five point scale on which the child's teacher rated the quantity and quality of each trait displayed in the child's classroom behavior. A factor analysis confirmed that the Playfulness Scale (PF Scale) traits form a cluster of highly related behaviors.

Lieberman used three measures of divergent thinking (Product Improvement Test, Plot Titles Test, Monroe Language Classification Test) adapted for testing with kindergartners. The tests were scored for ideational fluency, spontaneous flexibility, and originality. The results indicated that playfulness (as rated by the teachers) is significantly but moderately correlated with the three measures of creativity and flexibility. No sex differences were found in the correlations of sex with the playfulness traits or in the correlations of the playfulness and divergent thinking scores.

In her later studies Lieberman continued to use the five traits as her definition of playfulness. In a study of playfulness in adolescents (1967) she redesigned the PF Scale for use with junior high school and high school students, using teachers' ideas about playfulness and traits reflective of it. She also asked the teachers to rate students on a forty item trait checklist of playful and non-playful traits. From her results she discerned two types of playful students. The first type she described as physically alert, enthusiastic, intellectually curious, and imaginative. The second type she described as physically mobile, spontaneously joyful, humorous, group-oriented, and sometimes disruptive with attention getting.

In contrast to Lieberman's behavioral approach to playfulness is Haan's (1977) ego psychology approach. Haan began by defining playfulness, or regression in the service of the ego, as an adaptive or coping ego process. In playfulness the individual:

. . . utilizes feelings and ideas that are not directly ordered or required by the practical immediate elements of the situation to add to his understanding of problems, his handling of situations, and his enjoyment of life. He essentially utilizes his preconscious functioning in a rich and flexible way because his ego boundaries allow rapid and productive reversal of the time frame. He indicates a comfortable and optimistic expectancy that his products are likely to be good (resolved omnipotence), but he can stand the possibility that they may not be (laughs at his own bad wit). (p. 304)

Haan goes on to say that the individual with a high playfulness rating will "play with" ideas and feelings without inhibiting concern about their practicality or allegiance to reality. Others may initially regard this playfulness as disorderly. The individual with a low playfulness rating is propelled forward, unwilling to take time out and unable to let his preconscious work for him. Haan has derived a playfulness scale from the California Psychological Inventory (Gough, 1959) and performed some studies of its validity and reliability.

CRITICAL APPRAISAL

While Lieberman's definition has provided useful data, her behavioral approach is severely limited in providing understanding of the psychodynamics of playfulness. One cannot easily relate playfulness to other personality characteristics and underlying psychological processes on the basis of observable behavior alone.

Haan's approach to playfulness remedies this situation somewhat; but, it, too, has shortcomings. Her definition, while having the advantage of an empirical base, differs from many theoretical definitions of playfulness in which the individual acts upon and symbolically transforms aspects of reality in joyous self-expression. Haan's definition, rooted in the psychoanalytic definition, essentially posits playfulness as one of the ego's processes for

negotiating with reality's ambiguities and conflicts. Playfulness aids the individual in "his understanding of problems" and in "his handling of situations" as well as enhancing enjoyment of life. The ego reacts to the world and strives for adaptation. Haan seems to have conceptualized a style of mastery rather than a mode of spontaneous self-expression.

Consider, for example, Sutton-Smith's (1971) description in which playfulness follows mastery. Playfulness ". . . involves a special emphasis on the novelty of one's responses and a clearly experienced euphoria arising out of the voluntariness of the proceedings . . . that sort of playfulness comes only after the mastery. The most important thing that playfulness does is to make life worth living. That is its phenomenological satisfaction. When you do things with your own experience in a playful way, you enjoy being alive. . . ." Of course, this description lacks precision and empirical support. It serves, however, to highlight the utilitarian bias of Haan's formulation. Moreover, it is representative of those definitions of playfulness in the theoretical literature which emphasize playfulness as a non-instrumental mode of self-expression that occurs in the absence of conflict and ambiguity.

PLAYFULNESS: AN EXISTENTIAL DEFINITION

The present writer's dissatisfaction with the existing empirical definitions of playfulness lead to the

development of an alternative existential definition. This definition integrates the thinking of several authors: Czikszentmihalyi (1975), Klinger (1969), Sadler (1969), Sutton-Smith (1971), and Lieberman and Haan. Though the definition incorporates some psychoanalytic concepts, its designation as existential derives from its greater emphasis on the individual's freedom and responsibility and the uniqueness of his or her creativity. A discussion of each component of the definition will follow the definition itself:

Playfulness as a personality trait consists of a predisposition to engage in active and voluntary transactions with real objects, not limited by the constraints of reality, and characterized by novel, spontaneous, or humorous behaviors which are intrinsically pleasurable but not instrumental to the individual's survival, maintenance of interpersonal security, or the achievement of other extrinsic goals.

Active: Playfulness shares similarities with processes that have a playful component such as dreaming and fantasy; but in these processes the individual is a passive participant. Playfulness connotes active participation. Sutton-Smith (1971) distinguishes playfulness from exploratory behavior by pointing out that in exploration the individual surrenders himself to the stimulus and examines it in its own terms. In play the individual subdues the stimulus to his own activities. (Other distinctions, to be discussed below, exist between exploration and playfulness).

Voluntary: Linked with this aspect of active participation is the individual's behaving playfully because he chooses to do so. Although playfulness requires a temporary loosening of cognitive and affective control, the individual retains the ability to choose other ways of behaving. Finally, playfulness cannot be forced upon or compelled in oneself or another person.

Object Transaction: In fantasy, daydreaming, creativity, etc., the individual interacts with an internal object representation. Playfulness involves an interaction with a real object: another person, an animal (such as a pet), or an inanimate object.

Reality Constraints: Playfulness, especially in children, involves a transformation of reality as implied by the terms "pretend" and "make-believe." The individual subtly or dramatically alters his apprehension of space-time and/or social reality for the purpose of play. In this context, for example, the playful teasing of human adults can be viewed as the interpersonal parallel of play fighting commonly observed among children and sub-human primates.

Novelty/Spontaneity/Humor: Playful behaviors are not stereotyped, ritualized, or compelled by social formalities or sanctions. Instead, playfulness involves surprise, humor, deviation from prescribed roles, and experimentation with new ways of responding to and acting upon previously

encountered stimuli. Thus, games and sports do not automatically involve playfulness because these activities are systematic, replicable by others, and have a relatively predictable rather than open-ended outcome (Avedon & Sutton-Smith, 1971). Moreover, the spirit of competition usually brought to games and sports in our culture militates against engaging in them with an attitude of easy-going playfulness.

A difficult but necessary distinction is that between spontaneity (in playfulness) and impulsivity. A principal aspect of impulsive behavior is the individual's failure to integrate his potential actions with his memories of past experiences and his future goals; i.e., the individual acts to reduce a drive or discharge tension without reflecting on the risk of unwanted or negative consequences of his actions. Of course, impulsive behavior is not uniformly negative in its outcome. The fact that it often results in self-defeating consequences and that it often serves as a defense against anxiety helps to differentiate it from playful spontaneity.

Non-instrumentality: Playfulness is the antithesis of goal-oriented behavior. The individual does not engage in playful behavior in order to satisfy biological needs or to cope with or defend against intrapsychic or interpersonal sources of anxiety or insecurity. Playfulness is actually most likely to emerge only in the absence of pressing biological needs or anxiety. This definition does include,

however, playful elaborations of instrumental behaviors.

Playfulness and Exploration: Exploratory behavior and playfulness have often been equated in the research literature. Therefore one must differentiate these two types of behavior on dimensions other than that of activity-passivity. Hutt (1966) and Switzky et al. (1974) have demonstrated that exploratory behavior is elicited by such stimulus characteristics as novelty, ambiguity, incongruity, surprise, and complexity. Playfulness is elicited by stimulus situations of familiarity, clarity, simplicity, and congruity. Exploratory behavior enables the individual to come to feel competent and in control of his environment, preparing the way for the emergence of playfulness.

PHENOMENOLOGY OF PLAY AND PLAYFULNESS

As noted previously most attempts to study play have focused on its behavioral content, its inferred motives, and its role in child development. These approaches neglect a highly salient aspect of play and playfulness: playfulness invokes unique changes in the individual's subjective experience of himself in the world. Consideration of these changes as a whole suggests that play involves a reorientation of the ego to the world (Sadler, 1966). A brief discussion of this phenomenology may help discern personality characteristics associated with playfulness.

Freedom: Playfulness is voluntary, not limited by the constraints of reality, and detached from the normal press for goals and achievements and therefore fosters a subjective experience of freely originating one's behavior.

Self as Origin: The individual feels safe and in command of himself and the stimulus field upon which he has focused his attention. "Rather than an active awareness of mastery, it is more a condition of not being worried by the possibility of lack of control." (Czikszenmihalyi, 1975, p. 50) The individual perceives his behavior as determined by his own choosing, i.e., in the framework of DeCharms (1968) he experiences himself as an Origin rather than a Pawn.

Focal Attention: In playfulness the individual centers his attention on a limited stimulus field, part of which he may create through imaginative processes. The individual shifts from vigilant attention and scanning of the environment to an intense concentration in an absorption with a relatively narrow stimulus field. This focal attention differs from concentration in work in that it requires relatively little or no attention.

Perception: The relaxation of vigilance, freedom from the press of biological needs, and relative lowering of defensive processes all coalesce to foster a sense of openness in perception. The individual is released from habitual response sets and interpretations of himself, other

persons, and the physical environment. He is able to perceive with relatively greater objectivity and with relatively less "filtering" due to his own needs.

Loss of Self-Consciousness: The individual remains highly aware of his actions but not of his awareness itself, except intermittently in the course of play. The observing ego fades to the background of awareness. It is as if the constantly deliberating "I-me" usually interposed between stimulus and response is replaced by a more spontaneous experiencing Self. "Action follows upon action according to an internal logic which seems to need no conscious intervention on our part." (Czikszentmihalyi, 1975, p. 43)

Experience of Time: The time experienced in playfulness is not of clocks and calendars or plans and schedules. Play time is not fragmented but whole. One sets one's own time frame. Time is integral and flexible rather than fragmented and rigid (Sadler, 1969). The past and the future may fade from awareness as the player becomes absorbed in his or her here and now experience. The individual may "lose track of time" or experience a sense of timelessness. However, the past and the future are not entirely excluded from playfulness. At least two theorists maintain (Haan, 1977; Neumann, 1971) that play involves the preconscious inclusion of imaginary or cognitive extensions of previous experiences.

PERSONALITY CHARACTERISTICS ASSOCIATED
WITH PLAYFULNESS

Based on the foregoing discussion one can make some inferences about personality characteristics which may relate centrally to playfulness.

Anxiety: The individual seems to behave playfully when he feels safe and "at home" in the world. A sense of being in familiar surroundings coincides with a loosening of vigilant awareness or effortful concentration. The White House Conference on Children (Anon, 1970) emphasized that children are not freed to play when their basic needs for food, warmth, security, etc. have not been met. Presumably concern about unsatisfied primary and acquired drives preempts playfulness in both children and adults. Moreover, a long history of clinical observations describes how anxiety disrupts play (e.g., Erikson, 1950).

From another point of view, one can view many forms of playfulness as similar to adaptive regression, or regression in the service of the ego. Schafer (1960) defines regression in the service of the ego as:

. . . a partial, temporary, controlled lowering of the level of psychic functioning to promote adaptation. It promotes adaptation by maintaining, restoring, or improving inner balance and organization, interpersonal relations, and work. It is a process which increases the individual's access to preconscious and unconscious contents, without a thoroughgoing sexualization or aggressivization of major ego functions, and therefore without disruptive anxiety or guilt. (p. 122)

While one need not regard playfulness and adaptive regression as identical processes, it is useful to examine Schafer's list of conditions that enhance the ability for adaptive regression. These conditions are all associated with low levels of anxiety and include a well-established ego identity, a relatively moderate rather than severe super-ego, a relative mastery of early traumata, and a history of adequate trust and mutuality in interpersonal relations. Given these conditions, the individual is likely to react to his inner and outer worlds with relatively low anxiety and to "let go, increase inner awareness, and play intrapsychically without severe anxiety and guilt and with some degree of pleasure." (emphasis added)

Locus of Control: Playfulness involves acting upon and symbolically transforming the world rather than reacting to it passively. The individual behaves with a high degree of autonomy and responsibility for his experience. For a few moments or even longer he decides to "take time out" from his concerns and responsibilities. This decision reflects the individual's belief in his right and ability to exercise influence over his satisfaction and pleasure with his life.

In Rotter's framework (1966), the individual has a belief in an internal locus of control: ". . . he believes that his own behavior, skills, or internal disposition determines what reinforcements he receives." In the

framework of DeCharms (1968) the individual sees himself as the Origin of his behavior.

Capacity for Absorption: The child at play becomes absorbed in his make-believe world and the adult "loses track of time." Both focus their attention exclusively on the objects or activities of play with an imperviousness to normally distracting events. The self suspends its monitoring of its experience and behavior regarding appropriateness or congruence with reality. Intense playful absorption may also include alterations in the subjective experience of the self. Although not every form of playfulness would include intense absorption, one may perhaps assume that a high degree of playfulness involves this ability to suspend self-monitoring.

Tellegen and Atkinson (1974) have conceptualized a very similar capacity for episodes of absorbed and self-altering attention sustained by the ". . . full commitment of available perceptual, motoric, imaginative, and ideational resources. . . ." One may infer that this capacity for absorption is highly related to playfulness.

Temporal Experience: Several aspects of playful behavior suggest that the temporal experience of a person who manifests playfulness may differ from that of the less playful person. First, a person's engagement in playful behavior involves a decision and an ability to "take time out" from ordinary responsibilities and goal-directed

behavior. He temporarily suspends his usual temporal frame of reference, the clock and the calendar, with which he facilitates his social interaction and planning. This suspension of his culture's objective standards of time to which he has been socialized allows him to experience a lack of concern with and awareness of the passage of time, the second important aspect of temporal experience in playfulness. In psychoanalytic terms, he undergoes an adaptive regression to an ego state in which absorption with his experience diminishes his conscious symbolizing of past and future events.

Finally, at least two theorists (Neumann, 1971; Haan, 1977) state that play involves the preconscious integration of past memories into present experience so as to enhance understanding and pleasure. According to Haan (1977), the individual in his playful behavior often ". . . utilizes his preconscious functioning in a rich and flexible way because his ego boundaries allow rapid and productive reversal of the time frame." (p. 304)

In order to conceptualize the relationship between temporal experience and playfulness as a personality trait, one must first refer to the existing literature on temporal experience and personality. This literature is dominated by two major concepts: temporal orientation and temporal perspective.

Temporal orientation has been defined in different ways in the literature. The most frequent usage refers to the individual's awareness of the current location in time (hour, day, week, etc.) and is a basic tool in the diagnosis of severe psychopathology. A second common usage of temporal orientation denotes the individual's preference for the past, present, or future. For example, a "future-oriented" or "future-dominated" person places great value on images and tasks related to the future such as saving money or dreaming about a house to be constructed. However, a future-oriented person is not unaffected by or disinterested in memories of the past or experiences in the present.

The second major concept, time perspective, Wallace (1956) defined as "the timing and ordering of personalized events." Time perspective can refer to the past, present, or future; but most research has focused on future time perspective. Several aspects of future time perspective have been conceptualized. Extension refers to the time interval between the present and the most distant future (or past) event. Density refers to the number of personalized events listed within the future (or past) extension. Coherence refers to the consistency with which the individual organizes the personalized events. The development of a future time perspective is a central aspect of personality development, involving the ability to anticipate future goals and events and to manage one's present behavior in

accord with them.

One other concept relevant to the relationship between playfulness and temporal experience is temporal relatedness (Cottle, 1976). Relatedness is a major aspect of two fundamentally different concepts of time, the linear and the spatial. In the linear concept, ". . . moments are experienced as they occur, one by one. Past moments are irretrievable, and future moments cannot be experienced until they become the present or until we reach them in the future. Moments are visualized as occurring in a line . . ."

(Cottle, 1976, p. 85). In the spatial concept the past, present, and future are related through acts of remembering, expecting, and intending. To the extent that the person's symbolizations of the past, present, and future interact and influence one another, the three temporal zones are related and integrated. To the extent that one's temporal experience lacks relatedness, the three time zones are viewed as discrete and disconnected. One sees one's behavior in the present as uninfluenced by past and one's future experience as uninfluenced by present behavior.

Time Perspective: In this discussion one must bear in mind the distinction between the individual's experience of time while behaving playfully (a state) and his day to day temporal experience as it relates to playfulness as a personality trait. In this discussion his day to day temporal experience is of concern.

Although a highly playful person enjoys those times during which he focuses on intrinsic gratifications of the moment, one cannot validly assume that the typically concerns himself with the moment only. Such a notion is simplistic and denies the fact that all persons, barring some form of psychopathology, live in a present that includes symbolic representations of past events and future expectations and intentions.

The individual's decision to temporarily suspend conscious awareness of the past and the future implies that neither temporal zone is a source of inhibiting anxiety, conflict, or concern. The past does not overwhelm the individual with guilt or depression. In regard to the future, the individual judges that he has engaged in sufficient planning and preparation such that he can temporarily forget about it. Therefore, a prerequisite to engaging in playful behavior is a sense that one has "taken care of the future"; but one should note that what constitutes sufficient planning for the future probably varies among individuals and for one person depending on his or her life situation.

In order to take care of the future, the person must, according to Cottle and Klineberg (1974), ". . . act in the present in the light of his anticipation of relatively distant future events." (p. 16) This future time perspective involves three abilities:

- 1) the individual manipulates symbolic representations of reality and creates images of absent events with a belief in their validity.
- 2) he integrates these images into his ongoing experience, bringing images of the future into an implied continuum with conceptions of past and present experiences.
- 3) he experiences in the present pleasurable or unpleasurable affective responses to these symbolic representations.

Through these processes the individual anticipates future events and goals and behaves in the present in ways that increase the probability of future satisfaction. (The generic relationship between playfulness and future time perspective seems especially evident when one considers that both processes involve the ability to act beyond the immediate constraints of reality (creating images of absent events with a belief in their validity) in a manner that can elicit, among many affects, that of pleasure).

Thus, one may hypothesize that the development of future time perspective is related to playfulness as a personality trait. Indirect support for this hypothesis comes from a study by Rabin (1978) in which future time perspective was found to be associated with an internal locus of control, one of the personality characteristics previously hypothesized to be associated with playfulness.

Although much less research has been performed on past time perspective, this concept also seems useful in the present research. As stated previously, two theorists

have noted the importance of symbolizations of past experience in playful behavior. Neumann's (1971) definition of play behavior included the criteria that the person should transcend the immediate constraints of the situation and that "imaginary or cognitive extensions of previous experiences should appear." (quoted in Ellis, 1973, p. 123)

Haan (1977) emphasized the individual's integration of past memories with present experience in order to enhance understanding and pleasure. His ego boundaries allow rapid, flexible, and productive reversal of the time frame. This ability suggests that the highly playful person's memories are not repressed to the extent that they are inaccessible to conscious or preconscious experience. In playfulness the individual is able to loosen control over repression of past experiences.

Temporal Relatedness: Cottle (1976) employed the Circles Test as a measure of temporal relatedness. The subject is instructed to imagine the past, present, and future as being in the shape of circles whose size the subject can determine. The subject arranges the circles to show how he thinks about the relationships among the three temporal zones. Temporal relatedness is measured by the degree to which the circles touch one another or overlap either partially or completely.

Cottle designated three levels of temporal relatedness. The lowest level he named atomicity in which the

three time zones are totally unrelated. The next level is continuity in which the time zones touch but do not overlap, analogous to the linear conception of time as a continuous series of moments. The highest levels of relatedness are integrated or projected in which the time zones reside partially or totally within one another. The configurations are analogous to the spatial concept of time in which the past and future coexist partially or totally with the present.

In his discussion of temporal relatedness Cottle used Parsons' and Shils' (1962) distinction between instrumental and expressive interactions. In an instrumental interaction the individual uses the interaction to achieve later goals and gratifications. In contrast, the expressive interaction emphasizes immediate and direct gratification, does not shape future rewards, and becomes an end to itself. The expressive interaction shares essential similarities with the existential definition of playfulness (p. 8); but, the two are not identical concepts. In Cottle's formulation those persons who have been socialized to value an expressive orientation (traditionally females in our culture) theoretically would use a linear concept of time: "they visualize their expectations as occurring in a series of uninterrupted 'presents' and as ends in themselves rather than as means toward some future end which they create in the present." (Cottle, 1976, p. 79) Those persons

socialized for an instrumental orientation would perceive time in a spatial conception.

Initially, then, one would hypothesize that the highly playful person uses a linear conception of time, given his valuing of the moment's pleasure in and of itself. However, one need not hypothesize that the individual uses one time conception to the exclusion of the other. Again, too, one must distinguish between temporal relatedness while the individual is engaged in playful behavior and temporal relatedness in day to day, non-playful experience. According to the preceding discussion, the individual with a high degree of playfulness shifts easily among the three time zones. He symbolizes and prepares for the future with ease and skill and he easily retrieves memories of past experiences to enhance his current pleasure, and, in general, shows a high degree of temporal relatedness.

HYPOTHESES

Based on the foregoing discussion the following hypotheses are now formally stated:

- I. There is a negative correlation between Playfulness and the individual's reported level of trait anxiety.
- II. There is a positive correlation between playfulness and endorsement of statements reflecting belief in an internal locus of control.
- III. There is a positive correlation between playfulness and the capacity for absorption in self-altering experiences.

- IV. There is a positive correlation between playfulness and temporal relatedness.
- V. Playfulness is positively correlated with extension of future time perspective.
- VI. Playfulness is positively correlated with extension of past time perspective.

CHAPTER II

METHODS AND PROCEDURES

Phases of Research

The data collection proceeded in two phases because the experimenter inadvertently omitted the measure of Future and Past Time Extension in the first round of data collection. This phase of the research shall be designated Part I. In order to correct this error the experimenter collected further data from a small sub-sample of subjects. This phase shall be designated Part II.

Subjects

In both Parts I and II the subjects were students in an introductory psychology class at Monterey Peninsula College. The instructor gave the students a choice between writing one of seven biweekly required papers for the course or participating in this experiment by completing the research questionnaire. Because of the length of the questionnaire in Part I the instructor allowed those who chose to participate to complete the questionnaire at home rather than in class. The subjects were given one week to return the questionnaire.

One hundred twenty-five subjects participated in Part I. (This number accounted for approximately 95% of

the class, the other 5% of whom chose not to participate in the study.) Table 1 shows the relevant demographic characteristics of the subjects in Part I. The imbalance of female to male subjects reflects the preponderance of female students in this class rather than a bias in the pattern of volunteering for participation.

TABLE 1
SUBJECT CHARACTERISTICS: PARTS I and II

	AGE			YEARS OF EDUCATION	
	N	\bar{X}	S.D.	\bar{X}	S.D.
<u>PART I</u>					
FEMALES	85	23.6	7.5	13.4	1.1
MALES	40	23.0	8.6	13.5	1.2
<u>PART II</u>					
MALES	15	25.2	8.6	14.1	1.3
FEMALES	18	24.5	8.4	13.7	1.1

In Part II of the research students volunteered from the same psychology class (in the following semester); but they were allowed to complete the questionnaire during class because it was much shorter than the one used in Part I. Table 1 shows relevant demographic characteristics of this sample.

Measuring Instruments

As was noted above the measuring instrument in both Parts I and II was a self-report questionnaire which combined personality scales from several different sources. The questionnaire in Part I consisted of 165 items and in

Part II consisted of 55 items. The various personality scales operationalized the variables which comprise the main hypotheses of this study. The measures are as follows:

Anxiety: The Taylor Manifest Anxiety Scale (Taylor, 1953) was the only measure of trait anxiety. The scale consists of 50 items derived from the Minnesota Multiphasic Personality Inventory which pertain to physical and psychological symptoms of anxiety. For example:

I have nightmares every few nights.
I am troubled by attacks of nausea.
I am unusually self-conscious.

The scale is a self-report measure and positive responses (indicating anxiety) occur for both true and false items. The Manifest Anxiety Scale is a widely used research measure of established validity and reliability.

Locus of Control: Rotter's (1966) Internal-External (I-E) Scale was used to measure the individual's belief regarding locus of control. The I-E Scale consists of 29 items in a forced-choice format and six of the items are fillers designed to obscure the nature of the scale. A typical item reads as follows:

- (a) Most people don't realize the extent to which their lives are controlled by accidental happenings.
- (b) There is really no such thing as "luck."

Rotter (1966) emphasizes that this scale only measures the person's beliefs about whether or not s/he controls the

positive reinforcements s/he receives rather than a preference for an internal or external locus of control.

The six filler items on the I-E Scale were deleted because of the large number of items in the questionnaire used in Part I. The I-E Scale is an instrument of fairly well established validity (at least at the time of its development); but Rotter (1966) reports its reliability (retest) as .55 which, though adequate, is not optimal.

Absorption: The capacity for absorbed attention in self-altering experiences was measured using the Absorption Scale from the Differential Personality Questionnaire (Tellegen, 1976). This scale consists of thirty-four true/false items which are worded as follows:

Sometimes I feel and experience things
as I did when I was a child.
I like to watch cloud shapes change in
the sky.

All items are worded such that a "true" response reflects a capacity for absorbed attention. Tellegen reports high reliability and validity for this scale which is shown in Appendix G.

Temporal Relatedness: Because Cottle's (1976) Circles Test has not been subjected to appropriate validation procedures, it was supplemented by another measure of temporal relatedness to be described below. The Circles Test is a simple measure in which the subject is instructed to depict his experience of the interrelationships between

the past, present, and future by drawing three circles:

Imagine time as three circles representing the past, present, and future. In the space below draw these three circles to depict how you experience time. There is no right answer. Draw the circles in any way you wish and label them according to past, present, and future.

The measure of temporal relatedness is based on the extent to which the circles are discrete, contiguous, overlapping, or enclosed completely in one another. (The underlying assumption, of course, is that the drawing represents both consciously and unconsciously the subject's temporal experience in a manner similar to that of a projective drawing.) The subjects' drawings were scored as follows: zero points for discrete circles, one point for each pair of contiguous circles, two points for each pair of overlapping circles, and three points for the enclosure of a circle completely within another.

As noted above the Circles Test lacks established validity and reliability. As a supplement to this measure eleven true/false items pertaining to temporal relatedness were generated and included in the questionnaire. Here are several examples:

Sometimes I find new and different meanings in past experiences.
My future horizons are continually expanding.
The past is over and I have little interest in it.

Appendix A shows all eleven items which were assumed to have face validity. Six of the items were worded positively and five were worded negatively to maintain a balance of true and false items that reflected temporal relatedness.

Time Perspective: The extension of future and past time perspective was inadvertently omitted from Part I; however, it was measured in Part II using the method devised originally by Wallace (1955). The subjects were given the following instructions:

I want you to look ahead and tell me ten things that you'll do or think will happen to you. These don't have to be important things; just anything that comes to your mind.

After listing the ten items the subjects were instructed to specify how far into the future each event might occur. The score is the median time of all the events.

The procedure for measuring the extension of past time perspective is parallel except for appropriate changes in the wording of the instructions.

Playfulness: In Part I three measures of playfulness were used: Haan's (1977) Regression in the Service of the Ego Scale derived from the California Psychological Inventory, a scale developed by the present investigator, and a numerical self-rating by subjects of their playfulness. Several reasons led to this procedure. First, as described previously, Haan's definition and the Existential definition

of playfulness differ in some important respects, particularly in the roles of anxiety and instrumentality in playfulness. Second, Haan used a purely empirical method of scale construction which resulted in the use of items whose face validity is questionable. For example:

I am often said to be hotheaded. (true)
 I think Lincoln was greater than Washington
 (true)
 I much prefer symmetry to asymmetry. (true)
 I am often bothered by useless thoughts
 running through my mind. (true)

Despite these criticisms of this scale it was included in the present study because of the exploratory nature of research on adult playfulness. Appendix B shows all of the items in Haan's playfulness scale.

A supplemental scale to measure playfulness was developed by the present investigator. It consists of fifteen Likert format items deemed to be more consistent with the Existential definition of playfulness than is the Haan Scale. Appendix C describes the procedures used to validate this scale and contains the final version which resulted from subjects' comments on the original version. Each item was scored on a one to five point basis when the scale was used in the questionnaire in Part I.

Finally, again because of the exploratory nature of this research, subjects in Part I were asked to do a self-rating of their playfulness:

On a 10 point scale of playfulness with
1 being least playful and 10 being most
playful, I would rate myself as ____.

This measure of playfulness is obviously of unknown validity and reliability; but its inclusion seemed warranted to explore the relationship between objective measures and subjective estimates of playfulness.

Questionnaires: Appendix D shows the questionnaire as it was administered to the subjects in Part I. Appendix E shows the shorter questionnaire administered to the subsample of subjects in Part II.

CHAPTER III

RESULTS

The tables on the following pages show the results of the statistical analyses. Note that the statistical test employed was the Pearson correlation coefficient for interval data and that the test of significance is one-tailed.

Hypothesis I

This hypothesis predicted a negative correlation between playfulness and trait anxiety. The data, shown in Table 2, yielded conflicting results.

TABLE 2

RELATIONSHIP BETWEEN ANXIETY AND PLAYFULNESS MEASURES			
	HAAN	EXISTENTIAL	SELF-RATING
MANIFEST ANXIETY	.248*	-.210*	-.126

*p < .01

Haan's playfulness measure correlated positively and significantly with the Manifest Anxiety Scale (MAS) while the Existential Scale correlated negatively and significantly with the MAS. The weak negative correlation between the subject's self-rating of playfulness and the MAS failed to reach statistical significance.

Hypothesis II

This hypothesis proposed a positive relationship between playfulness and an internal locus of control. A high score on Rotter's I-E Scale indicates a belief in an external locus of control; thus Hypothesis II would lead one to predict a negative correlation between playfulness and the I-E Scale. The correlation between Haan's measure of playfulness and the I-E Scale reached statistical significance; but the correlation is positive and contrary to the hypothesized relationship. The Existential Scale and the subject's self-rating resulted in negative but statistically insignificant correlations with the I-E Scale.

TABLE 3

RELATIONSHIP BETWEEN LOCUS OF CONTROL AND PLAYFULNESS MEASURES

	HAAN	EXISTENTIAL	SELF-RATING
I-E SCALE	.149*	-.092	-.005

*
p < .05

Hypothesis III

Hypothesis III predicted a positive correlation between playfulness and the capacity for absorbed attention in self-altering experiences. Both the Haan and Existential measures of playfulness correlated positively with the absorption scale at statistically significant levels. The self-rating measure correlated positively with the absorption

TABLE 4

RELATIONSHIP BETWEEN ABSORBED ATTENTION AND
PLAYFULNESS MEASURES

	HAAN	EXISTENTIAL	SELF-RATING
ABSORBED ATTENTION	.251*	.303*	.086

*
p < .01

scale but at a statistically insignificant level.

Hypothesis IV

Hypothesis IV predicted a positive correlation between the measure of playfulness and the extent of temporal relatedness. Cottle's Circles Test failed to yield statistically significant correlations with any of the three playfulness measures. The second measure of temporal relatedness, which consisted of 11 true/false items pertaining to temporal experience correlated positively and significantly with the Existential and self-rating measures of playfulness. Its correlation with Haan's Scale was statistically insignificant.

TABLE 5

RELATIONSHIP BETWEEN TEMPORAL RELATEDNESS AND
PLAYFULNESS MEASURES

	HAAN	EXISTENTIAL	SELF-RATING
COTTLE	.004	-.020	-.072
SELF-REPORT	-.035	.260*	.180

*
p < .01

Hypotheses V and VI

Hypotheses V and VI respectively predicted a positive correlation between playfulness and extension of future time perspective and extension of past time perspective. The data by which these hypotheses were tested were collected in Part II of this study with a small sample of 33 subjects. Only the Haan and Existential measures of playfulness were used in Part II. The data supported neither of the hypotheses and resulted in very weak correlations.

TABLE 6

RELATIONSHIP BETWEEN EXTENSION OF TIME PERSPECTIVE
AND PLAYFULNESS MEASURES (n=33)

	HAAN	EXISTENTIAL
FUTURE	.027	-.067
PAST	-.100	-.008

Sex Differences

Table 7A shows the results of statistical analyses related to the main variables separated by gender. With regard to Hypothesis I the full sample of data had yielded a correlation between the MAS and the Haan Scale of .248. Breaking this correlation down by gender shows that it is much stronger for men than for women (.392 contrasted with .185). However, the difference between these correlations is not statistically significant ($z=1.15$).

TABLE 7A

CORRELATIONS OF MAIN VARIABLES WITH PLAYFULNESS
FOR MALE SUBJECTS (n=40)

	ANXIETY	ABSORPTION	I-E SCALE	COTTLE	SELF- REPORT
HAAN	.392*	.120	.188	-.095	-.072
EXIS- TENTIAL	.029	.345*	.041	.056	.224
SELF- RATING	-.082	-.078	-.061	-.189	.135

*p < .01

TABLE 7B

CORRELATIONS OF MAIN VARIABLES WITH PLAYFULNESS
FOR FEMALE SUBJECTS (n=85)

	ANXIETY	ABSORPTION	I-E SCALE	COTTLE	SELF- REPORT
HAAN	.185*	.320**	.124	.062	-.015
EXIS- TENTIAL	-.284**	.305**	-.132	-.054	.264**
SELF- RATING	-.131	.194*	.048	-.006	.186*

*p < .05

**p < .01

The correlation between the MAS and the Existential Scale was -.210 in the full sample. In this case, however, breaking the correlation down by gender shows that this correlation is much stronger for men than for women (-.284 contrasted with .029). Again, though, the difference between

the correlations is not statistically significant ($z=1.33$).

A somewhat similar situation resulted with regard to Hypothesis III. In the full sample the data yielded a correlation of .248 between the Haan Scale and the Absorption Scale. When this correlation is broken down by gender the parallel correlation is .320 for females and .120 for males. The difference between these correlations again is not statistically significant ($z=1.07$).

Intercorrelations of Measures

Table 8 shows the relationship of the measurement scales to one another as reflected by the Pearson correlation coefficient. One can note several interesting results.

TABLE 8
INTERCORRELATIONS OF MEASURES (n=125)

	ANXIETY	I-E SCALE	COTTLE	SELF- REPORT	HAAN	EXIS- TENTIAL	SELF- RATING
ABSORPTION	.114	.130	.094	.213**	.251**	.303**	.086
ANXIETY		.394**	.035	-.129	.248**	-.210**	-.126
I-E SCALE			-.129	.034	.149*	-.092	-.005
TEMPORAL RELATEDNESS							
COTTLE				.116	.004	-.020	-.072
SELF-REPORT					-.035	.260**	.180
PLAYFULNESS							
HAAN						.153*	.252**
EXISTENTIAL							.443**

*p < .05

**p < .01

The MAS and the I-E Scale correlated positively and significantly at .394. This result suggests that a belief in an external locus of control is associated with a relatively high degree of trait anxiety.

The absorption scale and the 11 item measure of temporal relatedness correlated significantly at .214. This result will be discussed in the following chapter.

Finally, the correlation between the two measures of temporal relatedness failed to yield a significant correlation. This result casts further doubt on the validity of the Circles Test, especially when considered in the context of its failure to correlate with any other variable in this study.

Table 8 also shows the results regarding the inter-correlations of the three measures of playfulness. All three measures correlated positively and significantly with one another. The strongest correlation (.443) was between the Existential and self-rating measures of playfulness. Both these measures correlated with the Haan measure and when the effect of the Haan measure is partialled out the correlation between the Existential and self-rating measures is reduced to .057.

The Haan and Existential measures correlated .153; but these measures also correlated significantly with the absorption scale. When the effect of the absorption scale is partialled out the correlation decreases to .08, a

statistically insignificant correlation.

Finally, the Haan and the self-rating measure of playfulness correlated .252. Even with the effect of the Existential Scale partialled out these two measures correlate .210.

CHAPTER IV

DISCUSSION

A Note on Methodology

The interpretation of the foregoing results promises to be most fruitful if made in the context of several relevant methodological considerations. First, the hypotheses in this investigation stem from an analysis of the phenomenology of play and playfulness. The data against which the hypotheses are tested are almost exclusively derived from self-report statements. This self-reporting is vulnerable to either conscious or unconscious distortions by subjects in their responses to items on the questionnaire. Unfortunately, the use of measurement scales from several independent sources on a one-time basis precludes the development of a scale that would detect lying, random responses, the effects of subtle demand characteristics of the questionnaire, or other factors which would signal that a subject's responses are invalid. Thus, one should bear in mind the ever present potential difference between a subject's actual behavior and experience and his or her later reporting of it.

Second, the failure of data to support experimental hypotheses can result from errors in at least three different phases of the experimental process. The constructs giving rise to the hypotheses may be based on faulty logic

or inferences. The experimental variables may be operationalized in such a manner that the phenomena in question are not actually measured. Finally, the data may be subjected to inappropriate statistical analyses which fail to show how the data actually support the hypotheses either partially or completely. Each of these errors may be partial or complete and they may occur singly or in combination with one another. In the discussion of the results to follow, the second source of error described above is most relevant because several measures of unknown validity and reliability were used in this investigation.

Third, the subjects in this study do not constitute a true random sample. They are primarily first and second year students at a junior college in a highly affluent community. The sample thereby shows a restriction in age, intelligence, and possibly value systems. The sample also consists of a preponderance of females and obviously does not reflect the distribution of the sexes in the general population. One should, therefore, exercise caution in generalizing from the results of this investigation to individuals and groups who are demographically different from the subjects in this study.

Experimental Hypotheses

This investigation hypothesized the relationship between the predisposition to an attitude of playfulness and certain personality characteristics. Hypothesis I predicted

a negative correlation between playfulness and the subject's level of reported trait anxiety as measured by the Taylor Manifest Anxiety Scale (MAS) (Taylor, 1953). The rationale for this hypothesis was that anxiety arising from unsatisfied biological needs or threats to interpersonal security inhibits playfulness and that a sense of familiarity and security fosters the enactment of novel, spontaneous, and non-goal-directed behaviors which are the essence of playfulness.

The results are conflicting. Playfulness as measured by the Existential Scale does correlate negatively with the measure of anxiety (-.21); but playfulness as measured by the Haan Scale correlates positively with the anxiety measure (.25). One may account for this contradiction on an empirical level by contrasting the actual items on the Haan and Existential Scales. Examination of the Haan Scale reveals a preponderance of items positively related to anxiety, frustration, and angry conflict. Consider, for example, the following items:

I am often said to be hotheaded.
Sometimes I feel like smashing things.
I am often bothered by useless thoughts
which keep running through my mind.
I have nightmares every few nights.

See, also, items 9, 11, 18, 24, 25, 26, 28, and 32 in Appendix B. One would expect a person who scores high on Haan's Scale to be anxious, low in self-esteem, quick to feel anger, and, in general, a person who is often conflicted with himself and others. In contrast, many of the

Existential Scale items focus on a less contentious and anxiety-ridden relation to the self and others. (See, for example, items 3, 12, 15, 5, 9, etc. in Appendix C.) This examination of the scale items lends support to the proposition advanced in Chapter I that the Haan and Existential concepts of playfulness are fundamentally different.

Haan's concept poses playfulness as a coping mechanism, a process by which the ego negotiates with reality's conflicts and ambiguities.

It would follow logically that playfulness as a personality trait does not preclude relatively higher levels of anxiety and that the playful person, regardless of anxiety level, is able to effectively manage this anxiety with what Haan describes as playful behaviors. The existential concept of playfulness is more restrictive than Haan's definition by virtue of defining playfulness as the ego's orientation to the world in the relative absence of anxiety. This definition implies that active and self-expressive playfulness emerges frequently because the person has relatively less need to respond to the inner and outer worlds with anxiety. According to the existential definition, then, a relatively anxious person would manifest an attitude of playfulness infrequently. According to Haan's definition, an anxious person might still manifest a playful attitude by relying on playfulness as one of several coping mechanisms at his or her disposal.

This situation is the common one in which different psychodynamic configurations or behavioral contingencies can lead to the expression of the same observable behavior or attitude. One need not become enmeshed in debate over the superiority of one definition of playfulness over the other. Any conclusion would be arbitrary. One need only be aware of the limitations of whichever definition of playfulness one uses and the implications of these limitations in making predictions and inferences.

Finally, the self-rating measure of playfulness correlates very weakly with the anxiety measure. Because the Haan and Existential Scales both correlate significantly with the anxiety scale, the question immediately arises concerning the validity of this method of measuring playfulness. The discussion of this question will be deferred until the other hypotheses have been discussed.

Hypothesis II predicted a negative correlation between the measure of playfulness and the I-E Scale which assesses the person's subjective locus of control. Playfulness was hypothesized as associated with an active and autonomous orientation to the world as opposed to a passive avoidance of opportunities to exercise influence over one's satisfaction and pleasure in life. Rotter (1966) describes the person with an internal locus of control as one who ". . . believes that his own behavior, skills, or internal disposition determines what reinforcements he receives."

A high score on the I-E Scale is associated with an external locus of control; thus, a negative correlation between playfulness and the I-E Scale was predicted.

Haan's measure of playfulness correlates significantly and positively with the I-E Scale with a one-tailed test of significance. One has at least two choices in interpreting these results. One can conclude that playfulness is actually very weakly correlated with an external locus of control in contradiction to the hypothesized relationship. Or given the weakness of the correlation and the lack of correlation with the Existential measure of playfulness, one can question whether the I-E Scale measured the variable that it was intended to measure. A review of the items on the I-E Scale suggests that many of the items, which Rotter developed in the early 1960's, may have weakened in validity because of the enormous political, social, and economic changes of the past two decades.

For example, a number of items relate to the individual's ability to impact on political processes. Given the widespread disenchantment with and cynicism about political processes, even among persons who in most other respects experience an internal locus of control, one would expect the I-E Scale to give somewhat ambiguous results.

The same criticism applies to items relating to good or bad luck, fate, recognition, etc. (See, for example, items 3, 5, 11, and 20 in Appendix F.) In the past two

decades popular thinking has been infused with concepts from Asian philosophy and new schools of psychology which paradoxically emphasize the futility of trying to control life's unpredictable flow while still prescribing the individual to take full responsibility for his or her life. (The prevalence of these social changes in California has been well documented by the media.) Consider in this context the following item:

- (a) I have found that what is going to happen will happen.
- (b) Trusting to fate has never turned out as well for me as deciding to take a definite course of action.

Alternative (a) is the critical item in this pair; i.e., selection of this response represents an external locus of control. This interpretation seems simplistic in the light of the recent evolution of social thought that encompasses an acceptance of paradox in the person's decision-making process. A tenet or belief may be the most effective guide in one situation, while in another situation its antithesis may be most effective. (Or as one contemporary writer put it: "There is a time to let things happen and a time to make things happen.") (Prather, 1970)

What perhaps most validly represents an internal locus of control is an active choice of either trusting fate or trying to influence events and then living with the consequences of that decision. Life is replete with opportunities for an attitude of basic trust rather than neurotic

attempts to control as well as opportunities for self-assertion rather than passive compliance. The important point here is whether the person experiences himself as the origin of the decision to take one stance or another instead of feeling compelled by factors outside of himself to make a particular choice. This concept of the self as origin differs subtly from Rotter's concept of an internal locus of control. For this reason the I-E Scale may represent an imperfect operationalization of the concept of self as origin, at least as it is embodied in this study.

Hypothesis III predicted a positive correlation between the measure of playfulness and the measure of capacity for absorbed attention in self-altering experiences. Playfulness was described as involving a suspension of the ego's monitoring of behavior and thought regarding appropriateness or congruence with reality. The individual centers his attention on a limited stimulus field; he is absorbed in playful behavior through a ". . . full commitment of available perceptual, motoric, imaginative, and ideational resources." (Tellegen & Atkinson, 1974)

Both the Haan and Existential Scales for measuring playfulness correlate positively and significantly with the absorption scale in support of Hypothesis III. Again, however, the self-rating measure of playfulness correlates very weakly with the absorption scale.

It is important to consider whether the Haan and Existential Scales correlate with the absorption scale for the same reason(s). The correlations do not necessarily have the same meaning, especially in light of the subtle differences in the definitions of playfulness which underlie the measurement scales.

The Existential definition holds that playfulness represents the ego's reorientation to the world which involves, in part, a diminution of the observing ego and a focal attention on the experience of the moment. In Haan's definition the relevant emphasis is on the "playing with" ideas and feelings without inhibiting concern about their practicality or allegiance to reality. One can see that Haan's definition does not emphasize as strongly as does the Existential definition the pleasurable absorption in self-expression of playfulness.

Again, examination of the scale items clarifies how the meanings of the correlations might differ. The Existential Scale emphasizes an ability to relinquish, if only temporarily, one's usual definition of one's identity and particularly one's adherence to consensually validated units of marking time, i.e., minutes, hours, etc. For example, item 8 in Appendix C indicates an ability to act as if one were an animal. Items 6 and 12 reflect an ease with letting go of the usual socially mediated marking of time as if these markers no longer existed. (This ability

is perhaps based on an intuitive understanding that these units of time are arbitrarily imposed by each culture out of social need and that they, in fact, exist only as abstractions.) These aspects of the Existential concept of playfulness seem to represent an ability to act as if one's playful definitions of reality (including the self) are experientially as valid, if not more so, than the usual definitions to which one usually adheres. Thus, one would expect this scale to correlate with the absorption scale which is replete with items pertaining to experiences of loss or letting go of one's ego identity.

One should note, too, that the items on the Existential Scale imply a proactive or voluntary relinquishing of reality definitions. This aspect of the Existential Scale contrasts with the Haan Scale which has many items implying a passive or reactive component to absorption in experiences. For example, items 3, 4, 11, 18, 21, 25, and 39 signify absorption in experiences of anger or anxiety in which the person is "caught up" rather actively choosing or allowing to happen.

A salient example of this type of absorption is the present experimenter's inadvertent omission of the Future and Past Time Perspective measures in the first round of data collection. Although more than one interpretation is plausible, this error seems to have occurred as a result of the experimenter's absorption in the details of the

validation of the Existential Playfulness Scale. This absorption was neither voluntary nor pleasurable.

Of course, this process is one of absorption with the possibility of changes in the experiences of the self; but it seems relatively less self-expressive and pleasurable than the process which the Existential Scale appears to measure. In summary, these factors suggest that although the correlations of the Haan and Existential Scales with the absorption scale represent a common process of absorption, the absorption process measured by the Existential Scale presumably is more active, pleasurable, and self-expressive than that measured by the Haan Scale.

Hypothesis IV predicted a positive correlation between the playfulness measure and the measure of temporal relatedness. The predisposition to playfulness was hypothesized to involve an ability to shift easily among the past, present, and future. The rationale for this hypothesis stemmed from several concepts. First, a distinction was made between temporal experience during moments of playfulness (a state) versus day to day experience of time as a general personality function. Second, playfulness was described as involving the preconscious inclusion of imaginary or cognitive extensions of previous experience and a diminution of conscious symbolizing of past and future experiences. In order to "take time out" from the usual goal-directed concern with the future, the person must have

"taken care of" future contingencies through sufficient planning. Given these inferences, it was hypothesized that the predisposition to playfulness involves an ability to move fluidly through the three time zones, i.e., that temporal experience is integrated and interrelated rather than fragmented and discrete.

None of the three playfulness measures correlated significantly with Cottle's (1976) projective measure of temporal relatedness. Note that Cottle's measure has not previously been subjected to study of its validity and reliability. These results highlight the importance of such evaluation if Cottle's measure is to be used in the future.

An alternative interpretation of the expected positive correlation between the eleven temporal relatedness items and the Existential and self-rating measures of playfulness rests on the concept of a social desirability response set. Many of the items on the Temporal Relatedness Scale seem biased to elicit an affirmative response because a negative response would be socially undesirable. The scale would seem to measure a set to answer items in a socially desirable manner. This hypothesis is plausible; but the fact that the scale correlates significantly with the Absorption Scale (see Table 8) argues against it. The Absorption Scale contains many items reporting relatively unusual experiences which would seem most unlikely to correlate positively with a set to give socially

desirable responses. (See the Absorption Scale items in Appendix G.)

Of the three playfulness measures only the Haan Scale failed to correlate positively and significantly with the self-report measure of temporal-relatedness. The failure of the Haan Scale to correlate significantly with the self-reporting measure of temporal relatedness bears at least two interpretations. One interpretation rests on the Haan's definition of playfulness specifies only preconscious inter-relatedness between past events and present experience with no delineation of any relatedness to future events. Thus, a high degree of conscious temporal relatedness would not necessarily follow logically from Haan's definition. Another interpretation of the results is based on the fact that Haan's playfulness scale contains very few items relevant to temporal experience despite the emphasis in her definition on preconscious inclusion of past experience in playfulness. This lack of items related to temporal experience could account for the lack of the correlation as predicted by Hypothesis IV.

Hypothesis V predicted a positive correlation between the measures of playfulness and the measure of extension of future time perspective. Wallace (1956) defines time perspective as the "timing and ordering of personalized events." This hypothesis stems from the inference that the individual who engages in playful behavior has planned sufficiently for

future contingencies such that this temporal zone is not a source of inhibiting anxiety. The individual, in a sense, has "taken care of the future." This process involves manipulation of symbolic representations of possible future events, integrating them into ongoing experience, and responding affectively to these representations with a belief in their validity. (Note the similarity of this process of creation of and belief in representations of absent events to the process of absorption in the make-believe.)

The data from the subsample of subjects in Part II failed to support Hypothesis V. One plausible interpretation of this result relates to the assumption underlying the hypothesis that a sense of having planned sufficiently for the future is a prerequisite to engaging in play and playful behavior. This assumption may or may not be valid; but even if it is valid one must bear in mind the likelihood that persons vary considerably in how much planning for the future is sufficient to feel secure enough to engage in play. Some persons may require detailed and repeated planning for the future before they can let go of concern about future possibilities. Other persons may require only minimal planning and might even feel oppressed by too much planning ahead for a largely unknown and unknowable future. Thus, the relationship between playfulness and extension of future time perspective would not be as strong as originally proposed.

Hypothesis VI predicted a positive correlation between playfulness and extension of past time perspective. This hypothesis stemmed from the concurrence of at least two theorists that elements of previous experience figure importantly in play and playfulness. Neumann's (1971) definition of play included "imaginary or cognitive extensions of previous experiences. . . ." Haan (1977) proposed that playfulness involved the preconscious integration of past memories in order to enhance understanding and pleasure (productive reversal of time frame). Thus, the underlying assumption of Hypothesis VI was that the playful person has greater access to memories of past experience than the less playful person.

The data did not support this hypothesis, yielding a weak negative correlation. The most fruitful interpretation of this result involves questioning the assumption that the playful person has a high degree of conscious access to memories of past experience. As was noted in the discussion of the results regarding Hypothesis IV (temporal relatedness), playfulness does not necessarily involve conscious retrieval of symbolizations of past experience; indeed, the process of retrieval might necessarily occur preconsciously because the flood of material from past experience might disrupt playfulness.

Moreover, one must consider that access to previous experience (whether conscious or preconscious) might differ

significantly depending on whether one is filling out a personality questionnaire in a classroom or engaging in playful behavior in a highly relaxing setting. Although the ordinarily playful person might have a high degree of access to memories while feeling relaxed and playful, the distinction between such a person and a relatively unplayful person might become less pronounced in a "test-taking" situation. As was noted in Chapter I, one must distinguish, with certain variables, the person's psychological processes while engaging in play from his psychological processes while engaging in day to day task-oriented behavior.

Intercorrelations of Measures

The intercorrelations of the measures in this study help round out the understanding of the relationship of playfulness to other personality traits.

As Table 4 shows, the MAS and the I-E Scale correlated significantly and positively. This result makes sense if one considers that a person with an external locus of control is likely to view himself as having relatively little control over the reinforcements he receives for his efforts in life. Such a person is apt to believe that his efforts have little impact in determining whether he gets what he wants, a situation that would engender much frustration, anxiety, and feelings of inadequacy. (This interpretation rests on the assumption, which has been questioned, that the I-E Scale measures what it was originally intended

to measure despite the political and social changes discussed earlier.) One would not expect such a person to manifest an attitude of playfulness.

The significant positive correlation between the absorption scale and the twelve item measure of temporal relatedness is consistent with the assumptions that led to Hypothesis III. The correlation of .214 is only slightly reduced to .162 when the effect of the Existential Scale is partialled out. This result seems consistent with the concept that a high degree of temporal relatedness represents an ability to move fluidly through temporal zones as opposed to rigidly reifying consensually validated concepts of time. It implies that one can lose track of time as in moments of absorbed attention. For example, a person with a high degree of temporal relatedness might recall a past event so vividly that the past momentarily becomes the present. The absorption scale seems to tap a fluidity and richness of imaginative and fantasy processes which one would logically associate with an ease in creating potent symbolic representations of past and future experiences.

Finally, the relatively high positive correlation between the Existential and self-rating measures of playfulness merits discussion. It suggests that subjects' perception of their own degree of playfulness had a fair amount of accuracy. This result is somewhat surprising because the mean score on the self-rating measure was 7.1 and the

standard deviation was 2.0. Thus, the scores were skewed to the high end of the scale which suggests a bias in wanting to see oneself as quite playful. It would seem that self perception of playfulness should be included in any further research despite the predictable bias in self-reporting of this positive personality characteristic.

Directions for Future Research

Although the present study is exploratory in nature, discussion of its limitations will point the way toward the most advantageous directions for future research. It is obvious that the subjects in this study were primarily older adolescents and young adults. It is highly questionable whether one could validly generalize the results of this study to children or to adults in later developmental stages. Because play and playfulness are visible and central aspects of child development which seemingly decline in importance in later developmental stages, it would be crucial to a comprehensive understanding of playfulness to include subjects of both earlier and later developmental stages than those included in this study.

The measurement of playfulness presently lacks precision. This study employed self-report measures which are vulnerable to conscious and unconscious distortion of reporting by subjects. Future research would perhaps produce more useful data if the self-report measures were

supplemented with behavioral measures of the type which Lieberman (1977) developed. Moreover, the Existential Scale requires further analysis of its validity. Its validity would likely be improved by increasing the number of items and subjecting the total scale to a standard item analysis, a procedure which was beyond the scope of the present study. Finally, the scale should also be correlated with behavioral and interview measures of playfulness to further assess the limits of its validity.

When the development of a generally accepted measure of playfulness has been achieved, future research might explore some of the following areas which for the time being must remain at an inchoate theoretical stage.

Play and Well-Being: Freud once offered a loose definition of mental health as the ability to love and to work. Wilhelm Reich extended that definition to the ability to love, to work, and to play. The foregoing exposition has repeatedly implied a concept that merits explicit statement and discussion. The contention is that playfulness is one essential and central hallmark of psychological well-being and the well-integrated personality.

At present this contention defies experimental testing because of the lack of generally accepted definitions and measures of both mental health and playfulness. The behavioral sciences have developed a rich taxonomy of pathological behavior and experience to the exclusion of an

equally sophisticated and comprehensive system of high-level personality functioning and behavior.

Despite this problem at least one investigator has explored the relationship between play and healthy interpersonal relations. Betcher (1977) defined "intimate play" or "regression in the presence of the other" as including such behavior as sexual foreplay, wrestling, tickling, teasing, the "private language" of the intimate dyad, and joking. Intimate play was viewed as ". . . a form of mutual risk-taking that is nurtured by conditions of interpersonal trust and acceptance, but by its occurrence confirms and extends the leeway for mutual risk in safe experimentation and increases the pathways for contact with the love object." In his study of thirty heterosexual couples, Betcher found that several measures of intimate play correlated significantly with measures of marital adjustment and satisfaction.

This study suggests that intimate play is interwoven with the capacity for love, a personality characteristic generally regarded as a key aspect of healthy functioning. This area would seem to deserve further exploration as our research instruments increase in sophistication.

Play and Creativity: A core theme in the varied concepts presented thus far is the role in playfulness of symbolic and "as if" cognition and behavior. A class of related psychological processes has been proposed which one might designate as a generic ability to create and

manipulate novel symbolizations. These symbolizations seem to involve temporary redefinition of time, space, social roles, etc.

The ability to fantasize with alternate conceptions of self and other (in the broad sense of other persons, the physical environment, and their interrelations) seems strongly related to creative processes. Common sense indicates that a rigid adherence to one view of reality inhibits curiosity, brainstorming, and experimentation. Indeed, creativity is often described as "playing with ideas."

Some individuals feel incapable of playfulness. They hold rigidly to an unchanging view of themselves, their roles, and their perceived relation to an immutable and constant reality. The rigidity and joylessness of the obsessive personality, bent on control, is a good example of this dilemma which interferes with creative adaptation to life's ambiguities and challenges.

Future research might profitably explore how playfulness in childhood and adulthood relates to the varied forms of creativity. It might particularly focus on play as a form of creative and adaptive regression as illustrated by the following vignette regarding Carl Jung:

The great falling out between Jung and Freud occurred over the nature of the unconscious. . . . This was a frightening thing for Jung to go through. He was young, untried, with no reputation of his own. It looked as if he were finishing an abortive career almost before it began. But Jung said he went home and decided

that if he really believed that the unconscious was the fountain from which all creativity sprang he would have to trust it. So he locked himself up in his room and waited on the unconscious. It wasn't long before he was down on the floor with his childish games. This led him to recall his childhood fantasies which he then decided to express in a form of adult play. For months he labored in his backyard building out of stone the villages and towns and forts which he had fantasied as a boy. He trusted his child-like experience and that was the beginning for him of an outpouring from the collective unconscious, from which we have the legacy of Jungian psychology. (Johnson, 1974, pp. 18-19)

Play, Anxiety, and Learning: Play and playfulness are pervasive aspects of the behavior of children, especially of young children. The first five years of life are a time of rapid and intense learning and development. Most scholars of child development regard play as the child's way of learning and practicing physical, cognitive, and social skills. A superficial view of the life span suggests that as children become adolescents and then adults, both overt and internalized forms of play (e.g., daydreaming) decline. These impressionistic observations suggest a number of questions.

Do play and playfulness decline with maturity? If so, do they decline because there are proportionately far fewer developmental demands as the person matures? If anxiety inhibits play and a sense of mastery engenders play, would not playfulness increase as the person's sense of

competence and mastery grows? Or does society inhibit this tendency with its implicit bias against playfulness among adults?

Answers to these questions would probably have substantial impact on our thinking about the learning process not only in childhood but in adulthood as well.

Afunctional Basis of Adult Playfulness: This study has departed from traditional and contemporary psychological thought by proposing that adult playfulness is neither a functional nor a goal-oriented behavior. For one steeped in utilitarian psychology, whether behavioral, psychodynamic, or physiological, the concept of afunctional behavior seems like a contradiction in terms. We are accustomed to thinking that all behavior has an end purpose or goal, conscious or not. Psychology requires a teleology of all behavior, i.e., a doctrine that explains (behavioral) phenomena by final causes. This teleology is applied uniformly to intrapsychic, interpersonal, and social systems.

Metapsychology is a theoretical branch of psychology which concerns itself with speculation on the connection of mental and physical processes and on the place of mind in the universe. In the latter domain, the place of mind in the universe, mainstream psychology has been less insistent upon a teleological doctrine. It is a curious contradiction that while the current Zeitgeist insists on all

behavior as purposeful, it is equally insistent in viewing as without purpose the myriad interrelated systems known as the universe. To paraphrase a statement attributed to the mystic scholar Hermes Trismegistus, "The universe is a living creature with a body which psychologists can see and an intelligence which they cannot see." (Needleman, 1976)

Intelligence implies a teleologic universe, one with purpose and goals. The present author, suggests that the purpose and goals of playfulness are of the same realm as the intelligence of the universe which psychologists cannot see. Perhaps our playfulness has no more and no less a grand purpose than to celebrate the mystery and wonder of being. As for the meaning this celebration might have in the scheme of a sentient universe, the author must acknowledge the limitations of his perception and vision.

CHAPTER V

SUMMARY

This study explored the generally neglected subject of adult playfulness and its correlation with other theoretically related personality characteristics. An existential definition of playfulness was proposed which differed significantly from ego psychological and behavioral definitions and which emphasized the person's freedom and creative self-expression.

The following hypotheses were offered:

- I. There is a negative correlation between playfulness and the individual's reported level of trait anxiety.
- II. There is a positive correlation between playfulness and endorsement of statements reflecting belief in an internal locus of control.
- III. There is a positive correlation between playfulness and the capacity for absorption in self-altering experiences.
- IV. There is a positive correlation between playfulness and a high degree of temporal relatedness.
- V. There is a positive correlation between playfulness and extension of future time perspective.
- VI. There is a positive correlation between playfulness and extension of past time perspective.

Although the different measures of playfulness yielded different and sometimes contradictory results, Hypotheses I, III, and IV were generally supported. With regard to Hypothesis II, playfulness as measured by the ego psychological scale actually showed a very weak but significant positive correlation with an external locus of control. The existential measure of playfulness correlated negatively with the anxiety scale while the ego psychological scale correlated positively. This result is especially important in light of the differing role of anxiety in play and playfulness advanced by these two theoretical approaches. No sex differences were found with regard to the hypotheses.

It should be stressed again that these findings are tentative because of the nature of the sample of subjects, the exclusive reliance on self-report measures in the gathering of the data, and the use of several measures of unknown validity. The further refinement of the existential scale of playfulness is underscored as the next step in future research. Without a generally accepted method of measuring playfulness, other important theoretical questions cannot be legitimately answered.

APPENDIX A
Temporal Relatedness Scale

APPENDIX A

Temporal Relatedness Scale

1. My future is remote and distant. (false)*
2. Sometimes I find new and different meanings in my past experiences. (true)
3. My past horizons are continually expanding. (true)
4. My life now seems unrelated to my future. (false)
5. My future horizons are continually expanding. (true)
6. The past is over and I have little interest in it. (false)
7. My present does not refer to anything beyond itself. (false)
8. My life now seems unrelated to my past. (false)
9. Time can go in many directions. (true)
10. I like to dream of things I'll do in the future. (true)
11. My plans for the future make the present meaningful. (true)

*The response in parentheses indicates the response which reflects a high degree of temporal relatedness.

APPENDIX B

Haan's Playfulness Scale

APPENDIX B

Haan's Playfulness Scale (Regression in the Service of the Ego) Scale Items

1. A person needs to "show off" a little now and then.
2. I think I would like the work of a dress designer.
3. I am often said to be hotheaded.
4. Sometimes I feel like smashing things. (female)
5. As a child I used to be able to go to my parents with my problems. (F)*
6. Some of my family have quick tempers. (male) (F)
7. I get excited very easily. (male) (F)
8. I think Lincoln was greater than Washington.
9. Most of the arguments or quarrels I get into are over matters of principle.
10. I do not like to see people carelessly dressed. (F)
11. At times I feel like picking a fist fight with someone.
12. I have frequently found myself, when alone, pondering such abstract problems as freewill, evil, etc.
13. I am likely not to speak to people until they speak to me. (female) (F)
14. Parents are much too easy on their children nowadays. (F)
15. I consider a matter from every standpoint before I make a decision. (F)
16. I never make judgments about people until I am sure of the facts. (F)
17. My parents have generally let me make my own decisions. (female) (F)
18. It makes me angry when I hear of someone who has been wrongly prevented from voting.
19. I much prefer symmetry to asymmetry. (male)
20. I am apt to show off in some way when I get the chance.
21. I am often bothered by useless thoughts which keep running through my mind.
22. I must admit I find it very hard to work under strict rules and regulations.
23. Only a fool would try to change our American way of life. (F)
24. There have been a few times when I have been very mean to another person.
25. I have nightmares every few nights.
26. I cannot do anything well.
27. My parents wanted me to "make good" in the world. (F)
28. There are times when I act like a coward.
29. A strong person will be able to make up his mind even on the most difficult questions. (female)

30. There are certain people whom I dislike so much that I am inwardly pleased when they are caught for something they have done.
31. I doubt if anyone is really happy.
32. At times I have been so entertained by the cleverness of a crook that I hoped he would get by with it.
33. I always see to it that my work is carefully planned and organized.
34. If people had not had it in for me I would have been much more successful. (male)
35. I set a high standard for myself and feel others should do the same.
36. I sometimes pretend to know more than I really do. (female) (F)
37. I would rather be a steady and dependable worker than a brilliant but unstable one. (F)
38. Once I have made up my mind I seldom change it. (F)

*F denotes an item which reflects playfulness if the subject's response is false.

APPENDIX C

Validation of Existential Scale

APPENDIX C

Validation of Existential Scale

As discussed in the introductory and methodology chapters, Haan (1977) based her playfulness scale (from the California Psychological Inventory) on a concept different from that of the existential concept which this study embodies. Haan also derived items for her playfulness scale through an exclusively statistical procedure which resulted in the use of items of questionable face validity and dubious relevance to playfulness.

Thus, the present investigator developed an alternative scale of items deemed more consistent than Haan's items with the existential concept of playfulness proposed in Chapter I. Thirty such items were subjected to the following validation procedure.

The investigator contacted instructors at Santa Monica Community College and Los Angeles City College who teach courses in "personal adjustment" and "human relations" to undergraduate students. The courses consist of weekly didactic lectures and small discussion groups in which students discuss how concepts in the lectures and readings apply to themselves. The investigator explained to the instructors the nature of the present study and the necessity to validate the playfulness scale items. Three instructors agreed to permit students in their discussion groups to

participate in the study. The composition of the groups is shown in Table 9.

Near the end of the academic term the students were given a typed definition of playfulness and asked to indicate which group member(s), if any, had demonstrated an attitude of playfulness in the group or in their accounts of their behavior outside the group. All students were then asked to complete the Playfulness Items-Preliminary Scale. That scale and the instructions to the students are found following Table 9.

Out of a total of eighty-six group members twenty-two were nominated by at least three of their peers as demonstrating an attitude of playfulness. Some students received one, two, or no nominations. Table 9 shows the frequency count for all the nominations. The twenty-two students nominated by at least three of their peers comprised the Playfulness Group. From the remaining sixty-four group members twenty-two were randomly selected to comprise a Comparison Group.

The responses of the Playfulness and Comparison Groups to the Playfulness Items-Preliminary Scale were then coded and a chi-square obtained of the difference between the distributions of each group's responses to each item on the scale. Table 10 shows the results.

Thirteen items had drequency distributions which were statistically significant at the .05 level or lower.

Two items had distributions which were significantly different at the .10 level and were retained for inclusion in the final scale.

Approximately fifteen of the eighty-six participants commented in writing that the true-false format of the items led to artificial, arbitrary, or misleading responses. In order to alleviate these problems and to increase the sensitivity of the scale, the investigator changed the format of the items to a Likert scale format. The final version of the scale with the Likert scale format follows Table 10.

INSTRUCTIONS TO STUDENTS

Much research has been done on children's play and its role in cognitive, affective, and social development. Relatively little research has been done on adult play; but we all know that some adults are more playful than others. Research on adult play must begin with a study of those persons who exemplify an attitude of playfulness.

One can loosely define this attitude as a pre-disposition to engage in novel, spontaneous, and humorous behaviors for their own sake without an underlying motive or goal. Your task here is to list those persons in your discussion group, if any, whom you believe are highly playful persons. Your decision can be based on your observations of group members in your meetings as well as what they say about their behavior and experience outside the group. You can use the above definition of playfulness as a guide for your thinking; but you need not limit yourself strictly to it, especially if you have a "gut sense" that someone is playful. After you complete this list you will be asked to complete a short questionnaire.

Highly Playful Group Members:

TABLE 9
PEER NOMINATIONS FOR
PLAYFULNESS

GROUP #	N	3+	2	1	0
1	11	2	2	4	3
2	12	2	3	2	5
3	11	3	5	1	2
4	7	2	3	1	1
5	10	3	4	0	3
6	9	4	3	1	1
7	8	2	1	3	2
8	10	3	0	4	3
9	8	1	3	2	2

Playfulness Scale

Preliminary Items

Instructions: The statements printed below are being evaluated for use in a research study of how adults work and play. Your honest cooperation in responding to these items will help make the study meaningful and worthwhile. You only need read each statement and then indicate T (true) if you think it applies to you or F (false) if you think it does not apply to you. If you want further information on this research, fill in your name and address. You may also write comments on the other side of the page.

Name/Address _____ (optional)

Age ____ Sex ____

- ____ 1. As a child I often played with one or both of my parents.
- ____ 2. I am satisfied with how much vacation time I have.
- ____ 3. I enjoy being teased in a friendly way.
- ____ 4. I am disappointed in myself when I lose my temper.
- ____ 5. My friends would describe my sense of humor as one of my strongest points.
- ____ 6. It makes me uneasy when I lose track of time.
- ____ 7. Most of the time I'm fairly shy.
- ____ 8. I make sure that I have leisure time to be alone.
- ____ 9. I find it easy to play with children.
- ____ 10. It is hard for me to cry.
- ____ 11. I enjoy a vacation with a schedule of things I can do.
- ____ 12. I prefer the company of amusing, fun-loving people.
- ____ 13. In the past I have felt uncomfortable about masturbating.
- ____ 14. I sometimes imitate animals just for fun.

- ___15. If I were in the circus, I'd rather be the ring-master than the clown.
- ___16. I forget about table manners when I eat alone.
- ___17. It seems kind of pointless to me to fly a kite.
- ___18. I like to show off once in a while.
- ___19. Humor and laughter are not much a part of my sex life.
- ___20. I act on the principle that a wise man is known by his ability to play.
- ___21. I sometimes make faces at myself in the mirror.
- ___22. I find that most of my meaning in life comes from my work and career.
- ___23. It is often hard for me to forget about my concerns and have a good time.
- ___24. I lose my temper sometimes when I feel angry.
- ___25. I believe that I have the disposition of a "man of great ambition" rather than a "man of pleasure."
- ___26. I operate best with schedules for myself.
- ___27. I wouldn't know what to do with myself if I didn't have to work.
- ___28. I am very competitive when I play sports.
- ___29. I imagine that some people envy my ability to have a good time.
- ___30. I feel uncomfortable when a friend acts silly in public.

COMMENTS:

TABLE 10

FREQUENCY DISTRIBUTIONS OF ITEM RESPONSES AND χ^2 ANALYSES

Item #	Playfulness Group Response T	Random Group Response T	χ^2	p
1.	14	8	3.08	.10
2.	6	13	4.53	.05
3.	18	10	6.29	.02
4.	5	12	4.66	.05
5.	14	4	9.24	.01
6.	6	13	4.53	.05
7.	5	8	.97	n.s.
8.	17	15	.44	n.s.
9.	14	10	1.32	n.s.
10.	8	6	.40	n.s.
11.	6	14	5.85	.02
12.	19	15	.26	n.s.
13.	9	7	.39	n.s.
14.	13	3	27.41	.001
15.	5	13	6.03	.02
16.	12	15	.88	n.s.
17.	10	7	.86	n.s.
18.	18	11	4.97	.05
19.	18	15	1.10	n.s.
20.	16	11	2.38	n.s.
21.	15	6	29.66	.001
22.	8	14	3.08	.10
23.	5	12	4.66	.05
24.	14	7	4.44	.05
25.	5	7	.46	n.s.
26.	11	10	.09	n.s.
27.	3	5	.62	n.s.
28.	8	6	.40	n.s.
29.	14	5	7.48	.01
30.	4	7	1.10	n.s.

Final Version

Existential Playfulness Scale

1. As a child I played with my father (a) very frequently (b) frequently (c) occasionally (d) infrequently (e) never.
2. Most of the time I find the amount of vacation time I have to be: (a) completely satisfactory (b) mostly satisfactory (c) neither satisfactory nor unsatisfactory (d) mostly unsatisfactory (e) completely unsatisfactory.
3. I enjoy being teased: (a) always (b) more often than not (c) about half the time (d) less than half the time (e) never.
4. When I lose my temper I am disappointed with myself: (a) never (b) rarely (c) occasionally (d) usually (e) always.
5. My sense of humor would be described by most of my friends as: (a) one of my strongest characteristics (b) one of my strong characteristics (c) one of my characteristics (d) one of my weak characteristics (e) one of my weakest characteristics.
6. When I lose track of time I feel uneasy: (a) each time it happens (b) most times it happens (c) some of the time it happens (d) every once in a great while (e) never.
7. I prefer a vacation with a schedule or itinerary of things to do: (a) always (b) usually (c) depends on my mood (d) rarely (e) never.
8. Just for fun I imitate animals (a) very often (b) often (c) occasionally (d) rarely (e) never.
9. If I could choose between being the clown or the ringmaster in the circus I would: (a) definitely be the ringmaster (b) probably be the ringmaster (c) not be able to decide (d) probably be the clown (e) definitely be the clown.
10. I like to show off: (a) very often (b) often (c) occasionally (d) rarely (e) never.

11. I make faces at myself in the mirror: (a) every time I look into one (b) often (c) sometimes (d) on rare occasions (e) never.
12. To forget my responsibilities and concerns and have a good time is a thing I find (a) impossible to do (b) very hard to do (c) neither easy nor hard to do (d) easy to do (e) very easy to do.
13. When I'm angry I lose my temper (a) never (b) rarely (c) occasionally (d) most of the time (e) always.
14. From my work (school) and career I derive: (a) all of my meaning in life (b) most of my meaning in life (c) some of my meaning in life (d) little of my meaning in life (e) none of my meaning in life.
15. I imagine that of those persons who know me: (a) all of them (b) many of them (c) some of them (d) few of them (e) none of them envy my ability to have a good time.
16. As a child I played with my mother (a) very frequently (b) frequently (c) occasionally (d) infrequently (e) never.
17. As a child I played with my sibling(s): (a) very frequently (b) frequently (c) occasionally (d) infrequently (e) never.

APPENDIX D

Questionnaire for Part I

APPENDIX D

Questionnaire for Part I

LIFESTYLE SURVEY

This survey consists of a wide variety of questions about your behavior and experience. It is part of a larger body of research in contemporary lifestyles and modes of consciousness. The questionnaire has several types of questions: true/false, multiple choice, and forced choice (in which you are to choose one of two statements according to which reflects your attitudes most accurately). In all cases please indicate your answer in the blank space provided next to the question.

Your answers are anonymous to protect your privacy and to encourage you to answer as candidly as possible. I thank you for your time.

AGE____ SEX____ YEARS OF EDUCATION____

- ___ 1. Sometimes I feel and experience things as I did when I was a child. T/F
- ___ 2. I do not tire quickly. T/F
- ___ 3. I am unusually self-conscious. T/F
- ___ 4. Sometimes I become so excited that I find it hard to get to sleep. T/F
- ___ 5. (a) Many of the unhappy things in people's lives are partly due to bad luck.
(b) People's misfortunes result from the mistakes they make.
- ___ 6. A person needs to show off a little now and then. T/F
- ___ 7. I can be greatly moved by eloquent or poetic language. T/F
- ___ 8. (a) One of the major reasons why we have wars is because people don't take enough interest in politics.
(b) There will always be wars, no matter how hard people try to prevent them.
- ___ 9. As a child I played with my father (a) very frequently (b) frequently (c) occasionally (d) infrequently (e) never.
- ___ 10. I have nightmares every few nights. T/F
- ___ 11. I think I would like the work of a dress designer. T/F
- ___ 12. While watching a movie, a T.V. show, or a play, I may become so involved that I forget about myself and my surroundings and experience the story as if it were real and as if I were taking part in it. T/F
- ___ 13. I certainly feel useless at times. T/F
- ___ 14. If I stare at a picture and then look away from it, I can sometimes "see" an image of the picture, almost as if I were still looking at it. T/F
- ___ 15. I have very few headaches. T/F
- ___ 16. My future is remote and distant. T/F

- ___17. Sometimes I feel as if my mind could envelop the whole world. T/F
- ___18. I like to watch cloud shapes change in the sky. T/F
- ___19. I am often said to be hotheaded. T/F
- ___20. Most of the time I find the amount of vacation time I have to be (a) completely satisfactory (b) mostly satisfactory (c) neither satisfactory nor unsatisfactory (d) most unsatisfactory (e) completely unsatisfactory.
- ___21. (a) In the long run people get the respect they deserve in this world.
(b) Unfortunately, an individual's worth often passes unrecognized no matter how hard s/he tries.
- ___22. I have very few fears compared to my friends. T/F
- ___23. Sometimes I find new and different meanings in my past experiences. T/F
- ___24. I feel hungry almost all the time. T/F
- ___25. If I wish I can imagine (or daydream) some things so vividly that they hold my attention as a good movie or story does. T/F
- ___26. I sometimes pretend to know more than I really do. T/F
- ___27. As a child I used to be able to go to my parents with my problems. T/F
- ___28. Sometimes I feel like smashing things. T/F
- ___29. I enjoy being teased (a) always (b) more often than not (c) about half the time (d) less than half the time (e) never.
- ___30. I cry easily. T/F
- ___31. I work under a great deal of tension. T/F
- ___32. I think I really know what some people mean when they talk about mystical experiences. T/F
- ___33. (a) In the case of the well-prepared student there is rarely if ever such a thing as an unfair test.
(b) Many times exam questions tend to be so unrelated to course work that studying is really useless.

- ___34. I think Lincoln was greater than Washington. T/F
- ___35. I am troubled by attacks of nausea. T/F
- ___36. My past horizons are continually expanding. T/F
- ___37. I believe I am no more nervous than others. T/F
- ___38. I sometimes "step outside" my usual self and
experience an entirely different state of being.
T/F
- ___39. When I lose my temper I am disappointed with myself:
(a) never (b) rarely (c) occasionally (d) usually
(e) always.
- ___40. I worry over money and/or business. T/F
- ___41. My life now seems unrelated to my future. T/F
- ___42. Textures--such as wool, sand, wood--sometimes
remind me of colors or music. T/F
- ___43. I get excited very easily. T/F
- ___44. Sometimes I experience things as if they were
doubly real. T/F
- ___45. I frequently notice that my hand shakes when I try
to do something. T/F
- ___46. My sense of humor would be described by most of my
friends as (a) one of my strongest characteristics
(b) one of my strong characteristics (c) one of my
characteristics (d) one of my weak characteristics
(e) one of my weakest characteristics.
- ___47. I blush no more often than others. T/F
- ___48. A sound, color, or fragrance can evoke a vivid
memory from my distant past. T/F
- ___49. Most of the arguments or quarrels I get into are
over matters of principle. T/F
- ___50. I have diarrhea once a month or more. T/F
- ___51. (a) Becoming a success is a matter of hard work,
luck has little or nothing to do with it.
(b) Getting a good job depends mainly on being in
the right place at the right time.

- ___ 52. When I listen to music, I can get so caught up in it that I don't notice anything else. T/F
- ___ 53. I worry quite a bit over possible misfortunes. T/F
- ___ 54. I practically never blush. T/F
- ___ 55. If I wish, I can imagine that my body is so heavy that I could not move it if I wanted to. T/F
- ___ 56. My future horizons are continually expanding. T/F
- ___ 57. As a child I played with my mother (a) very frequently (b) frequently (c) occasionally (d) infrequently (e) never.
- ___ 58. My hands and feet are usually warm enough. T/F
- ___ 59. I can often somehow sense the presence of another person before I actually see or hear her/him. T/F
- ___ 60. The crackle and flames of a wood fire stimulate my imagination. T/F
- ___ 61. (a) The average citizen can have an influence in government decisions.
(b) This world is run by the few people in power, and there is not much the average guy can do about it.
- ___ 62. I do not like to see people carelessly dressed. T/F
- ___ 63. At times I feel like picking a fistfight with someone. T/F
- ___ 64. It is sometimes possible for me to be completely immersed in nature or in art and to feel as if my whole state of consciousness has somehow been temporarily altered. T/F
- ___ 65. I am very seldom troubled by constipation. T/F
- ___ 66. I am a high strung person. T/F
- ___ 67. Different colors have distinctive and special meanings for me. T/F
- ___ 68. When I lose track of time I feel uneasy: (a) each time it happens (b) most times it happens (c) some of the time it happens (d) every once in a great while (e) never.

- ___ 69. I have periods of such great restlessness that I cannot sit long in a chair. T/F
- ___ 70. (a) The idea that teachers are unfair to students is nonsense.
(b) Most students don't realize the extent to which their grades are influenced by accidental happenings.
- ___ 71. I am likely not to speak to people until they speak to me. T/F
- ___ 72. Life is a strain for me much of the time. T/F
- ___ 73. I hardly ever notice my heart pounding and I am seldom short of breath. T/F
- ___ 74. I am able to wander off into my own thoughts while doing a routine task and actually forget that I am doing the task, and then find a few minutes later that I have completed it. T/F
- ___ 75. The past is over and I have little interest in it. T/F
- ___ 76. I prefer a vacation with a schedule or itinerary of things to do: (a) always (b) usually (c) depends on my mood (d) rarely (e) never.
- ___ 77. Parents are much too easy on their children nowadays. T/F
- ___ 78. I consider a matter from every standpoint before I make a decision. T/F
- ___ 79. I have a great deal of stomach trouble. T/F
- ___ 80. I am usually calm and not easily upset. T/F
- ___ 81. Just for fun I imitate animals: (a) very often (b) often (c) occasionally (d) rarely (e) never.
- ___ 82. Things that might seem meaningless to others often make sense to me. T/F
- ___ 83. I never make judgments about people until I am sure of the facts. T/F
- ___ 84. My parents generally let me make my own decisions. T/F

- ___ 85. (a) Without the right breaks, one cannot be an effective leader.
(b) Capable people who fail to become leaders have not taken care of their opportunities.
- ___ 86. While acting in a play, I think I could really feel the emotions of the character and "become" her/him for the time being, forgetting both myself and the audience. T/F
- ___ 87. Sometimes when embarrassed, I break out in a sweat which annoys me greatly. T/F
- ___ 88. My thoughts often don't occur as words but as visual images. T/F
- ___ 89. I frequently find myself worrying about something. T/F
- ___ 90. I often take delight in small things (like the five-pointed star shape that appears when you cut an apple across the core or the colors in soap bubbles). T/F
- ___ 91. My present does not refer to anything beyond itself. T/F
- ___ 92. I have frequently found myself, when alone, pondering such abstract problems as free will, evil, etc. T/F
- ___ 93. It makes me angry when I hear of someone who has been wrongly prevented from voting. T/F
- ___ 94. As a child I played with my sibling(s): (a) very frequently (b) frequently (c) occasionally (d) infrequently (e) never.
- ___ 95. I have had periods in which I lost sleep over worry. T/F
- ___ 96. It makes me nervous to have to wait. T/F
- ___ 97. When listening to organ music or other powerful music, I sometimes feel as if I am being lifted into the air. T/F
- ___ 98. I dream frequently about things that are best kept to myself. T/F

- ___ 99. If I could choose between being the clown or the ringmaster in the circus I would: (a) definitely be the ringmaster (b) probably be the ringmaster (c) not be able to decide (d) probably be the clown (e) definitely be the clown.
- ___ 100. I wish I could be as happy as others seem to be.
T/F
- ___ 101. Sometimes I can change noise into music by the way I listen to it. T/F
- ___ 102. I am easily embarrassed. T/F
- ___ 103. Some of my most vivid memories are called up by scents and smells. T/F
- ___ 104. I much prefer symmetry to asymmetry. T/F
- ___ 105. I would rather be a steady and dependable worker than a brilliant but unstable one. T/F
- ___ 106. I am apt to show off in some way if I get the chance. T/F
- ___ 107. (a) No matter how hard you try some people just don't like you.
(b) People who can't get others to like them don't understand how to get along with others.
- ___ 108. Certain pieces of music remind me of pictures or moving patterns of color. T/F
- ___ 109. I often know what someone is going to say before he or she says it. T/F
- ___ 110. I am often afraid that I am going to blush. T/F
- ___ 111. I must admit that I find it very hard to work under strict rules and regulations. T/F
- ___ 112. Only a fool would try to change our American way of life. T/F
- ___ 113. I have sometimes felt that difficulties were piling up so high that I could not overcome them. T/F
- ___ 114. I often have "physical memories"; for example, after I've been swimming I may still feel as if I'm in the water. T/F

- ___115. (a) I have often found that what is going to happen will happen.
(b) Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.
- ___116. My life now seems unrelated to my past. T/F
- ___117. I am entirely self-confident. T/F
- ___118. The sound of a voice can be so fascinating to me that I can just go on listening to it. T/F
- ___119. There have been a few times when I have been very mean to another person. T/F
- ___120. I have nightmares every few nights. T/F
- ___121. I cannot do anything well. T/F
- ___122. (a) When I make plans, I am almost certain that I can make them work.
(b) It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
- ___123. Time can go in many directions. T/F
- ___124. I make faces at myself in the mirror: (a) every time I look into one (b) often (c) sometimes (d) on rare occasions (e) never.
- ___125. (a) In my case getting what I want has little or nothing to do with luck.
(b) Many times we might just as well decide what to do by flipping a coin.
- ___126. My parents wanted me to "make good" in the world.
T/F
- ___127. There are times when I act like a coward. T/F
- ___128. (a) Who gets to be the boss often depends on who was lucky enough to be in the right place first.
(b) Getting people to do the right thing depends upon ability, luck has little or nothing to do with it.
- ___129. At times I somehow feel the presence of someone who is not physically there. T/F
- ___130. I sweat very easily even on cool days. T/F

- ___131. I like to show off: (a) very often (b) often (c) occasionally (d) on rare occasions (e) never.
- ___132. I am more sensitive than most other people. T/F
- ___133. (a) As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.
(b) By taking an active part in political and social affairs the people can control world events.
- ___134. Sometimes thoughts and images come to me without the slightest effort on my part. T/F
- ___135. I like to dream of things I'll do in the future. T/F
- ___136. A strong person will be able to make up his mind even on the most difficult questions. T/F
- ___137. I must admit that I have at times been worried beyond reason over something that really did not matter. T/F
- ___138. I never make judgments about people until I am sure of the facts. T/F
- ___139. There are certain people whom I dislike so much that I am inwardly pleased when they are catching it for something they have done. T/F
- ___140. I sometimes feel that I am about to go to pieces. T/F
- ___141. I find that different odors have different colors. T/F
- ___142. My plans for the future make the present meaningful. T/F
- ___143. To forget my responsibilities and concerns and have a good time is something I find (a) impossible to do (b) very hard to do (c) neither easy nor hard to do (d) easy to do (e) very easy to do.
- ___144. (a) Most people don't realize the extent to which their lives are controlled by accidental happenings.
(b) There is really no such thing as "luck."
- ___145. I can be deeply moved by a sunset. T/F

- ___146. (a) It is hard to know whether a person really likes you.
(b) How many friends you have depends upon how nice a person you are.
- ___147. (a) Most of the time I can't understand why politicians behave the way they do.
(b) In the long run the people are responsible for bad government on as well as a local level.
- ___148. I doubt if anyone is really happy. T/F
- ___149. I feel anxiety about something or someone almost all the time. T/F
- ___150. From my work (school) and career I derive: (a) all of my meaning in life (b) most of my meaning in life (c) some of my meaning in life (d) little of my meaning in life (e) none of my meaning in life.
- ___151. (a) In the long run the bad things that happen to us are balanced by the good ones.
(b) Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.
- ___152. Once I have made my mind up I seldom change it. T/F
- ___153. (a) What happens to me is my own doing.
(b) Sometimes I feel that I don't have enough control over the direction my life is taking.
- ___154. At times I have been so entertained by the cleverness of a crook that I have hoped he would get away with it. T/F
- ___155. I imagine that of those persons who know me (a) all of them (b) many of them (c) some of them (d) few of them (e) none of them envy my ability to have a good time.
- ___156. I shrink from facing a crisis or difficulty. T/F
- ___157. I always see to it that my work is carefully planned and organized. T/F
- ___158. (a) Many times I feel that I have little influence over the things that happen to me.
(b) It is impossible for me to believe that chance or luck plays an important role in my life.

- ___159. I set a high standard for myself and feel others should do the same. T/F
- ___160. I am inclined to take things hard. T/F
- ___161. (a) People are lonely because they don't try to be friendly.
(b) There's not much use in trying too hard to please people; if they like you, they like you.
- ___162. I find it hard to keep my mind on a task or job.
T/F
- ___163. (a) Sometimes I can't understand how teachers arrive at the grades they give.
(b) There is a direct connection between how hard I study and the grades I get.
- ___164. On a 10 point scale of playfulness with 1 being least playful and 10 being most playful, I would rate myself as ___.
- ___165. This question is different from all the preceding ones. Imagine time as three circles representing the past, present, and future. In the space below draw these three circles to depict how you experience time. There is no right answer. Draw the circles in any way you wish and label them according to past, present, and future.

- - - - -

If you would like to receive the results of this research please put your name and permanent address below. I expect to have the results in about 6 months at the latest. This part of the page will be clipped off to preserve your anonymity.

Name _____

Address _____

APPENDIX E

Questionnaire for Part II

APPENDIX E

Questionnaire for Part II

LIFESTYLE SURVEY

This survey is part of a body of research on contemporary lifestyles and modes of consciousness. It has several types of questions which are self-explanatory. Your answers are anonymous to protect your privacy and to encourage you to answer as candidly as possible. Thanks for taking the time to fill out this questionnaire.

AGE ___ SEX ___ YEARS OF EDUCATION ___

- I. In this section you are to look ahead and write down ten things that you'll do or that you think will happen to you in the future. These don't have to be important things; just anything that comes to your mind.

Now you are to look back and write down ten things that have already happened to you. Again, these don't have to be important things; just whatever comes to your mind.

II. This section has multiple choice and true/false questions. Put your answer in the space provided.

- ___ 1. A person needs to "show off" a little now and then.
T/F
- ___ 2. As a child I played with my father (a) very frequently (b) frequently (c) occasionally (d) infrequently (e) never.
- ___ 3. I have nightmares every few nights. T/F
- ___ 4. I think I would like the work of a dress designer.
T/F
- ___ 5. I am often said to be hotheaded. T/F
- ___ 6. Most of the time I find the amount of vacation time I have to be (a) completely satisfactory (b) mostly satisfactory (c) neither satisfactory nor unsatisfactory (d) mostly unsatisfactory (e) completely unsatisfactory.
- ___ 7. I sometimes pretend to know more than I really do.
T/F
- ___ 8. As a child I used to be able to go to my parents with my problems. T/F
- ___ 9. Sometimes I feel like smashing things. T/F
- ___ 10. I enjoy being teased (a) always (b) more often than not (c) about half the time (d) less than half the time (e) never.
- ___ 11. I think Lincoln was greater than Washington. T/F
- ___ 12. When I lose my temper I am disappointed with myself:
(a) never (b) rarely (c) occasionally (d) usually (e) always.
- ___ 13. I get excited very easily. T/F
- ___ 14. My sense of humor would be described by my friends as
(a) one of my strongest characteristics (b) one of my strong characteristics (c) one of my characteristics (d) one of my weak characteristics (e) one of my weakest characteristics.
- ___ 15. Most of the arguments or quarrels I get into are over matters of principle. T/F

- ___16. As a child I played with my mother (a) very frequently (b) frequently (c) occasionally (d) infrequently (e) never.
- ___17. I do not like to see people carelessly dressed. T/F
- ___18. At times I feel like picking a fistfight with someone. T/F
- ___19. When I lose track of time I feel uneasy (a) each time it happens (b) most times it happens (c) some of the time it happens (d) every once in a great while (e) never.
- ___20. I am likely not to speak to people until they speak to me. T/F
- ___21. I prefer a vacation with a schedule or itinerary of things to do (a) always (b) usually (c) depends on my mood (d) rarely (e) never.
- ___22. Parents are much too easy on their children nowadays. T/F
- ___23. I consider a matter from every standpoint before I make a decision. T/F
- ___24. Just for fun I imitate animals (a) very often (b) often (c) occasionally (d) rarely (e) never.
- ___25. I never make judgments about people until I am sure of the facts. T/F
- ___26. My parents generally let me make my own decisions. T/F
- ___27. I have frequently found myself when alone pondering such abstract problems as free will, evil, etc. T/F
- ___28. It makes me angry when I hear of someone who has been wrongly prevented from voting. T/F
- ___29. As a child I played with my sibling(s): (a) very frequently (b) frequently (c) occasionally (d) infrequently (e) never.
- ___30. If I could choose between being the clown or the ringmaster in the circus I would (a) definitely be the ringmaster (b) probably be the ringmaster (c) not be able to decide (d) probably be the clown (e) definitely be the clown.

- ___31. I much prefer symmetry to asymmetry. T/F
- ___32. I would rather be a steady and dependable worker than a brilliant but unstable one. T/F
- ___33. I am apt to show off in some way if I get the chance. T/F
- ___34. I must admit that I find it very hard to work under strict rules and regulations. T/F
- ___35. Only a fool would try to change our American way of life. T/F
- ___36. There have been a few times when I have been very mean to another person. T/F
- ___37. I have nightmares every few nights. T/F
- ___38. I cannot do anything well. T/F
- ___39. I make faces at myself in the mirror (a) every time I look into one (b) often (c) sometimes (d) on rare occasions (e) never.
- ___40. My parents wanted me to "make good" in the world. T/F
- ___41. There are times when I act like a coward. T/F
- ___42. I like to show off (a) very often (b) often (c) occasionally (d) on rare occasions (e) never.
- ___43. A strong person will be able to make up his mind even on the most difficult questions. T/F
- ___44. There are certain people whom I dislike so much that I am inwardly pleased when they are catching it for something they have done. T/F
- ___45. To forget my responsibilities and concerns and have a good time is something I find (a) impossible to do (b) very hard to do (c) neither easy nor hard to do (d) easy to do (e) very easy to do.
- ___46. I doubt if anyone is really happy. T/F
- ___47. From my work (school) and career I derive (a) all of my meaning in life (b) most of my meaning in life (c) some of my meaning in life (d) little of my meaning in life (e) none of my meaning in life.
- ___48. Once I have made up my mind I seldom change it. T/F

- ___ 49. At times I have been so entertained by the cleverness of a crook that I have hoped he would get away with it. T/F
- ___ 50. I imagine that of those persons who know me (a) all of them (b) many of them (c) some of them (d) few of them (e) none of them envy my ability to have a good time.
- ___ 51. I always see to it that my work is carefully planned and organized. T/F
- ___ 52. I set a high standard for myself and feel others should do the same. T/F
- ___ 53. If people had not had it in for me I would have been much more successful. T/F
- ___ 54. I am often bothered by useless thoughts which keep running through my mind. T/F
- ___ 55. When I'm angry I lose my temper (a) never (b) rarely (c) occasionally (d) most of the time (e) always.

IMPORTANT

Now return to the first page. For each event you listed, past and future, specify roughly how long ago the event occurred or roughly when you think the event will occur. You need not be exact but be sure to specify a time for each event in hours, days, months, years, etc.

IMPORTANT

If you would like to receive the results of this research please put your name and permanent address below. I expect to have the results in about 6 months at the latest. This part of the page will be clipped off to preserve your anonymity.

Name:

Address:

APPENDIX F

I-E Scale

PLEASE NOTE:

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These consist of pages:

100-102

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APPENDIX F

I-E Scale

1. a. Many of the unhappy things in people's lives are partly due to bad luck.*
b. People's misfortunes result from the mistakes they make.
2. a. One of the major reasons why we have wars is because people don't take enough interest in politics.
b. There will always be wars, no matter how hard people try to prevent them.
3. a. In the long run people get the respect they deserve in this world.
b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
4. a. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
b. Many times exam questions tend to be so unrelated to course work that studying is really useless.
5. a. Becoming a success is a matter of hard work, luck has little or nothing to do with it.
b. Getting a good job depends mainly on being in the right place at the right time.
6. a. The average citizen can have an influence in government decisions.
b. This world is run by the few people in power, and there is not much the little guy can do about it.
7. a. The idea that teachers are unfair to students is nonsense.
b. Most students don't realize the extent to which their grades are influenced by accidental happenings.
8. a. Without the right breaks one cannot be an effective leader.
b. Capable people who fail to become leaders have not taken advantage of their opportunities.

*The score on this scale is the number of underlined items.

9.
 - a. No matter how hard you try some people just don't like you.
 - b. People who can't get others to like them don't understand how to get along with others.
10.
 - a. I have often found that what is going to happen will happen.
 - b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.
11.
 - a. When I make plans I am almost certain that I can make them work.
 - b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
12.
 - a. In my case getting what I want has little or nothing to do with luck.
 - b. Many times we might just as well decide what to do by flipping a coin.
13.
 - a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.
 - b. Getting people to do the right thing depends upon ability, luck has little or nothing to do with it.
14.
 - a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand nor control.
 - b. By taking an active part in political and social affairs the people can control world events.
15.
 - a. Most people don't realize the extent to which their lives are controlled by accidental happenings.
 - b. There is really no such thing as "luck."
16.
 - a. It is hard to know whether or not a person really likes you.
 - b. How many friends you have depends upon how nice a person you are.
17.
 - a. In the long run the bad things that happen to people are balanced by the good ones.
 - b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.
18.
 - a. With enough effort we can wipe out political corruption.
 - b. It is difficult for people to have much control over the things politicians do in office.

19.
 - a. Sometimes I can't understand how teachers arrive at the grades they give.
 - b. There is a direct connection between the grades I get and how hard I study.
20.
 - a. Many times I feel that I have little influence over the things that happen to me.
 - b. It is impossible for me to believe that chance or luck plays an important role in my life.
21.
 - a. People are lonely because they don't try to be friendly.
 - b. There's not much use in trying too hard to please people, if they like you, they like you.
22.
 - a. What happens to me is my own doing.
 - b. Sometimes I feel that I don't have enough control over the direction my life is taking.
23.
 - a. Most of the time I can't understand why politicians behave the way they do.
 - b. In the long run the people are responsible for bad government on a national as well as on a local level.

APPENDIX G

Capacity for Absorption in
Self-Altering Experiences
Scale Items

APPENDIX G

Capacity for Absorption in Self-Altering Experiences Scale Items

- (1) Sometimes I feel and experience things as I did when I was a child.
- (2) I can be greatly moved by eloquent or poetic language.
- (3) While watching a movie, a TV show, or a play, I may become so involved that I forget about myself and my surroundings and experience the story as if it were and as if I were taking part in it.
- (4) If I stare at a picture and then look away from it, I can sometimes "see" an image of the picture, almost as if I were still looking at it.
- (5) Sometimes I feel as if my mind could envelop the whole world.
- (6) If I wish I can imagine (or daydream) some things so vividly that they hold my attention as a good movie or story does.
- (7) I think I really know what some people mean when they talk about mystical experiences.
- (8) I sometimes "step outside" my usual self and experience an entirely different state of being.
- (9) Textures--such as wool, sand, wood--sometimes remind me of color or music.
- (10) Sometimes I experience things as if they were doubly real.
- (11) A sound, color, or fragrance can evoke a vivid memory from my distant past.
- (12) When I listen to music, I can get so caught up in it that I don't notice anything else.
- (13) If I wish, I can imagine my body is so heavy that I could not move it if I wanted to.

- (14) I can often somehow sense the presence of another person before I actually see or hear her/him.
- (15) The crackle and flames of a wood fire stimulate my imagination.
- (16) It is sometimes possible for me to be completely immersed in nature or in art and to feel as if my whole state of consciousness has somehow been temporarily altered.
- (17) Different colors have distinctive and special meanings for me.
- (18) I am able to wander off in my own thoughts while doing a routine task and actually forget that I am doing the task, and then find a few minutes later that I have completed it.
- (19) Things that might seem meaningless to others often make sense to me.
- (20) While acting in a play, I think I could really feel the emotions of the character and "become" her/him, for the time being, forgetting both myself and the audience.
- (21) My thoughts often don't occur as words but as visual images.
- (22) When listening to organ music or other powerful music, I sometimes feel as if I am being lifted into the air.
- (23) Sometimes I can change noise into music by the way I listen to it.
- (24) Some of my most vivid memories are called up by scents and smells.
- (25) Certain pieces of music remind me of pictures or moving patterns of color.
- (26) I often know what someone is going to say before he or she says it.
- (27) I often have "physical memories"; for example, after I've been swimming, I may still feel as if I'm in the water.

- (28) The sound of a voice can be so fascinating to me that I can just go on listening to it.
- (29) At times I somehow feel the presence of someone who is not physically there.
- (30) Sometimes thoughts and images come to me without the slightest effort on my part.
- (31) I find that different odors have different colors.
- (32) I can be deeply moved by a sunset.
- (33) I like to watch cloud shapes change in the sky.
- (34) I often take delight in small things (like the five pointed star shape that appears when you cut an apple across the core or the colors in soap bubbles).

APPENDIX H

Raw Score Data and Demographic
Data on All Subjects

APPENDIX H

TABLE 11

RAW SCORE DATA AND DEMOGRAPHIC
DATA ON ALL SUBJECTS

	MEAN	S.D.	MODE	MINIMUM	MAXIMUM
AGE	23.4	7.8	18	16	50
EDUCATION	13.4	1.1	13	12	16
HAAN SCALE	15.3	3.4	14	6	23
EXISTENTIAL SCALE	43.3	5.9	42	24	57
PLAYFULNESS SELF-RATING	7.1	2.0	8	1	10
ANXIETY	16.9	7.3	17	2	35
ABSORPTION	20.3	7.0	18	2	33
I-E SCALE	8.4	3.6	8	1	17
TEMPORAL RELATEDNESS (COTTLE)	2.0	2.6	0	0	9
TEMPORAL RELATEDNESS SELF-REPORT	8.5	1.8	10	3	11
TIME PERSPECTIVE	(n=33)				
FUTURE	28.5	24.7	48	1	84
PAST	44.5	52.7	1	1	226

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